

Research Capability and Problems Encountered in Higher Education Institutions in the Philippines

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Abstract

The descriptive design with a questionnaire was used in this study to determine the research capability of the University as perceived by the faculty members and administrators regarding research support facilities and research activities. This study further identified the problems encountered by the respondents in formulating the research agenda, supporting research activities, and carrying out research activities by the University.

The researchers concluded that the perceptions of the faculty members and the administrators on the research capability regarding support facilities and conduct of research activities were of moderate extent and moderately agreed, respectively. The faculty members and the administrators indicated the problems related to research as a "Moderately Felt Problem" (MoFP).

Keywords: administrator; faculty; research activity; support facilities; research support facilities.

1. Introduction

Identifying research as one crucial part of their functions, instructors of Higher Education Institutions (HEIs) have regularly evidenced research productivity together with other factors that contribute to the process. State Colleges and Universities in the Philippines have an active practice of research. On the other hand, State Colleges and Universities in the developing world had weak research functions and retained vital instruction functions (24).

In the study of the topology of HEIs in the Philippines, as observed by the author (6), 'there were 15 out of 223 HEIs in the sample met the needs for the graduate-capable HEI category, and only two HEIs complied with the criteria for doctoral/research university groups.' It shows that most State Colleges and Universities are only teaching institutions. The State Universities and Colleges in Region 8 are not an exclusion from this.

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In light of this reality, the Philippine Commission on Higher Education (CHED) has also established 12 Zonal Research Centers (ZRC) nationwide to further encourage and promote capability in the 1,605 public and private universities. An analysis of research in these universities showed that only 13,859 research outputs were submitted to the ZRCs from 1996 – 2001; this revealed a small turnout of research output. Among these studies, only 72% were conducted by individuals, which far surpassed collaborative and institutional research. Masters and doctoral students did about 69% of these different studies as part of their curriculum requirements (23).

Despite the CHED initiatives, the current situation of the State Colleges and Universities regarding research in the Philippines leaves much to be preferred regarding quantity, quality, thrusts, and contribution to national development (23).

However, some of the Universities in the Philippines' evident varied research capabilities have a variety that can explain differences in school type, faculty profile, and college locale. This variety notwithstanding, the ability to respond to the call to develop a research-oriented university of higher learning depends on the institution's human capital. As reflected in the figures cited above, teachers' little involvement in research activities can be attributed to the lack of firm training from graduate studies that would make them consistent producers of research. It may draw to the fact that many State Colleges and Universities in the Philippines are formerly High Schools that have converted to the college level. Thus most of the institutions in the Philippines focused on sustaining the instruction function. Based on the author's report (10), 34% of the faculty are graduate degree holders, and limited have researched their master's theses or doctoral dissertations. The graduate thesis/dissertation 'were one-shot short-term undertakings that did not build on earlier findings or lead to further investigations (23).

Universities in the Philippines must aim to be not only institutions that provide instruction but schools that are strong in research. A challenge not only for Philippine government universities but universities in other countries (3). This thrust is emphasized in the World Conference on Higher Education Partners in June 2003 as UNESCO promoted policy dialogue that enhances quality education and knowledge sharing across borders and strengthens research capacities in higher education institutions. In response to this call, this study focuses on understanding the research capability from the perception of faculty and administrators in State Colleges and Universities (SUCs) in Region 8.

2. Research questions

This study aimed to determine the research capability of the University as perceived by the faculty members and administrators regarding the research support facilities and conduct of research activities. Also, the problems the faculty members and administrators encountered regarding the institution's research activities in the context of formulating the institutional research plan and support to research activities.

3. Literature Review

In a challenging and changing environment, a capabilities-based view of research and development provides executives with the necessary tools to drive innovation and implement business strategy and production.

Research capability is a logically distinct combination of the complete research process, including the technologies and resources, to produce a discrete output (i.e., physical, data, or knowledge). The performance of research capabilities can be measured and compared, both within the network and against industry benchmarks. It provides insight into effective practices that might exploit and issues that need to address. Once an organization defines its capabilities and appreciates how they function today, it is better positioned to increase its operations in the future. It can design its research and processes to support business objectives over the long-term and development networks and become flexible enough to grab new activities efficiently.

Research is an original investigation undertaken to increase understanding and knowledge. The first and most crucial research task is to observe, conceptualize, and systematically record processes and events to do with learning. The second task is accurately analyzing such explanations to describe their conditions, contexts, and implications. The third task is to put out accounts of all that is known about the particular topic under thought, drawing on existing theory from one of the disciplines which contribute to our field, from the educational theory itself, or from developing an approach that will itself be helped by the work. But even with a theoretical behind, the researchers' task is incomplete, for they have to relate their conclusions to society's political, economic, and social aspects. The fourth function and primary purpose of educational research are to further educational enhancement. Some research outputs are somewhat complicated in style. One intention for this may be the researchers' wish to give their readers as much data as plausible. But another may be the need for results to be better processed before publication. A legitimate difficulty is that researchers are expected to write for different audiences. The new BERA Code of Respectable Practice in Educational Research Writing, planned by Margaret Brown and working party associates, suggests a 'pyramid' writing model. The design begins with a full report, which should provide sufficient detail for replication and an appraisal of methodology, and ends some three stages with a brief and accessible news story. It should help by making what is written for whom much stronger to avoid the dangers of supplying too much information or technical detail for some audiences and too little for others (2).

In his article "*Improve Research Capability or Be Left Behind*," author (11) stresses that China's research investment is 1.3-1.5% of its GDP. Prof. Chin cited the following reasons why research is so important:

1. Research is necessary for students' teaching and learning to make a quality workforce that will bring economic assistance. Many of Hongkong's 4,000 professors start research as part of their duties for better education for undergraduate students. They can give insights and pass on the latest developments in their expertise.
2. Put on innovation. Even if China bought all the inventions in the world, it would not be able to create any jobs or wealth from them unless the people recognized their usefulness and knew what to do with them. Working out of research personnel is imperative in recognizing the value of innovation and creativity and putting them to good use.
3. Innovative workforce. Research can generate creativity in almost anything and general training. For example, someone trained to study computer science may go into the do finance modeling and investment market. Students going into the workforce need curious minds to solve problems and innovate. Research training gives them this.

4. Discovery and economic benefit. Research training pushes discovery, and discovery leads to new products and services. Research is a whole order of events, from fundamental research to applied research, commercialization, and knowledge transfer.

Author (14) in his research on predictors of research capability as to research process and research management of public higher educational institutions (HEIs) in Region IV. Author (14) discovered that there was high significant compliance on the normal; however, there is a need to strengthen the research networks and improve the research rewards and linkage, incentives, and recognition for the research efforts. Furthermore, he also found that the factors that strengthen the description of research culture are research experiences, attitudes, leadership skills, and personal research interests.

The author's (18) study on *Faculty Research in Higher Education Institutions: Extent and Hindering Factors* revealed the extent to which faculty research was conducted, dissemination of research findings, and use of research results were restricted. In contrast, the faculty participation as reviewers of research was negligible. The research-based factors, research-related factors, and organization-related factors moderately hindered the participation of the faculty in the conduct of research, review of research, dissemination of research, and use of research. Lacanaria established that the degree of faculty involvement in research undertakings was lower than the prospects of the mandates of CHED and the University. Faculty contribution in the review of research was significantly controlled by factors related to the nature of research capability, attitude, and the research climate in the work setting.

The findings in the *Survey of the Research Capability of Higher Education Institution* under the CHED-Silliman University Zonal Research Center revealed the following results: (1) There was little priority given to research regarding funding and other support compared to the importance of teaching and extension. The reason is the absence of a research culture in the academic community in this country. (2) the quality of research outputs gives much to be desired, that is, the need for techniques to inspire researchers to publish in refereed or peer-reviewed and local journals. (3) Many scientists tend to conduct research in traditional areas and shy away from the emerging, technical areas needed for development or interdisciplinary. The reason is that many fellows in graduate schools lack research track records. (4) There are universities with many teachers with a degree in MAs and Ph.D.'s, but their research productivity is short. The research study revealed that the research outputs need improvement regarding quantity and quality.

The author (1) shows that 92.95 percent of teachers countrywide have undertaken research and development accomplishments for more than 20 years. But only 22.81 percent were participating in research despite the incentives in attendance to local/national/international conferences publication of research outputs, research load credits, and honoraria. The study of the author (8) on developing research capability in the social sciences had the following results:

1. Respondents whose present position was either researcher or lecturer were most likely to be men (17.2%) over women (30.3%).
2. The most common disciplines in which doctorates were held were management (9.8%), psychology

(10.8%), economics (10.8%), education (9.1%), and sociology (6.7%).

Author (6) revealed that the most significant critical obstructions to researchers studied in social science researchers were the following findings: lack of time, the nature of the academic workload, and lack of funding. Also, his study showed that other obstructions were overhead levels within institutions, practices, or research funders' policies and problems with 'buying out' teaching time for research. Lastly, the same study found that there was a lack of internationally refereed publications and lack of recognition; furthermore, the most commonly used methodological approaches were face-to-face surveys/interviews, used by more than 50%.

Author (5) study stated that linear regression analysis proposes advantages over distinct time point hypothesis testing in analyzing higher concurrent serial data. Trends in the behavior of the measured parameters are evident, rigorous accounting for correlation between measurements is facilitated, and hypothesis testing is highly flexible.

The HEI's in Region 8 adheres to its common vision-mission to encourage research toward solving social, technological, educational, and community problems as ways to improve the quality of life of the Filipinos. According to the author (16), research results are the basis for reflective teaching, personal considerations, and complete decision-making. To be successful, instructors, assistant professors, associate professors, and professors must be both researchers and practitioners.

It is apparent. Research consciousness is acknowledged as an essential factor in effecting innovations. Consequently, faculty members in higher education institutions should become research-aware. Any change(s) in the education organization, in-school programs, activities, projects, and techniques and approaches shall be first subjected to research because only research can provide a factual basis for their effectiveness or ineffectiveness. In other words, all educational activities for entire development are based on research.

4. Results and Discussion

Research Capability Of The University In Terms Of Support Facilities And Conduct Of Research Activities

Support Facilities

Part of this assessment was to look into the research capability of the University as perceived by the faculty members and administrators regarding support facilities classified as benefits and incentives, linkages, funding, laboratory facilities, research equipment, and research personnel are shown in Table 1.

Benefits and Incentives. Concerning the benefits and incentives, the faculty members perceived them as "Great Extent" (GE) with an overall mean of 3.63. In contrast, the administrators perceived the extent of support as "Moderate Extent" (ME) with an overall mean of 3.12. This indicates that faculty members were more confident about the support the University extended than the administrators.

In particular, the teachers' ratings showed that the highest mean was on the enjoyment of NBC 461, which points to every research published in the journal. Also, item number 7 is the additional points for NBC 461 that can be enjoyed by the faculty when the research output is presented in a forum. The least the rank was by the faculty members involved in research to want additional privileges when planning and other research-related activities held in resorts and hotels within the province.

This situation confirms the observation of the author (9) that most universities do not give cash incentives to teacher-researchers as this is already incorporated in the compensation scheme and faculty ranking. Reston cited some ways the school could extend support to a faculty conducting research: recognition of research productivity included in the university reward structure; compensation scheme for faculty efforts towards quality research should design; financial and technical assistance should provide to faculty researchers.

Table 1: Research Capability of the University on the Extent of Support As Perceived by the Respondent

ITEMS	Faculty (n = 192)		Administrators (n = 71)	
	Mean	D	Mean	D
Benefits and Incentives	3.63	(GE)	3.12	(ME)
Linkages	3.54	(GE)	3.52	(GE)
Funding	3.57	(GE)	3.59	(GE)

GE – Great Extent

VGE- Very Great Extent

In the author's study (12), teachers stated that their schools had small research incentives; research performance is significantly related to educational attainment, funding, physical resources, and research incentives. Accordingly, the best predictor of research performance was researched incentives.

Also, author (13) said that the University might pay special recognition to those who have conducted research, promotion, and designation by research accomplishment since rewards in higher education are based primarily on research.

Linkages. The faculty members perceived that the support extended by the institutions on linkages was a "Great Extent" (GE) with an overall mean of 3.54. In contrast, the administrators perceived the support as a "Great Extent" (GE) with an overall mean of 3.52. The findings could infer that the faculty and administrators have the same assessment of the institution's research support.

In particular, the ratings of both faculty (3.17) and administrators (3.14) showed that the least in all the items were of the faculty members given a list of names of contact persons from other agencies and institutions with whom they can coordinate as regards submission of research proposals. The results indicate that somehow the respondents were sensitive to the University's effort to keep them from being disadvantaged in research collaboration with other agencies.

On the other hand, author (17), in his study, found out that as a whole, the technological SUC's in

Region VIII maintained beneficial linkages with S & T and now- S & T entities. Indeed, the institution and the administrators considered it part of their task to assist the faculty in their research and to look for prospective agencies as partners in research endeavors since the growing research arms would lead to more complex interactions with universities. Furthermore, both in differential terms- specific research oriented towards the regional economy and the quality of teaching and professional practice – and convergence, as the study moves towards fulfilling traditional academic standards (25).

Author (19) described linkages to comprise all the connections, associations, or relations of a university within its constituent departments or other institutions concerning the conduct, financial and technical support, and dissemination of research. Moreover, Reston said that linkages within the University and those with other institutions outside the University are important. The author also points out the importance of the investigation linkages (15), which contend that factors outside the institutions play a vital role in sustaining the productivity of prolific researchers and scholars. These include linkages with external institutions, senior researchers, and professional experts who may be researchers' primary sources of recognition and reinforcement.

Funding. The overall mean for the faculty members to assess the University's support for research in the area of funding was 3.57, or a "Great Extent." At the same time, the administrators perceived the funding support as a "Great Extent," with an overall mean of 3.59. With these data, it can surmise that both the faculty and administrators perceived the same views of the support extended by the University on research funding.

About the faculty, they rated all the items to a "Great Extent." The faculty members indicated that the University appropriated a budget for research with a mean of 3.85, indicating that both were aware that the University set aside a budget for research every year. Furthermore, the faculty also indicated that the University provided funds for research activities (3.70) and that the University provided a budget for the procurement of materials and facilities needed for research (3.56).

Meanwhile, the administrators rated all the items as a "Great Extent." The administrators indicated that the University had an annual appropriation for research (3.96) and that the University provided funds for research activities. These indications validated the faculty's claim of the support extended by the university administration regarding funding.

Moreover, administrators rated the item that the University made sure that researchers of the faculty were appropriated funds, with a mean of 3.86. These indications validated the claims of the faculty in the case of universities in Cebu City. Most teacher-researchers produced research from University resources (Restor, 2001). It appears that this observation is the same as compared to the case of SUCs Region VIII, where most of the research was conducted by the faculty funded by the University and a few research funded by other government institutions.

It is noteworthy, though, that in the author's study (20), it was observed that the financial status of the technological SUCs in Region VIII could not allow for a sustainable research undertaking. The findings were also the same observation of 14) about the research capability and their funding system for research, and the

study author (22) pointed out that researchers were not accepted successfully because of a lack of financial assistance.

It also noted that linkages with government and private institutions could be useful sources of funding for teachers and graduate students doing research. Among those commonly cited as sources of funding is the Commission on Higher Education (CHED), the Philippines Council for Health Research and Development (PCHRD), the Department of Science and Technology (DOST), and the Fund Assistance for Private Education (FAPE) (27).

5. Conduct of Research Activities

The University of Central Florida's Program Assessment Handbook, published in 2008, stated that there are four primary purposes or objectives of program assessment: to improve, to inform, to prove, and to support. It is, therefore, part of these goals to determine the status of the University regarding its research capability in carrying out research activities in the areas of implementation, monitoring, evaluation, utilization, and dissemination, as shown in Table 3.

Implementation. The overall mean of faculty members in their ratings on the capability of the University in the implementation of research activity was 3.83 (Agree). At the same time, the administrators had an overall mean score of 3.43 (Moderately Agree), which implies that both faculty and administrators see the capability of the University in the area of implementation only to varying degrees.

The faculty indicated "Agree" in all items except on the areas of researchers given time to conduct their study through de-loading with a mean of 3.42.

Table 2: Research Capability of the University regarding Research Activities Conducted As Perceived by the Respondents

ITEM	Faculty (n = 192)		Administrators (n = 71)	
	Mean	D	Mean	D
Implementation	3.83	(A)	3.43	(MA)
Monitoring	3.62	(A)	3.58	(A)

A-Agree

MA – Moderately Agree

The result implies that the institutions were weak in this aspect. But at the University of San Jose-Recoletos (USJR) in Cebu, they give cash incentives of Php 15,000.00 to teacher-researchers for every actual research output to encourage their faculty to conduct research published or unpublished (4).

Meanwhile, the administrators rated almost all the items as "Moderately Agree" and indicated that the institutions gave a de-loading of units to provide time for the faculty to research every research proposal presented by the faculty (3.35). The institutions also provided advanced studies and training opportunities to

develop faculty research competence (3.66).

As the author (26) noted, participation in research-related conferences/seminars/workshops/training, gatherings, and meetings within or outside the organization got the highest frequency in all SUCs. But such observation was a contrast with the findings of the author (16) that teachers handling research instruction had inadequate training in research. But indeed, the institutions regularly provided training and seminars to improve the capability of the faculty in doing research.

In the study of the author (4), she shared the concept of mentoring and what Dr. Van Den Verg, a long-term consultant to the Science and Mathematics Education Institute (SMEI) of the University of San Carlos, Cebu City, has to say regarding improving the research capability of the faculty. Dr. Van Den Berg pointed out the lack of senior researchers who can assist junior researchers daily, if not weekly, as a significant problem in universities. He contends that research is learned in natural settings, not just studied in courses. According to the author (4), who said that among other factors, mentoring relationships contribute 18% towards prevailing research attitudes. Furthermore, the research training environment directly predicts 60% of faculty mentoring.

Monitoring. On this aspect, the faculty members and the administrators gave an overall mean of 3.62 and 3.58, i.e., "Agree" (A). The findings signify that the faculty and administrators share the same monitoring views.

It can be noted that the faculty rated all the items as "Agree" and indicated as 1st which they gave a rating of 4.05, and this was the designation of research coordinators in every area or department. It means that the faculty had observed the advantage and importance of the coordinators' role in conducting research. However, almost all the respondents also pointed out that the requirement to submit research status reports was weak, being the last in all items, implying that the institutions have not strictly implemented this monitoring system. On the part of administrators, they rated all the items "Agree," but ranked 1st on the designation of a research coordinator in every area or department (3.93), which indicates that the administrators shared the same view of the faculty. The author (23) found that their research center in Urios College in Butuan City has a staff shortage since they have several functions such as research, coordination, publication, and evaluation. In comparison, all the school respondents have efficiently implemented this system. There is a need for further improvement so that the coordinators' function would be further maximized, and monitoring could also be improved.

Problems Encountered Concerning Research Activities

Many believe that evaluation is about showing the success or failure of a program. This myth assumes that success is employing the perfect plan and never having to hear from employees, customers, or clients again. Success is remaining open to continuing feedback and adjusting the program accordingly (21). This portion shows the discussion of the perceived problems of the respondents in the conduct of research, specifically on the support of the institutions to research activities and on implementation, monitoring, and evaluation.

Problems with the Formulation of the Research Agenda

Table 3 shows the perceived problems in developing the University's research agenda.

For the faculty, they rated all of the five items on the research agenda formulation as a "Moderately Felt Problem" (MoFP). But looking more closely, the highest mean was 3.00 on the issue of consultation of the faculty, students, and other stakeholders when the research agenda was formulated. The result indicates that the participation of the faculty, students, and other institutions' stakeholders was a felt problem.

Meanwhile, the administrators rated a "Moderately Felt Problem" (MoFP) with a mean of 2.76 on the item about research agenda most often for granted and are not considered by the administrators in formulating a research proposal. The result of the study suggests that the administrators had the same level of understanding as regards the problems met in the formulation of the research agenda.

Table 3: Perceptions of the Faculty and Administrators on the Problems Encountered in the Context of Formulation of the Institution Research Agenda

ITEM	Faculty (n = 192)		Administrators (n = 71)	
	Mean	D	Mean	D
Faculty, students, and other stakeholders of the University are not consulted when the research agenda is formulated.	3.00	(MoFP)	2.7	(MoFP)
Faculty members are not aware of the University's research agenda.	2.76	(MoFP)	2.59	(MoFP)
The research agenda is often taken for granted and not considered by faculty members when formulating a research proposal.	2.88	(MoFP)	2.76	(MoFP)
The faculty members are not aware of the importance or significance of the research agenda to individual research projects and activities.	2.79	(MoFP)	2.75	(MoFP)
Faculty researchers are not in line with the thrust and priorities of the government at the regional and national levels.	2.75	(MoFP)	2.61	(MoFP)

MoFP – Moderately Felt Problem

As explained by the author (6), the definition of a Strategic Research Agenda is commonly coordinated by an advisory council that comprises representation from a wide range of stakeholders. In many cases, the active involvement of Member States is guided through a "mirror group" that returns their opinions as the Strategic Research Agenda takes outline. Seemingly, this was the same observation of author (4) in his study; hence he recommended that the research agenda be formulated by administrators, faculty, students, and government agency representatives.

Problems with Support to Research Activities

Table 4 presents the perceived problems regarding the institutions' support for research activities.

The number one problem of the faculty was their perception of research as an additional burden (3.46). This perception of the investigation as a burden is nothing uncommon. The author's (7) observation indicated that many faculty members were uncomfortable doing research in her interviews. Some described it as cumbersome, a difficult task, and constant exposure to scrutiny and pressure. The result implies that the respondents did not have a favorable view of research being part of their function in the institution.

The administrators also felt the research problem was an additional burden (3.18), implying that they had observed such attitudes among the faculty. Author (26), in her study, said that most faculty members perceived research as tedious and challenging. In fact, despite the privileges given by the school, like deduction of three units from their regular loads, approved official travel related to research work, and some financial assistance for office supplies, some faculty were hesitant to go beyond their comfort zones in doing research. According to Reston, most university faculty lack the passion for doing research.

Table 4: Perceptions of the Faculty and Administrators on the Problems Encountered in the Context of Support to Research Activities

ITEM	Faculty (n = 192)		Administrators (n = 71)	
	Mean	D	Mean	D
The faculty members are not keen on submitting research projects to other government agencies or research funding institutions.	3.09	(MoFP)	3.06	(MoFP)
Research topics submitted by faculty members are not attractive to funding agencies.	3.04	(MoFP)	2.93	(MoFP)
Faculty members perceive research as an additional burden.	3.46	(MoFP)	3.18	(MoFP)
Designations and other assignments are given to faculty members, which entails a greater responsibility to keep them from having time to conduct research.	3.33	(MoFP)	3.21	(MoFP)
Equipment in the science laboratory is not functional for research use.	3.07	(MoFP)	2.92	(MoFP)
The laboratory lacks equipment, apparatus, and chemicals for experiments.	3.12	(MoFP)	2.90	(MoFP)
Scientific journals on the Internet are not accessible to the faculty because the University has an online subscription.	2.94	(MoFP)	2.77	(MoFP)
The university library lacks books and other materials that can be used as a reference for research.	2.90	(MoFP)	2.79	(MoFP)
Nobody can assist the faculty in encoding and other research-related clerical tasks.	3.16	(MoFP)	2.79	(MoFP)
The number of computer units is enough to accommodate faculty members.	3.06	(MoFP)	2.77	(MoFP)

Based on the findings of the study, the following conclusions were drawn:

1. The perceptions of the faculty members and the administrators on the research capability regarding support facilities and conduct of research activities were of moderate extent and moderately agreed, respectively.

2. The faculty members and the administrators indicated the problems related to research as a "Moderately Felt problem" (MoFP).

References

- [1]. Abon, Marilou, et al. 2003. "Research Capability of HEIs in the Philippines and State of
- [2]. *R and D in Region III*," <http://serp-p.pids.gov.ph/details.php3?tid=3969>
- [3]. Andres, Thomas D. 1991. *Human Resource Management in the Philippine Setting*. Quezon City:
- [4]. New Day Publishers.
- [5]. Aniga, Frederick C. (2011). *Assessment of the Research Capability of the Southern Leyte State University (SLSU)*. Doctoral Dissertation. Eastern Visayas State University, Tacloban City, Philippines.
- [6]. Ballais, Socrates O. (2010). *"Status of Program Accreditation of Eastern Visayas State University (EVSU): A Framework for Policy Redirection."* Doctoral Dissertation. Eastern Visayas State University, Tacloban City, Philippines.
- [7]. Bautista, Agnes T., Josefina S. Esguerra, and Lloyd V. Orduña, 2002. "Research Capability of the Faculty of the University of Baguio," UB Research Journal, Vol XXV, No. 1, January -June.
- [8]. Bernardo, A. B. 2003. *Towards a typology of Philippine Higher Education Institutions*. In *Towards Rationalizing Philippine Higher Education*. Proceedings of the Symposium on the Rationalization of the Philippine Higher Education System. CHED: Philippines.
- [9]. Best, John W. 1981. *Research in Education*. New Jersey: Prentice-Hall, Inc.
- [10]. Best, John W. and James V. Kahn. 1989. *Research in Education*. New Jersey: Prentice-
- [11]. Hall, Inc.
- [12]. Calderon, Jose F., and Expectation C. Gonzales. 1993. *Methods of Research and Thesis Writing*. Manila: National Book Store.
- [13]. CHED and PAGE, Region I. 2002. *A Handbook in Thesis/Dissertation Writing and*
- [14]. *Advising*. Dagupan City: SLA Publishing House.
- [15]. Chin, Roland. 2007. "Improve Research Capability or Be Left Behind," Retrieved from
- [16]. <http://www.ugc.edu.hk/rgc/rgcnews12/Pages/1%20Lead-E.html>
- [17]. Conyers, Angela. 2006. "Building on sand?: Using statistical measures to assess the
- [18]. *impact of electronic services*", Performance Measurement and Metrics. Vol. 7 Issue 1. Emerald Group Publishing Limited. [http://lyceumbooks.com/ UsingStatisticalMethods.html](http://lyceumbooks.com/UsingStatisticalMethods.html)
- [19]. Esguerra, Josefina. 1998. *Writing Quality Research*. UB Monograph Series No. 3 Research and Development Center, University of Baguio, Baguio City.
- [20]. Fetalver, Mario Jr. A. 2003. "Predictors of Research Capability as to Research
- [21]. *Management and Research Process of State Higher Education Institutions in Region IV, Philippines*," dissertation. Romblon State University. Retrieve from [http://thesisabstracts.com/ThesisAbstract_276_Predictors-of-research-capability-as-to-research-management-and-research-process-of-state-higher-education institutions-in-Region-IV-Philippines.html](http://thesisabstracts.com/ThesisAbstract_276_Predictors-of-research-capability-as-to-research-management-and-research-process-of-state-higher-education-institutions-in-Region-IV-Philippines.html)

- [22]. Good, Carter V. 1988. *Introduction to Educational Research*. New York: MacMillan Publishing Co., Inc.
- [23]. Good, Carter V. and Douglas E. Scales. 1972. *Methods of Research Educational, Psychological, Sociological*. Manila: Appleton-Century-Crafts, Inc.
- [24]. Ibay, Amalia M. "Research and Evaluation Fro Excellence and Competitiveness." *St. Louis College Research Journal*. December 1997, Vol. XXIII No. 1.
- [25]. Lacanaria, Benedicto F. 2008. "*Faculty Research in Higher Education Institution: Extent*
- [26]. *and Hindering Factors*," Retrieve from <http://dspace.slu.edu.ph/handle/123456789/192>
- [27]. Laruan, Mary Jane. 2010. "*Utilization of Researches Conducted by BEC Teachers in the Implementation of the Basic Education Curriculum*," Retrieve form <http://www.sunstar.com.ph/baguio/educationresearches-used-classrooms>
- [28]. Lynn M. Jamieson, Indiana University, 2002. <http://lin.ca/Uploads/cclr10/CCLR1053.pdf>
- [29]. McNamara, Carter. (2005). *Basic Guide to Program Evaluation*. Retrieved November 4, 2010, Retrieve from <http://www.tgci.com/magazine/>
- [30]. Pagoso, Crisrobal M., et al. 1992. *Fundamental Statistics*. Manila: Sinag-Tala Publishers, Inc.
- [31]. Salazar-Clemeña, R.M. 2006. *Higher Education Research in the Philippines: Policies, Practices, and Problems*. Meek, V. L. & Suwanwela, C. (eds.) *Higher Education Research and Knowledge in the Asia Pacific Region* (pp. 185-200). New York: Palgrave Macmillan.
- [32]. Sanyal, B. C. & Varghese, N. V. 2006. *Research Capacity in Higher Education Sector in Developing Countries*. UNESCO: Paris.
- [33]. "*Survey of the Research Capability of Higher Education Institution*," Education Newsletter, CHED-Siliman University Zonal Research Center, Retrieved from http://www.su.edu.ph/suakcrem/ched/ched_1.htm
- [34]. Sy, Francis Ann R. (2010). "*Meta-Evaluation of Faculty Performance Evaluation Tools*
- [35]. *and Schemes in SUCs in Leyte Province*." Doctoral Dissertation. Cebu Normal University, Cebu