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Research Article

Research Competence and Productivity Among School Heads and Teachers: Basis for District Research Capacity Building

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Abstract

The study was conducted to determine the research competence and productivity among school heads and teachers: Basis for district research capacity building. It was conducted in thirteen Public Elementary Schools and four Public Secondary Schools in Taytay District III and involved twelve school heads and 124 public school teachers. The researcher's modified survey questionnaires and administered utilizing google form. Descriptive statistical tools such as mean, frequency counts, and percentage were applied as statistical treatments. Mann-Whitney Test and Chi-square Test were used to analyze the significant difference between the research skills and productivity of the school heads and teachers. The study revealed that school heads and teachers have different beliefs concerning individual research skills and are described as sometimes and often respectively. However, the study found out that only two teachers and none of the school heads engaged in crafting basic and action research. Results revealed that School heads and teachers were lack of training and seminars on how to do research, insufficient budget in the school to undertake research, difficulty in analyzing qualitative data, heavy teaching load, and the process of proposing research is very tedious and rigorous, busy with their teaching practice and personal life to do research are the challenges encountered by the school heads and teachers in conducting research. Mann-Whitney Test shows that there is a significant difference between the school heads' and teachers' research skills. Chi-square Test revealed that there is a significant difference between the school head and teachers' research productivity.

Keywords: Research Competence, Productivity, Capability Building, Descriptive, School Heads And Teachers

Introduction

The word "research" originated from the old French word "*researcher*" meaning to search and search again. It implies repeating a search for something and implicitly assumes that the earlier search was not exhaustive and complete in the sense that there is still scope for improvement (Kabir, 2018).

Research is a process of systematic inquiry that entails the collection of data; documentation of critical information; and analysis and interpretation of that data/information, following suitable methodologies set by specific professional fields and academic disciplines

Moreover, DepEd Order 039 s. 2016 cited research as a systematic process of collecting and analyzing data to increase the understanding of a topic. The National University of Ireland Galway defined research skills as the ability to search for, extract, organize, evaluate, and use the gathered information relevant to the topic. Research competence is the ability to find an answer to a question or a solution to a problem). Research is the art of scientific investigation. Obliopas (2018), in his study, revealed that respondents have moderate research skills and low productivity. The research skills are positively linked to the number of completed and presented while the publication skills are significantly correlated with the number of published research papers.

The Department of Education began its quest to improve the quality of basic education through research and came up with an essential action to improve the performance of school children by addressing specific issues and concerns in teaching and learning.

The adoption of the Basic Education Research Agenda is essential to improve the performance of school children by applying research-based intervention. One of the thrust and priorities of the Department of Education is to promote the culture of research. The Governance of Basic Education Act of 2001 (RA 9155), Section 7 (5), includes among the duties and responsibilities of the Department of Education is the undertaking of educational research and studies that will serve as one of the bases for necessary reforms and policy development in the department.

The Schools Division of Palawan has already started an endeavor to promote and strengthen the culture of research among its teaching and non-teaching personnel. However, the number of teaching and not

teaching personnel who are engaged in conducting basic and action research in the past 3 years are still low despite the effort exerted by the planning and research section and the division office.

In the last five years, there is no proof of evidence showing the Taytay III district is taking part in any research initiatives such as submission of research proposals, research presentations, and alike. This situation motivates the interest of the researchers to find out what are the reasons for the non-participation of the teaching and non-teaching personnel of Taytay III in any research initiative.

This study aims to determine the research competence and productivity among school heads and teachers: Basis for district research capacity building. Thus, the advocacy to promote the culture of research in Taytay District III is one of our priorities.

Research Questions

The general aim of this study is to determine the research competence and productivity of the school heads and teachers: The basis for district research capacity building. Specifically, it sought to answer the following questions:

1. What is the level of research competence of the respondents?
2. What is the research productivity of the respondents?
3. What are the challenges encountered in conducting research?
4. Is there a significant difference between research competence and the productivity of the school heads and teachers?

Methodology

The researchers employed a quantitative-descriptive research design. This design is the most appropriate research by providing the facts and essential knowledge about the nature of data. Descriptive research is a quantitative research method that tries to collect quantifiable information for statistical analysis of the population sample. The respondents of this study were the 12 school heads and the 124 teaching personnel of Taytay District III utilizing a total enumeration. The survey questionnaire was adopted from the works of Hussien et al, (2019) and Ulla et al., (2017) and modified by the researchers for this study. Descriptive statistics such as frequency counts, percentages, and means, were applied as statistical treatment. The Mann-Whitney Test and Chi-Square Test were used to analyze the significant difference between research competence and productivity of the school heads and teachers.

Results and Discussion

Research Competence as perceived by the School Head themselves and Teachers

Table 1 (*Please see appendix 1*) presents the research competence as perceived by the school heads themselves and Teachers. Results show that the mean rating given by the school heads themselves was 3.39 generally described as competent while teachers' mean rating was 3.69 which was described as very competent. It implies that school heads and teachers have different perceptions concerning their research competence. Specifically, the statement “capable of finding information that is specific to my needs” (4.01); and “gather new and unexplored information related to my work” (4.0) were obtained the highest mean.

Furthermore, the school heads and teachers “ensure that due acknowledgment is given to the source of my information” (3.83) and (3.84) respectively. “Plan the information that I need to gather before scheduling a face-to-face interview” has a mean of (3.83) and (3.82).

However, the statement that states “ability to identify statistical tool in analyzing data (2.83) and “confidence in producing a well-researched work” (3.33) obtained the lowest mean. It implies that respondents need to familiarize themselves and master the process and the statistical tool used in analyzing data.

According to Hine (2013), doing action research could also lead to the betterment of the teachers’ teaching skills and for their student's progress and improvement as well.

Furthermore, Cain and Malovic (2010), believed that doing research is a significant tool for professional development that can promote lifelong learning, this did not have to change in their teaching practice.

According to Thomas (2004) as cited by Hussein

(2019), the more involvement of the teacher in research, the more the teacher enhance the educational quality. Moreover, Worrall (2004) cited "to create a greater understanding of specific issues and concerns in teaching and learning".

Research productivity of the school heads and teachers.

Table 2 shows the research productivity of the school heads and teachers. The results show that only 1.61% of the teachers engaged in research. However, none of the school heads were engaged in research. It implies that school heads must be engaged in basic and action research to encourage teachers in school to be actively involved in academic research and, school heads are needed to capacitate themselves.

Ulla et al. (2017) and Morales (2016) cited that time constraints make it impossible for teachers to research as they have so many teaching hours to do, and they rarely have time to do research.

Table 2. *Frequency distribution of School Heads and Teachers Research Productivity*

Statement	School Head N=12		Teacher N=124	
Research Productivity	**F**	**%**	**F**	**%**
No. of the teacher with basic and action research produced.	0	0	2	1.61%
Total	**0**	-	**2**	**1.61%**

Challenges Encountered by the respondents in conducting research.

Table 3 (*Please see appendix 2*) shows the challenges encountered by the school heads themselves and teachers in conducting research. Results revealed that 87.7% of the respondents were lack of training and seminars on how to do research. It implies that school heads and teachers must be engaged in training and seminars related to research. The conduct of the school and district-based capability building on basic and action research is one of the primary topics to be discussed in the learning action cell and during the in-service training.

On the other hand, insufficient budget in the school to undertake research (79.9%); difficulty in analyzing my qualitative data (77.5%); heavy teaching load affect the practice of research; our process of proposing research is very tedious and rigorous (76.1%); busy with my teaching practice and personal life to do research (73.9%) are the common challenges encountered by the school heads and teachers in conducting research.

In support of the above results, Ulla et al., (2017) found out that lack of knowledge in research, insufficient training, and seminars, and time-consuming are one of the challenges met by teachers. Furthermore, promotion is the motivating factor why teachers engaged in research. However, research findings showed that teachers experience challenges in doing research such as lack of knowledge and skills, heavy teaching loads, lack of financial support from the school, and lack of training and seminars about research.

Mann-Whitney Test shows the significant difference between school heads' and teachers' research Competence.

Mann-Whitney Test shows the significant difference between School Heads' and teachers' research competence. Since the p-value of 0.001 is less than the significance level of 0.05, we reject the null hypothesis. Thus, there is a significant difference between the school head and teachers' research skills. Moreover, Obliopas (2018), revealed that respondents have moderate research skills and low productivity.

Table 4. *Mann-Whitney Test shows the significant difference between school heads and teachers' research competence*

Test Statistics[a]

	VAR00004
Mann-Whitney U	124.000
Wilcoxon W	424.000
Z	-3.384
Asymp. Sig. (2-tailed)	.001

a. Grouping Variable: VAR00001

Chi-square Test showing the significant difference between School Heads and Teachers' research productivity

Chi-square Test shows the significant difference between School heads' and Teachers' research productivity. Since the p-value of 0.021 is less than the significance level of 0.05, we reject the null hypothesis. Thus, there is a significant difference between the School Heads' and Teachers' research productivity. Obliopas (2018) found out that research

skills are positively linked to the number of completed and presented while publication skills are significantly correlated with the number of published research papers.

Table 5. *Chi-square Test shows the significant difference between School Heads and Teachers' Productivity.*

Test Statistics

	School Head
Chi-Square	5.333[a]
Df	1
Asymp. Sig.	.021

Conclusion

Considering the findings of this study, the following conclusion was drawn: (1) The school heads and teachers have different perspectives about their research competence. School Heads were considered competent while teachers describe as very competent. (2) Few of the public school teachers and none of the school heads in Taytay District III are engaged in basic and action research. (3) Lack of training and seminars on how to do research, insufficient budget in the school to undertake research, difficulty in analyzing my qualitative data, heavy teaching load affect the practice of research, our process of proposing research is very tedious and rigorous, busy with my teaching practice and personal life to do research were the challenges encountered by the school heads' and teachers' in conducting research. (4) There is a significant difference between the school heads' and teachers' research competence. (5) There is a significant difference between the school heads and teachers' research productivity.

After reviewing the results of this study, the following recommendations were made: *Department of Education:* (1.1) The conduct of capability building on basic and action research should be given priority. (1.2) Provide training and seminars about research to capacitate school heads, teachers, and non-teaching personnel. (1.3) Provide technical assistance to school heads and teachers in conducting research. (1.4) Encourage the participation of school heads and teachers in research activities and programs of the district and division. (1.5) Strengthen the research program at the district level. *School Head:* (2.1) Attend training seminars and capability building for them to be capacitated and to provide technical assistance to teachers. (2.2) Provision of SEF shall be utilized in the research development program. (2.3) Research is one of the priority topics to be discussed in Learning Action Cell. (2.4) Submit a research proposal to District Research Committee. *Teachers:* (3.1) Participate in online and face-to-face training and seminars related to research. (3.2) Participate in conducting basic and action research to improve the teaching-learning process. (3.3) Submit a research proposal to District Research Committee (DRC).

References

Cain, T. and Milovic, S. (2010). Action research as a tool of professional development of advisers and teachers in Croatia. *European Journal of Teacher Education*, *33*(1), 19-30.

Government of the Philippines. (2015). Department of Education. (2015). Department Order 43.s, 2015 "Revised Guidelines for the Basic Education Research Fund (BERF).

Government of the Philippines. (2016). Department of Education. (2016). Department Order 39, s. 2016 "Adoption of Basic Education Research Agenda (BERA)".

Government of the Philippines. (2017). Department of Education. (2017). Department Order 16, s. 2017 "Research Management Guidelines"

Hine, G.S.C. (2013). The importance of action research in teacher education programs. *Issues in Educational Research*, *23*(2):

Hussien, O. Q., Jerusalem, R. Y. & Langam, H. L., (2019). Research Barriers of Public School Teachers of the Division of Ilgan City. PUPIL: International Journal of Teaching, Education and Learning, 3(1), 189-204.

Morales, M.P.E. (2016). Participatory action research (PAR) cum action research (AR) in teacher professional development: A literature review. *International Journal of Research in Education and Science (IJRES)*, *2*(1), 156-165.

Obliopas, Riomar (2018) research Skills and Productivity among Faculty in A State University: Basis for a Proposed Research Capability Building. Easter Samar State University, Philippines.

Thomas, G. (2004). Introduction: Evidence and practice. In G. Thomas, & R. Pring (Eds.), Evidence-based education practice (pp. 1–18). Maidenhead: Open University Press.

Ulla, Mark B., Barrera, Keneth Ian B, Acompanado, Meller M. (2017). Philippine Classroom Teachers as Researchers: Teachers' Perceptions, Motivations, and Challenges. Australian Journal of Teacher Education. Volume 42. Issues 11. Article 4

Worrall, N. (2004). Trying to build a research culture in a school: Trying to find the right questions to ask. Teacher Development, 8(2-3), 137-148

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Appendix 1 (Table 1). *Research Competence as perceived by the School Heads themselves and Teachers*

Statement	**School Head N=12**		**Teacher N=124**	
I as School Head/Teacher:	**Mean**	**DI**	**Mean**	**DI**
Write down the purpose of collecting information before finding the sources for collecting information	3.33	C	3.85	VC
Chalk out a focused plan for collecting information from various sources	3.08	C	3.76	VC
Like to collect information from varieties of sources to understand the reliability of the information	3.58	VC	3.94	VC
Take time to sort out the information and filter unwanted information	3.58	VC	3.90	VC
Cautious about information overload	3.42	VC	3.73	VC
Apply professional skills for downloading information from websites	3.75	VC	3.95	VC
Gather new and unexplored information related to my work	3.58	VC	3.86	VC
Capable of finding information that is specific to my needs	3.50	C	4.01	VC
Know how to collect information from online journals and other research e-databases	3.17	C	3.57	VC
Have the technical skills needed for sorting and synthesizing relevant information	3.25	C	3.48	C
Make a record of valid and quality information from all sources	3.33	C	3.71	VC
Ensure that the source of my information is acknowledgment.	3.83	VC	3.84	VC
Know how to write the standard format for citations and references	2.92	C	3.44	C
Plan the information that I need to gather before scheduling a face-to-face interview	3.83	VC	3.82	VC
Prepare a list of required information and questions for which I seek answers	3.58	VC	3.84	VC
Curious to know about the current trends related to my work	3.75	VC	4.00	VC
Confident in producing a well-researched work	3.25	C	3.33	C
Analyze graph, tabular, and other similar data	3.00	C	3.49	C
Ability to find statistical tools for analyzing data	2.83	C	3.39	C
Ability to draft reports in a professional manner	3.17	C	3.55	VC
My colleagues seek my help in gathering information related to the work context	3.25	C	3.35	C
Ability to persuade people based on the information that I gather	3.50	C	3.47	C
Have the skills in information dissemination using various platforms	3.42	C	3.57	VC
Over-All Mean	***3.39***	***C***	***3.69***	***VC***

Appendix 2 (Table 3). *Challenges Encountered by the Respondents in Conducting Research*

Statement	N=136	
I as School Head/Teacher:	**Agree**	**Disagree**
Lack of knowledge on how to do action research.	65.9%	34.15
I find researching time-consuming	69.6%	30.4%
Busy with my teaching practice and personal life to do research	73.9%	26.1%
I do not have much support from school to do research	38.4%	61.6%
No interest to research at all.	21.7%	78.3%
I am not motivated to do research	39.9%	60.1%
Low proficiency in English hinders me to do research	44.2%	55.8%
I do not see the importance of researching my personal life.	9.4%	90.6%
There are insufficient reference materials (journals, research books, research reports, etc in the school library.	68.1%	31.9%
Lack of training and seminars on how to do research	87.7%	12.3%
Difficulty in analyzing my qualitative data	77.5%	22.5%
Insufficient budget in the school to undertake research	79.9%	20.1%
Lack of recognition to conduct research activities	55.8%	44.2%
I don't know how to conceptualize my research	63.8%	36.2%
Heavy teaching load affects the practice of research	76.1%	23.9%
Lack of clear role of the teacher in the school to conduct research	55.8%	44.2%
Involvement in action research should be one criterion for promotion	73.9%	26.1%
Lack of knowledge on how to do statistical analysis of numerical data	71.0%	29.0%
Our process of proposing research is very tedious and rigorous	76.1%	23.9%
No mentor in conducting research	70.3%	29.7%