

## **Increasing the Number of Faculty Research Outputs Through Faculty Development Program**

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### **Abstract**

It is very important for the universities and colleges that their teaching staff are able to write academic research without limit to numbers. Thus, it is necessary for the institution to develop a program which will address the emerging needs of the academicians specifically in research production. This action research focuses on how academic personnel increase research output through the utilization of a faculty development program of the institution. Quantitative research was applied and the researcher used a questionnaire that was distributed across different academic programs. Also, this study used univariate analysis since frequency distribution was determined and it measured the dispersion of one sample. The sample consisted of twenty-two teaching staff which are equivalent to 62.86% response rate of distinct educational rankings and status. The findings indicated that teaching staff possessed average knowledge and competencies in writing academic research. They indicated that workload pressure and lack of time hindered research production which, they deem can be achieved through decreasing teaching capacity. Likewise, the study revealed that teaching staff noticeably agreed on the support provided by the faculty development program. However, successive training in academic research writing was recommended.

**Keywords:** Academic research; faculty development; research output

### **1 Introduction**

Merle (2018) in his presentation on Action Research Making, it is crucial to every member of the academe to conduct action research because it will give the researchers an opportunity to discover effective solutions to school-related problems. Likewise, teachers can make use of research conclusions to enhance their capabilities in the teaching and education method. Galleto (2016) found out that teachers with highest educational attainment and attended several trainings were more productive in terms of academic writing. Likewise, inadequate research support contributed to research production.

In the Philippines, Higher Educational Institutions (HEIs) placed a meaty concerns on inculcating the culture of research, provides capability trainings and subsequently increase the research production among faculty members and students enrolled in the graduate programs (CMO No. 52, Series of 2016). In addition, as part of the National Higher Education Research Agenda (NHERA) 2 - 2009-2018, the guidelines was reaffirmed distinctively by HEIs in the area of academic writing. Likewise, this introduces approaches and plans to create and improve research efficiency among teaching staff of one university (NHERA-2 of 2009-2018). It is, therefore, a call for HEIs particularly the Philippine Universities to improve research production in distinct fields of expertise.

Commission oh Higher Education formed Zonal Research Centers (ZRCs) intended for research promotion and production among private and state universities. Based on the data assessment, 13,859 articles were presented in the ZRCs from 1996-2001 and large number of this research outputs were completed by those graduate students and not the teaching personnel of HEIs (Salazar-Clemena 2006).

Research is considered the mainstream in providing solution by all types of professionals even from the earliest period (Boadou & Babetsing 2007). Research outputs in South Africa are about 64% of the researches produced in the Southern African region (Sayed and Soudien 2005). A new financing system in 2005 was launched that resulted in significant adjustments in research works' monetary support.

There are studies aimed at determining the impediments of writing research in different disciplines, for example, a study conducted by (Mitchell & Rebne 1995) which finds that fewer extent of conferring and lecturing may lead to improve research production. Amongst the explanations for poor writing, mindset is that they break the true importance and uses of this knowledge expansion as well as their doubtful thinking on how to use it effectively (Powell 1997).

Due to the institutional needs of producing researches, teaching staff are anticipated to be the principal creators of research in a higher education institution. Encouraging them to conduct the same is of utmost importance that must be understood as they play a big role in the educational system in honing the minds of academics clientele. The University provides necessary institutional support, funding and other incentives for researchers aimed at intensifying the value and extent of research outputs delivered by teaching and non-teaching personnel in the University. Despite these supports and incentives, problems in research production existed.

Embedding the culture of research at PUP Lopez is part of the Faculty Development Plan that requires each member of the institution to attend and enhance their skills in research writing through seminar/training/workshop. Likewise, this endeavor as part of the criteria in giving monetary and non-monetary incentives, teaching staff should give attention to this call. But, despite this clear manifestation, there are hindrances and reasons why this academic personnel failed to address.

### 1.1 Statement of the Problem

The aim of this study is to increase the number of academic writing outputs of PUP Lopez faculty through Faculty Development Program. Specifically, we would like to seek an answer to the subsequent questions:

1. What is the rate of research output produced by PUP Lopez teaching staff before the FDP?

## Increasing the Number of Faculty Research Outputs Through Faculty Development Program

2. What is the rate of research output delivered by PUP Lopez teaching staff after the FDP?
3. What challenges/difficulties do teaching staff encounter that stop them from writing research papers?
4. What assistance was being offered to teaching staff through FDP to assist them in producing academic papers?

### 1.2 Conceptual Framework of the Study

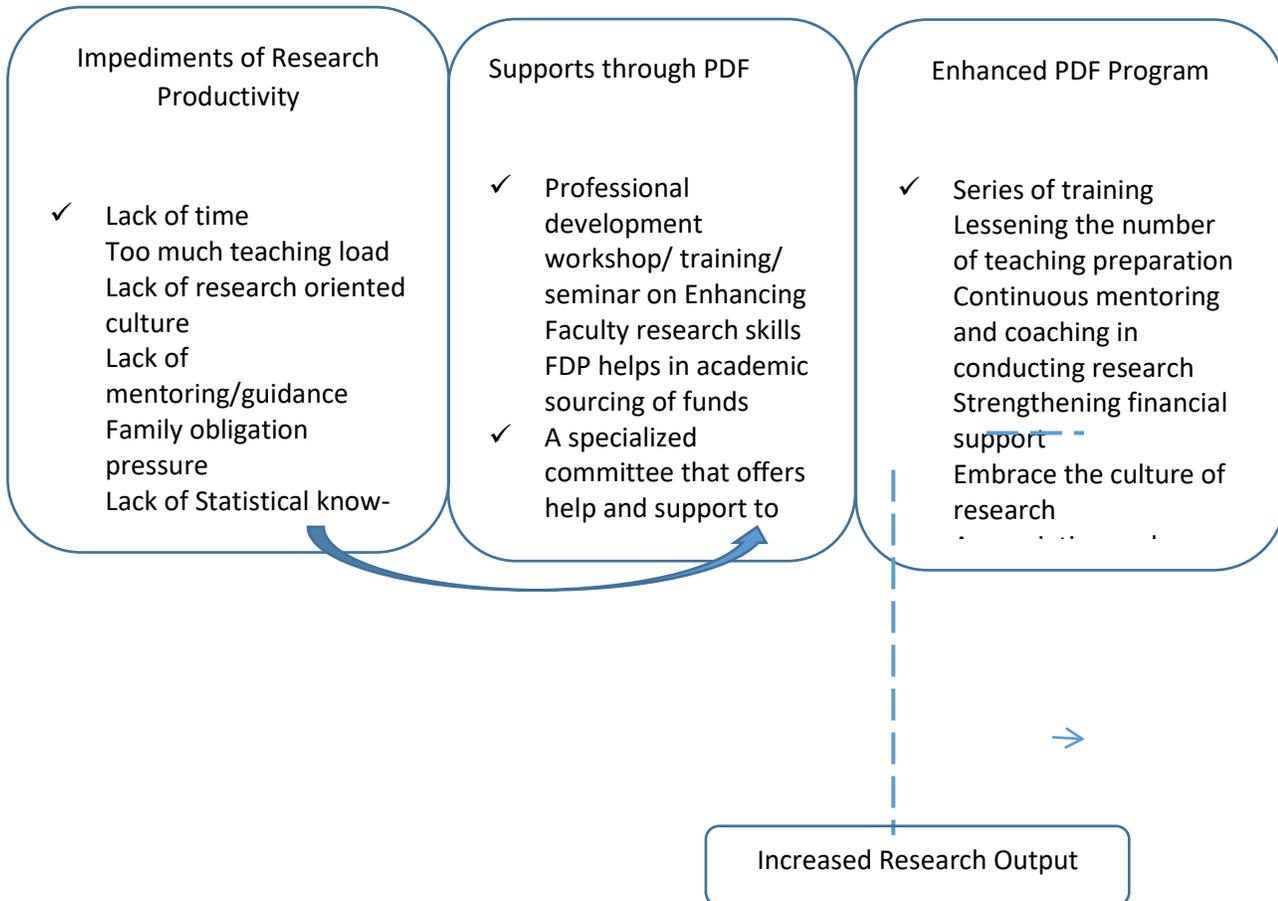


Figure 1: Conceptual Model

The conceptual framework of the study showed that there are several factors that hindered research productivity such as workload pressure, lack of time in conducting research, too much teaching load, and absence of research-focused culture in the college, shortage of mentoring, family obligation pressure, lack of statistical know-how, insufficient motivation and age of academicians. These factors could be best addressed by faculty development programs where each of them will realize full support of the institution, especially in academic writing.

Additionally, traditional supports for faculty development is not enough thus, continuous enhancement of program is deemed necessary. For this reason, in order to determine the needed adjustments to improve the number of research outputs and what else should be added based on the needs of the participants, this

study was conducted. Also, it aims to respond effectively to research productivity calling in the higher learning institutions.

### 1.3 Theoretical Framework (Keeves 1999)

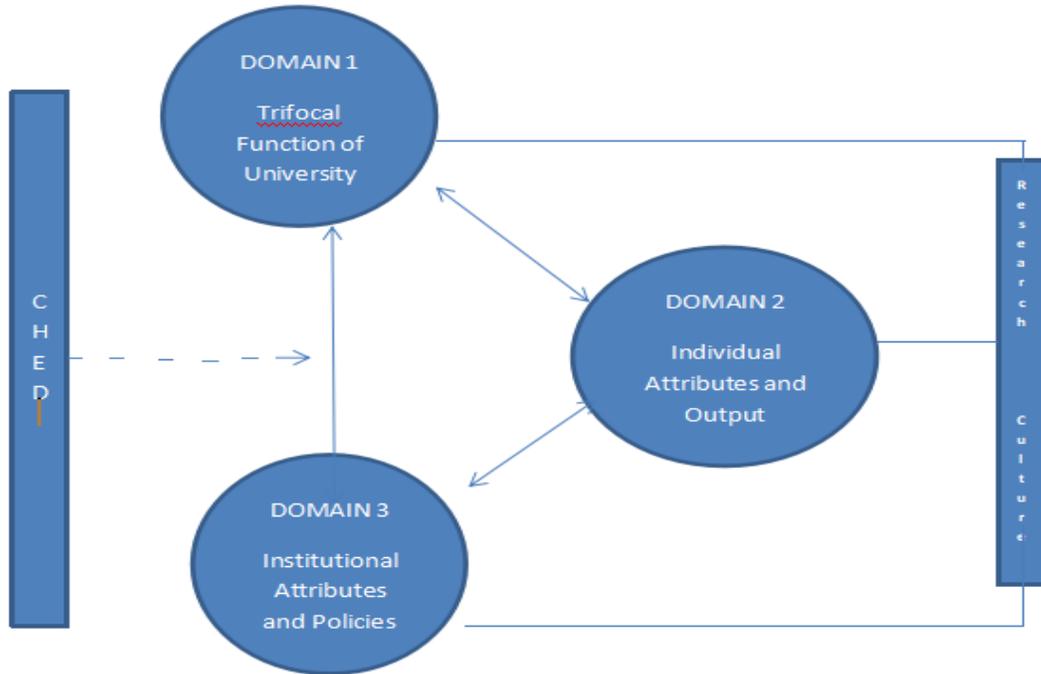


Figure 2: Research Culture Understanding Framework in Philippine HEIs (Patterned from Keeves, 1999)

Research culture is a combination of interrelations of three domains (Fig 3). The first domain is the duty of teaching personnel in teaching courses, research production and community extension service. These duties have different span of overlapping for individual teaching staff. The second domain concerns the output attributes that encompass skills and knowledge that teaching staff possess in relation to conducting the research activity. This also involves their willingness and capacity and experience of conducting research. The third domain is the attributes of the institution that includes the policies regarding development of research oriented activities. This involves policies and regulations that concern the teaching and non-teaching staff of the whole institution. Instilling culture of research is mainly the interchange connecting section 1 and section 2. The parity of these functions in section 1 was archetypal as the teaching staff have discretion that is dependent upon their individual perception of the task. Domain 2 is based on the individual skills and knowledge of writing an academic paper. More so it shows interaction on the different trifocal functions in higher education institutions which form part of domain 1. An interactive relation exists between domain 1 and 2. Research culture is the output of that interaction between domain 2 and 3 which have the reciprocating processes. The third domain develops the content and extent of the research productivity. The application of measures in domain 2 set the tone for the changes to take place in domain 3. The output in Domain 2 would develop the knowledge necessary for the context of Domain 3. Understanding and being responsive to research culture requires 3 Domains where teaching staff must

adhere. The interactive output between domain 2 and 3 allows the teaching staff to construct the research dome based on institutional policies and their own capabilities. These interactive frames exist also between domain 1 and 3. It is represented by a double arrow that teaching staff performance in research based on their capabilities should also have an impact of institutional policies just as they impact activities in other two domains. CHED has an influence on policy development in HEIs but it is interpreted based on institutional context. The dotted line represents that mandates, policies and procedures are open to alteration for the interest of the institution as well as the researchers, presumably the teaching staff. (Salazar & Acosta 2016).

This framework served as a guide for teaching staff in the different colleges and universities on how do they will respond and adapt to the culture of research. It is not only enough that teaching staff in the HEIs focus on instruction because nowadays, but it is also required that academic personnel should consider the trifocal functions of the institutions. Through these, the HEIs implemented several programs in encouraging academic staff to enhance research productivity following the latter policies and guidelines.

## **2 Literature Review**

### **2.1 Research Culture Productivity**

Embedding a Culture of Research is always part of the Educational Institution's Agenda like PUP. The university implemented several incentives to those teaching staff as well as the non-academic staff who will conduct research. Despite the fact that a lot of incentives were provided by the university, teaching staff were not able to produce what the university is expecting from them.

There are a lot of aspects that influence the faculty research output, likewise, there is number of explanations why academic personnel does not write for publication (McGrail et.al 2006). It is for this reason that some teaching staff in the Higher Educational Institutions were not able to produce outputs as required by the institution. Additionally, Tamban & Maningas (2020) revealed in their studies that teachers were somewhat able of writing research with regard to technical capabilities.

Jung (2012), stated that there are "individual-level variables" that may encourage to conduct research attributable to personal and demographic profile, as well as teaching and academic writing experiences. Several studies mentioned that there are factors affecting research productivity. However, there is also a major individual factor that may hinder research production in the academe.

### **2.2 Faculty Development Program**

The participants of the study conducted by Bilal & Guraya (2019), claimed that Faculty Enhancement Program motivated them to exercise pedagogically the learnings and knowledge gained from it. In addition, it resulted to more innovative and creative approach for them in the field of education. Furthermore, it was revealed that Faculty Development Program in the field of Medical education creates an enhanced capabilities of mentors hence, generates an effectual learning conditions in the field (Tenzin,et.al, 2019). It was also concluded that FDP had a great impact on the behavior of the learners, since the teacher-beneficiary of this program acquired knowledge through it (Wadhwa, et.al, 2014). However, FDP is not limited to health profession but also applies to other disciplines that creates a worthy impact to both learning and teaching practices (Kamel AM,2016).

In this quest for the search of new knowledge, faculty members are longing for an attractive and highly motivational programs for the advancement of their career. It is for this reason that the

administration of higher educational institutions devise different programs and plans. But, still on the study conducted by Tamban & Maningas (2020), there is a need for thorough and continuous training/ workshop in order to improve the teachers' research capabilities.

It is therefore a challenge to an institution on how they will encourage the faculty members and even the non-teaching force to produce research outputs. Consequently, research related trainings emerged in the faculty development program priorities. FDP is a platform for the university in particular that intends to consider self-analysis, faculty needs and requirements, the nature of involvement in a given task responsive to what they will get out of the development program. More so, this workplace-based training in education will definitely produce a competitive, efficient and effective teacher.

### **3. Methodology/Materials**

This action research utilized quantitative method to respond to the research questions. Likewise, univariate analysis was applied since frequency distribution was determined and it measured the dispersion of one sample. In addition, it sought to determine the number of research output produced before and after the faculty development program.

Furthermore, this study examined the challenges and difficulties encountered by PUPLO teaching staff in writing research. For the frequency distribution, mean and standard deviation, SPSS was used.

#### **3.1 Sample**

Out of fifty-four teaching personnel of PUP Lopez in 2018, thirty were given a survey questionnaire to participate in this study. However, twenty-two of them responded with 62.86 percent response rate. Fifteen females and 7 males were the sample size who are mostly regular faculty. Majority of them are assistant professors aged 27-66. Their teaching experiences range from three to more than thirty years which composed of a representative sample of different programs such as education, business, IT, Engineering, Architecture, Agribusiness, Political Science and Accountancy.

#### **3.2 Instrument**

A 40 item-questionnaire was prepared by the researcher intended to all teaching staff of Polytechnic University of the Philippines-Lopez, Quezon Branch. Content validity was evaluated and validated by two faculty members outside our institution with expertise in the field of research. The instrument was divided into 6 sections. The first section contain six items pertaining to participants' personal profiles and academic experience. The second part includes the number of research output in the last three years and the role of researchers in promoting the university research agenda. The third part was focused on faculty knowledge and competencies in writing research consisting of 11 items. The fourth part comprises 16 items about the factors affecting research production. The fifth part consists of 4 items in relation to supports provided by the institution through faculty development program. Lastly, the researcher solicited their suggestions to increase the research production of teaching staff in the last part of the instrument.

### **4 Results and Findings**

**Table1:** The number of research papers produced by teaching staff before and after having a Faculty Development Program

## Increasing the Number of Faculty Research Outputs Through Faculty Development Program

No. of Research Outputs	Before FDP(2015)		After FDP(2016)		After FDP(2017)	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
None	52	96.3	49	90.7	44	81.5
1	2	3.7	3	5.6	3	5.6
2	0	0	2	3.7	3	5.6
3 and more	0	0	0	0	4	7.3
<b>Total</b>	<b>54</b>	<b>100</b>	<b>54</b>	<b>100</b>	<b>54</b>	<b>100</b>

With regards to the production of research (based on actual record), the results in table 1 presented that the number of research output produced is higher after having implemented the Faculty Development Program (FDP). Before the implementation of FDP, faculty produced 2 research outputs and 15 types of research were conducted after the implementation of the program.

**Table2:** Faculty knowledge and competencies in writing a research paper

Variables	Mean	Standard Deviation
Concepts and foundation of research methodology.	2.0455	.57547
Concept and foundation of academic research writing.	2.1364	.63960
Finding a good topic.	2.0455	.48573
Identification of problems	1.9545	.48573
Formulating research objectives.	2.0000	.53452
Theoretical framework	2.1429	.47809
Conceptual framework	2.0476	.49761
Hypothesis writing	1.9524	.58959

Participants in this study were also asked about their knowledge and competencies in line with writing research. They indicated that they had average knowledge of all the basic concepts of writing. Overall, they seemed to have successive reorientation in all the items from table 2 to enhance their research writing production (*Mean* ranges from 1.9524-2.1429).

**Table3:** Factors affecting research production of teaching staff

Variables	Mean	Standard Deviation
Workload pressure	1.3636	.58109

Lack of time	1.4091	.50324
Administrative work pressure	2.0	.68599
Too much teaching load	1.7778	.73208
Absence of research-oriented environment in the university	1.9524	.58959
Absence of mentoring/assistance with respect to techniques and methods of performing research	1.7727	.61193
Personal obligation burden	1.8636	.77432
Absence of expertise of statistical analysis and/or statistical software	1.8182	.66450
Absence of inspiration	2.1905	.60159
Absence of research means	2.1500	.67082
Absence of joining academic research writing workshops/seminars to cultivate research abilities	1.9545	.65300
Exasperation during research writing	2.3810	.58959
Absence of library resources	1.7727	.61193
Absence of expertise in how to perform academic research	1.9545	.58573
Age factor	2.0909	.81118

From the data showed in table 3, the participants revealed that with regards to the knowledge and competencies they possess, they indicated two primary components that influence production in research; these are: workload pressure (*Mean* = 1.3636, *SD*= .58109), and lack of time (*Mean*= 1.4091, *SD*= .50324). All the rest, indicated in the table (3), fall under the secondary factors that hold them from writing except frustration during research writing (*Mean*=2.3810, *SD*=.58959) which participants did not agree that it is one of the important factors that hindered them to write.

**Table4:** Support provided to teaching staff by the Faculty Development Program

<b>Variables</b>	<b>Mean</b>	<b>Standard Deviation</b>
FDP inspires teaching staff to perform research	1.3182	.47673
There is a dedicated committee that supports teaching staff in performing academic research	1.6818	.56790
FDP presents professional advancement workshops/seminars/platforms that focus on improving faculty research abilities	1.3182	.47673
FDP supports teaching staff in academic research funding/obtaining funds	1.7727	.75162

With regards to the support they got from the institution through the faculty development program to help them in writing, their responses were noticeably agreed on “providing professional advancement workshops/seminars/platforms that focus on improving enhancing faculty research abilities” and “FDP

## Increasing the Number of Faculty Research Outputs Through Faculty Development Program

encourages them to conduct research” ( $Mean=1.3182, SD=.47673$ , respectively). However, they specified neutral answers to both “The presence of specialized committee that helps teaching staff in conducting academic research” ( $Mean=1.6818, SD=.56790$ ); and “provision of research funding” ( $Mean=1.7727, SD=.75162$ ).

Also, this study solicited suggestions from the participants in order to increase the research production of the branch, and they specified the following:

- Reduce teaching load;
- Series of training/workshops about writing research should be provided to develop skills and knowledge of teaching staff;
- Lessen the number of preparations in line with faculty specialization;
- Financial assistance should be provided before research writing;
- Continuous mentoring and coaching;
- Appreciation and recognition of teaching staff in the branch with the most number of researches produced;
- Provide opportunities to disseminate findings in different national and international conferences;
- Financial support must be strengthened;
- Embrace the culture of research. Those who are indifferent teaching staff towards research should be given adequate support system to push with the endeavor
- Incentives for those with research outputs that significantly creates an impact on the progress of the university/branch.
- Reduce the load of teaching staff who are in the preparation of thesis/dissertation
- Conduct an annual research conference/seminar.
- Increase the budget allocation
- Provide a better workplace and research center for teaching staff engaged in research
- Provide a list of funding bodies aside from PUP

## 5 Conclusion

Primarily, this study aimed at determining the number of research output of PUP Lopez teaching staff by enhancing the faculty development program. One of the remarkable discovery that emerged in this study that despite of the Faculty Development Program (FDP) that provides seminars and training and encouraged the participants to start writing academic paper, they still were not able to do it.

More so, the findings revealed that despite the competencies and knowledge they have, there are still prevalent factors that hinder research productivity such as; workload pressure and lack of time.

The researcher’s recommend that there must have a full execution of the ideal workload for teaching staff who are conducting and or planning to conduct research; also, provides successive training/workshops that will enhance the research productivity of teaching staff; and; provide other incentives relevant to research productivity such as merit and recognition.

Furthermore, it is highly suggested that a special session for competency enhancement should be given emphasis by the FDP. Also, continuous mentoring and coaching should be implemented to increase

the number of research outputs. Likewise, opportunities to present research output in national and international conferences should be equally disseminated. Taken all the findings and suggestions to this study, the authors recommend that in order to establish and promote the tradition of writing research in PUPLO, everybody shall be motivated to conduct research and accomplish it on the desired completion time. This can be augmented in a variety of ways such as reducing the teaching load of those who will conduct or planning to conduct research/es and assign faculty and/or personnel who has the capability, aptitudes and skill in academic writing. In the end, findings revealed that it would be beneficial to conduct further study on how other universities and colleges (with more research outputs) were able to attain their goal in terms of research production.

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