

Research Management of School Administrators in Samar Division, Philippines

Genaro O. Basas III, Ph.D.¹, Lanie M. Pacadaljen, Ph.D.²

¹ Head Teacher, Bagacay National High School, Bagacay, Daram, Samar, Samar Division, Catbalogan City, Philippines

² Associate Professor, Samar State University, Catbalogan City, Philippines

Email: ¹genaro.basas@deped.gov.ph, ²lanie.pacadaljen@ssu.edu.ph

ABSTRACT

Research is utilized as an aid to any educational innovation and a tool for knowledge building. It is imperative to promoting evidence-based decision and policy-making at different levels of school governance (San Miguel, 2019). This study was designed to assess the research management of school administrators in senior high schools in the Division of Samar, Philippines during the School Year 2019-2020. This study used descriptive research with correlational analysis. Total enumeration in the selection of 68 senior high school administrators was employed. Results revealed that senior high school administrators are less competent in research management. Their competencies in research management were not yet well-developed since they lacked years of practice in getting along with people, cultivating people's research potentials, implementing research policies and initiatives, and using research outputs for the benefits of the school which resulted to unclear and undefined plan in research data management as to storage, dissemination, and utilization, and they did not put in place a systematic monitoring and evaluation (M&E) for research. Thus, it is recommended that selection and promotion of school heads in all levels, elementary, junior and senior high school should include criterion on research management competencies of the applicant-school heads. All school personnel should be engaged in research by motivating and providing them more research incentives and benefits, and increasing more chances for interdisciplinary and collaborative research activities to improve their research productivity.

Keywords

research management, research incentives, research productivity, innovation

Introduction

Necessity is the mother of invention. If we will look at all things that we use in our everyday lives, these were invented because of necessity and to make our life easier. This is also the same in education. New trends, issues, difficulties, and problems are faced by the school administrators specifically in the school management. These need research and study so that school administrators can come up with new strategies and techniques and so that management will be adaptable in present situation in the schools. As stated by Austin (2020), the following are the importance of conducting educational research: address issues and challenges in the school settings; support professional learning; establish networks of information and professional support; introduce change by clarifying priorities, purposes and processes; enhance understanding of professional and policy context to manage the school strategically and effectively; and improve self-efficacy and voice within the school and more widely within the profession.

Research is utilized as an aid to any educational innovation and a tool for knowledge building. It is imperative to promoting evidence-based decision

and policy-making at different levels of school governance (San Miguel, 2019). The results of any research conducted in basic education would be irrelevant if not managed well and properly used for school improvement. In the Asia-Pacific Regions, more countries including the Philippines are still struggling to build a culture of research. The Department of Education (DepEd), being the prime mover of basic education in the country, needs to establish a clear and effective framework of research management that reinforces the link of research to school improvement. The necessity is that this research management in public schools must require competencies of school administrators not just in doing research, but also in managing the research-related data, processes, activities, and resources.

That is why, the issuance of research policy of the DepEd known as the "Research Management Guidelines (RMG)" has primarily aimed to improve the conduct of research in basic education and likewise to reinforce the link of research to school management by research advocacy, dissemination, and utilization (Llego, 2017). The improvement of research in the basic education can be a great help in the undertaking of programs and activities under Research and

Development of every public school. This is very much feasible if there are school administrators who are efficient in research management and capable in utilizing the results as bases for necessary reforms and program development in the provision of quality basic education. However, the function of school administrators in research management in public schools cannot be singled out into one role. They assume varied roles such as managers, researchers, and collaborators to ensure the effectiveness of management of research processes and utilization of research outcomes. They should emphasize activities that could enhance their research productivity and of their teachers to benefit classroom instruction and learning. A variety of experiences that complement trainings and actual engagements in doing research should reinforce the acquisition of research (Prihatin, 2017).

Despite the various efforts exerted by the DepEd Samar Division in building the culture of research among all its school personnel, the performance of the Division in the Eastern Visayas Basic Education Research Conference (EVBERC) from 2017 to 2019 was still wanting. The Division failed to bag any award in poster and oral research presentations (DepEd R8, 2019). In 2017, only nine (9) out of 29 districts participated in the “1st Division Research Summit” (DepEd Samar Division, 2017). It was also determined that there was still a minimal number of school personnel conducting research in Samar Division. In fact, there were only 10 school personnel who submitted research proposals that have been approved and completed under BERF in 2019 (DepEd Samar Division, 2019).

The researchers believed that the performance of Samar Division in the research competitions and the less engagement of school personnel in research were attributed to the research management competencies of school administrators. If these school administrators were into managing research effectively, their research management in the schools would likely result to school personnel who were research-oriented and evidence-based decision makers. Though it becomes a challenging task to school administrators, they need to make strides in research and its utilization in program development. They also need to formulate

strategies cultivating a culture of research in school.

Statement of Objectives

This study was designed to assess the research management of school administrators in senior high schools in the Division of Samar during the School Year 2019-2020. Specifically, it sought answers to the following questions:

1. What is the profile of the school administrators in terms of:
 - 1.1 age and sex;
 - 1.2 educational background;
 - 1.3 work experiences in terms of:
 - 1.3.1 length of teaching experience; and
 - 1.3.2 length of administrative experience?
 - 1.4 number of research management trainings attended; and
 - 1.5 research productivity in terms of:
 - 1.5.1 number of researches conducted;
 - 1.5.2 research funding facilities availed;
 - 1.5.3 research presentations;
 - 1.5.4 research awards received; and
 - 1.5.5 research publication?
2. What is the level of research management competencies of school administrators along the following areas:
 - 2.1 organization and delivery of research services;
 - 2.2 research planning, strategy and policy development;
 - 2.3 partnerships and collaboration;
 - 2.4 research funding;
 - 2.5 research integrity and ethics;
 - 2.6 managing funded research;
 - 2.7 research data and information management; and
 - 2.8 research uptake, utilization and impact?
3. Are there significant relationships between the level of research management competencies of school administrators and their profile variates?

4. What are the experiences of school administrators in research management in the schools?

Methodology

This study was classified into descriptive research with correlational analysis. However, a qualitative approach was used to address the question on the experiences of the senior high school administrators in research management. In the collection of relevant information, the following basic instruments were utilized: the self-made survey questionnaire, the document analysis, and the semi-structured interview. The researchers used the total enumeration in the selection of 68 senior high school administrators in the gathering of quantitative data. Meanwhile, the purposive sampling was used in choosing the 6 participants for qualitative data gathering. Questionnaires were personally administered to the senior high school administrator-respondents to ensure high percentage of retrieval. In obtaining the data on the research management experiences of school administrators, interview was conducted among selected participants at a place of their convenience.

The data gathered were subjected to data processing, both manual and machine processing. In the statistical presentation and treatment of the data, the researchers employed the descriptive and

inferential statistics, such as: frequency count, percentage, arithmetic mean, standard deviation, weighted mean, Pearson Product Moment Coefficient Correlation (Pearson r), and Chi-square test. On the other hand, the researcher treated the qualitative data obtained from the interview applying the thematic analysis. This study thoroughly adhered to Data Privacy Act of 2012 to make sure that respondents' right to data privacy would not be violated. The highest level of objectivity in all aspects of the study was maintained.

Results and Discussion

This section presents the results of the study as follows:

Profile of the Senior High School Administrators

This section presents the socio-demographic characteristics of the senior high school administrators in the Division of Samar in terms of age and sex, educational background, work experiences, number of research management trainings attended, and research productivity.

Age and Sex. Table 1 shows the age and sex distribution of the senior high school administrator-respondents. Majority of the senior high school administrator-respondents were aging 47-51 years old and are dominated by females with 36 or 52.94 per cent.

Table 1: Age and Sex Distribution of the Senior High School Administrator-Respondents

Age Bracket (in years)	Sex Category				Total	Percent
	Male		Female			
	F	Percent	F	Percent		
57 – 61	5	16	8	22.2	13	19.1
52 – 56	6	19	7	19.4	13	19.1
47 – 51	7	22	10	27.8	17	25.0
42 – 46	4	13	3	8.3	7	10.3
37 – 41	5	16	3	8.3	8	11.8
32 – 36	3	9	2	5.6	5	7.4
27 – 31	2	6	3	8.3	5	7.4
Total	32	100	36	100.0	68	100.0
Mean	46.7 years	-	48.5 years	-	47.7 years	-
SD	9.4 years	-	9.2 years	-	9.3 years	-
Percent	47.05882	-	52.941176	-	100.0	-

The data imply that sex is not a factor in the designation of school heads. This signifies that male and female teachers have equal opportunity

to be promoted in administrative positions. In the DepEd, any sex can already be considered into

administrative position as gender equality is now being acknowledged (Llego, 2017).

Educational Background. Table 2 presents the educational background of the senior high school administrator-respondents.

Table 2: Educational Background of Senior High School Administrators

Educational Background	Frequency (f)	Percent (%)
Doctorate Degree Holder	9	13.2
w/ doctorate Degree Units	18	26.5
Master's Degree Holder	22	32.3
w/ Master's Degree Unit	18	26.5
Bachelor's Degree Holder	1	1.5
Total	68	100.0

As shown in the table, majority of the senior high school administrator-respondents were master's degree holders. The data presented in the table disclose that the senior high school administrator-respondents possessed educational qualifications necessary for their present positions. In the DepEd, the qualification educational standard for head teacher and principal positions was at least Bachelor's Degree in Education or Bachelor's Degree with 18 professional education units (Llego, 2016). Shulsinger (2017) emphasized that earning a graduate degree helps to improve one's

skills to become more competitive in management including aspects on research. Since majority of the senior high school administrator-respondents were masters' degree holders, they were expected to perform not just their duties as school leaders, but also as research managers.

Work Experiences. Table 3 shows the work experience of the senior high school administrator-respondents which includes their teaching experience and administrative experience as school heads.

Table 3: Work Experiences of the Senior High School Administrators

Work Experience (in years)	Nature of Work			
	Administrative		Teaching	
	Frequency (f)	Percent (%)	Frequency (f)	Percent
24 - 27	3	4.4	2	2.9
20 - 23	5	7.4	7	10.3
16 - 19	3	4.4	19	27.9
12 - 15	12	17.6	13	19.1
8 - 11	18	26.5	11	16.2
4 - 7	11	16.2	13	19.1
3 years and below	16	23.5	3	4.4
Total	68	100.0	68	100.0
Mean	9.7 years	-	13.0 years	-
SD	6.6 years	-	6.0 years	-

As shown in the table, majority or 19 (27.9%) out of 68 senior high school administrator-respondents had a length of teaching experience within 16 to 19 years. As regards to their administrative experience, majority or 18 (26.5%) of them had been to administrative positions for eight (8) to 11 years now. Hassel (2016) claimed that those school administrators with experiences of 10 years and below in administrative works are considered neophytes in the positions. It is,

therefore, that more of the respondents of this study were considered as neophytes being senior high school administrators. Others had been in a position for a considerable number of years of administrative experience that afforded them with knowledge and competencies relative to management. The ability of the leader to manage the organization, according to Kolin (1978), must be learned and cultivated through experience.

Number of Research Management Trainings Attended. Table 4 shows the number of research management trainings attended by senior high school administrator-respondents. As shown in the table, 57 or 83.8% out of 68 senior high school administrator-respondents had not attended trainings on research management.

Table 4: Number of Research Management Trainings Attended by Senior High School Administrators

No. of Trainings Attended	Frequency (f)	Percent (%)
None	57	83.8
1 training	10	14.7
2 trainings	1	1.5
Total	68	100.0

The results denoted that there was less provision of trainings relevant to school research management in Samar Division that is why majority of senior high school administrator-respondents had no trainings in research management. This is also supported by Ulla (2018) in his findings that in the DepEd, the school personnel, especially school administrators, were lacking of relevant trainings relative to management of research. The data in the table imply that the DepEd has no strict policy on research management trainings for school

administrators. School administrators can continue managing the schools even without proper trainings in research management.

Research Productivity: Table 5 shows the research productivity of the senior high school administrator-respondents. As shown in the table in terms of research productivity indicators, 57 or 83.8% out of 68 senior high school administrator-respondents had not conducted any research study. It was evident in this result that only very few of them were conducting research in the schools. The findings were found similar to the report of the DepEd during 2018 Research Management Conference that there was only a few number of school personnel who submitted research proposal for approval under BERF, and completely conducted their researches in the field. Hence, the results of their researches were utilized as bases for strategy formulation and decision-making (Cardona, 2020).

In terms of research funding facility, 57 or 83.8% out of 68 senior high school administrator-respondents had not conducted any research study. The findings denote that more of the senior high school administrators were not into research and some of those who conducted researches used their personal fund and only very few availed the funding under the BERF program.

Table 5: Research Productivity of the Senior High School Administrators

Research Productivity Indicator	Frequency (f)	Percent (%)
No. of Research Conducted:		
0 (None)	57	83.8
2	1	1.5
1	10	14.7
Total	68	100.0
Research Funding Facility:		
None (Without Research Conducted)	57	83.8
Personal	6	8.8
DepEd - Basic Educ Research Fund (BERF)	5	7.4
Total	68	100.0
Research Presentation:		
None	58	85.3
District	2	2.9
Division	4	5.9
Regional	3	4.4
Other (Non-DepEd Research Congress)	1	1.5
Total	68	100

Type of Research Awards Received:

None	64	94.1
Best Oral Presenter	2	2.9
Best Poster Presentation	2	2.9
Total	68	100

Research Published:		
0 (None)	68	100
Total	68	100.0

In terms of research presentation, 58 or 85.3% out of 68 senior high school administrator-respondents had not presented any research study. The above data disclose that a big percentage of senior high school administrator-respondent had no experience in research presentation knowing that many of them had no researches conducted in the field.

In terms of the type of research awards received, 64 or 94.1% out of 68 senior high school administrator-respondents had not received any award related to research. However, in terms of research published, this study found out that no one among the 68 senior high school administrator-respondents had published their research study. The findings imply that the senior high school administrators were not able to publish any research study considering that some of them had no researches conducted in the field and others were not aware on how to publish research articles.

Level of Research Management Competencies of Senior High School Administrators

This section provides the data on the level of research management competencies of senior high school administrator-respondents along the following areas: organization and delivery of research services; research planning, strategy and policy development; partnerships and collaboration; research funding; research integrity and ethics; managing funded research; research data and information management; and research uptake, utilization, and impact.

Organization and Delivery of Research Services. Table 6 shows the level of research management competency of senior high school administrator-respondents along organization and delivery of research management services. As shown in the table, the three indicators considered resulted to less competent.

Table 6: Level of Research Management Competency of Senior High School Administrators Along Organization and Delivery of Research Services

Indicator	Xw/Interpretation	
1. Organization and structure of research support functions and activities in the school	2.04	LC
2. Management and delivery of administrative, managerial and strategic deliverables or research activities in the school	2.15	LC
3. Monitoring and review of research support functions and activities	2.25	LC
Grand Total	6.44	-
Grand Mean	2.15	LC

Legend:

- 4.51 - 5.00 - Highly Competent (HC)/w/ 91-100% sufficiency level
- 3.51 - 4.50 - Competent (C)/w/ 61-90% sufficiency level
- 2.51 - 3.50 - Moderately Competent (MC)/w/ 31-60% sufficiency level
- 1.51 - 2.50 - Less Competent (LC)/w/ 1-30% sufficiency level
- 1.0 - 1.50 - Not Competent (NC)/w/ 0% sufficiency level

The school administrators should adopt and use particular strategies in implementing their strategic plan into practice in consonance with the

policy of the DepEd (Arinato, 2014) like Research Management Guidelines (RMG) Policy. Very few of school administrators had a comprehensive

plan in the delivery of research services in the school. Others were still found to be indifferent in relation to the implementation of research policies and programs of the DepEd. They were really struggling to succeed in research considering the hindering factors such as lack of technical know-how in conducting research and management of research in the school (Hussine et al., 2019).

Research Planning, Strategy and Policy Development.

Table 7 shows the level of research

management competency of senior high school administrators along research planning, strategy, and policy development. As shown in the table in terms of “Conceptualization, plan or formulation of research-based approaches and practices aligned with the goals of the school,” the senior high school administrators have a weighted mean of 2.59 or moderately competent.

Table 7: Level of Research Management Competency of Senior High School Administrators Along Research Planning, Strategy and Policy Development

Indicator	Xw/Interpretation	
1. Conceptualization, plan or formulation of research-based approaches and practices aligned with the goals of the school.	2.59	MC
2. Facilitation and support for the development and implementation of DepEd research policies and strategies in the school.	2.42	LC
3. Monitoring and evaluation of the progress of the school research initiatives and the DepEd research approaches, policies and strategies in the school.	2.40	LC
Grand Total	7.41	-
Grand Mean	2.47	LC

Legend:

4.51 - 5.00 - Highly Competent (HC)/w/ 91-100% sufficiency level

3.51 - 4.50 - Competent (C)/w/ 61-90% sufficiency level

2.51 - 3.50 - Moderately Competent (MC)/w/ 31-60% sufficiency level

1.51 - 2.50 - Less Competent (LC)/w/ 1-30% sufficiency level

1.00 - 1.50 - Not Competent (NC)/w/ 0% sufficiency level

On the other hand, other indicators were assessed “less competent” which resulted to a grand mean of 2.47 which also means “less competent”. The other senior high school administrators, due to overflowing activities of the DepEd, had no time to plan for school initiatives and strategies for research policy development in school. They rather focused on the most important deliverables in school as mandated by the DepEd (Ulla, Barrera & Acompanado, 2017). The findings of this study somewhat signify the implication that senior high school administrators in the DepEd Samar Division were less competent on research planning, strategy, and policy development.

Partnerships and Collaboration. Table 8 shows the level of research management competency of senior high school administrators in terms of partnership and collaboration. As shown in the table in terms of “Building of cooperative

relationship between the school and other agencies, research organizations, or stakeholders in the conduct of research,” the senior high school administrators have a weighted mean of 2.53 which can be interpreted as having moderate competency on this indicator. The other two indicators yielded a result of “less competent”.

Table 8: Level of Research Management Competency of Senior High School Administrators Along Partnerships and Collaboration

Indicator	Xw/Interpretation	
1. Building of cooperative relationship between the school and other agencies, research organizations, or stakeholders in the conduct of research	2.53	MC
2. Development of cooperative works among teachers and other school personnel at fulfilling common research goals	2.40	LC
3. Sustainability of a database of active collaborations on behalf of the school	2.43	LC
Grand Total	7.36	-
Grand Mean	2.45	LC

Legend:

4.51 - 5.00 - Highly Competent (HC)/w/ 91-100% sufficiency level

3.51 - 4.50 - Competent (C)/w/ 61-90% sufficiency level

2.51 - 3.50 - Moderately Competent (MC)/w/ 31-60% sufficiency level

1.51 - 2.50 - Less Competent (LC)/w/ 1-30% sufficiency level

1.0 - 1.50 - Not Competent (NC)/w/ 0% sufficiency level

Research partnership and collaboration plays a vital role in inculcating the culture of research in school (Armstrong, 2015). It is, therefore, relevant for school administrators to give full emphasis on the research partnership and collaboration. According to Grimmer-Farrell (2017), this partnership and collaboration must be emphasized to give anyone in the school an avenue to share their knowledge and skills in research. The findings of this study imply that most of senior high school administrators had no clear and

effective strategy to establish research partnership and collaboration in the school. They could not gain support because they were less competent in establishing research partnership and collaboration.

Research Funding. Table 9 shows the research management competency of the senior high school administrator-respondents in terms of research funding. All indicators considered along this area yielded to “moderately competent” on research funding.

Table 9: Level of Research Management Competency of Senior High School Administrators-Respondents Along Research Funding

Indicator	Xw/Interpretation	
1. Identification and dissemination of research funding opportunities for teachers and other school personnel.	2.78	MC
2. Alignment of research funding proposals to the organizational mission and vision and to the research priorities of the school.	2.50	MC
3. Optimization of research funding strategies of the DepEd or non-DepEd entities.	2.46	MC
4. Utilization of infrastructures like management and financial support structures of the school to assist the efficiency and effectiveness of the proposal process.	2.32	MC
Grand Total	10.06	-
Grand Mean	2.52	MC

Legend:

4.51 - 5.00 - Highly Competent (HC)/w/ 91-100% sufficiency level

3.51 - 4.50 - Competent (C)/w/ 61-90% sufficiency level

2.51 - 3.50 - Moderately Competent (MC)/w/ 31-60% sufficiency level

1.51 - 2.50 - Less Competent (LC)/w/ 1-30% sufficiency level

1.00 - 1.50 - Not Competent (NC)/w/ 0% sufficiency level

As reiterated in the DepEd Research Management Guidelines (RMG), the school may explore partnerships with external stakeholders for the chance of giving grants to school researcher. This is to expand the chance of the school to conduct more researches with the funding support from external stakeholders (DepEd, 2017).

Research Integrity and Ethics. Table 10 shows the level of research management research

competency of senior high school administrator-respondents along research integrity and ethics. As shown in the table in terms of “Formulation and implementation of a good policy framework and ethical standards or considerations in conducting research,” the senior high school administrators have a weighted mean of 2.63 or moderately competent. The other two indicators were assessed “less competent”.

Table 10: Level of Research Management Competency of Senior High School Administrators Along Research Integrity and Ethics

Indicator	Xw/Interpretation	
1. Formulation and implementation of a good policy framework and ethical standards or considerations in conducting research.	2.63	MC
2. Promotion and fostering among researchers a compliance and responsible conduct of research.	2.04	LC
3. Validation of the quality of individual research in the school.	1.53	LC
Grand Total	6.20	-
Grand Mean	2.07	LC

Legend:

4.51 - 5.00 - Highly Competent (HC)/w/ 91-100% sufficiency level

3.51 - 4.50 - Competent (C)/w/ 61-90% sufficiency level

2.51 - 3.50 - Moderately Competent (MC)/w/ 31-60% sufficiency level

1.51 - 2.50 - Less Competent (LC)/w/ 1-30% sufficiency level

1.00 - 1.50 - Not Competent (NC)/w/ 0% sufficiency level

It is noticeable, however, that the senior high school administrators assessed themselves as less competent in research management along research integrity and ethics. Thus, the findings imply that the senior high school administrators needed formal trainings on the proper evaluation of the

research adherence to highest ethical standards of conducting research in the school.

Managing Funded Research. Table 11 shows the level of research management competency of the senior high school administrator-respondents along managing funded research. The indicators along this area were assessed “less competent”.

Table 11: Level of Research Management Competency of Senior High School Administrators Along Managing Funded Research

Indicator	Xw/Interpretation	
1. Management of human resource capacity to aid the effective conduct of funded research.	2.32	LC
2. Development of the researchers' adherence to the conditions, and timelines of funding entities and to the management structure of the DepEd or school.	2.37	LC
3. Taking on the responsibility of stewardship of the relationship of the school with the funding entities or stakeholders.	2.49	LC
Grand Total	7.18	-
Grand Mean	2.39	LC

Legend:

4.51 - 5.00 - Highly Competent (HC)/w/ 91-100% sufficiency level

3.51 - 4.50 - Competent (C)/w/ 61-90% sufficiency level

2.51 - 3.50 - Moderately Competent (MC)/w/ 31-60% sufficiency level

1.51 - 2.50 - Less Competent (LC)/w/ 1-30% sufficiency level

1.00 - 1.50 - Not Competent (NC)/w/ 0% sufficiency level

The above data imply that these senior high school administrators had a rear opportunity to manage grant funded research projects since most of them and their school personnel were not engaged into conducting funded researches. A less provision of funding opportunity by the DepEd to school personnel is seen as one of the reasons why many among the school administrators had no opportunity to work a funded research in the school with their teachers (Hussien et al., 2019).

Research Data and Information Management.

Table 12 shows the level of research management competency of senior high school administrators along research data and information management. As shown in the table in terms of “Development of research data and information management plans and support system,” and on “Promotion of the development and coordination of data policies, data training and data infrastructure,” the senior high school administrators are moderately competent.

Table 12: Level of Research Management Competency of Senior High School Administrators Along Research Data and Information Management

Indicator	Xw/Interpretation	
1. Development of research data and information management plans and support system.	2.51	MC
2. Promotion of the development and coordination of data policies, data training and data infrastructure.	2.51	MC
3. Management and application of research-related data in strategic decision making.	2.50	LC
Grand Total	7.52	-
Grand Mean	2.51	MC

Legend:

4.51 - 5.00 - Highly Competent (HC)/w/ 91-100% sufficiency level

3.51 - 4.50 - Competent (C)/w/ 61-90% sufficiency level

2.51 - 3.50 - Moderately Competent (MC)/w/ 31-60% sufficiency level

1.51 - 2.50 - Less Competent (LC)/w/ 1-30% sufficiency level

1.00 - 1.50 - Not Competent (NC)/w/ 0% sufficiency level

It is very important to have an established data support system in school. Efforts of school administrators could be geared toward realizing these research data and information for effective decision making (Omeluzor, Madukoma, Bamidele, & Ogbuiyi, 2012). The issuance of the memorandum on the implementation of the “Research Management Guidelines” (RMG) Policy” is not enough to say that the school administrators are properly guided in this matter.

Research Uptake, Utilization, and Impact.

Table 13 shows the level of research management competency of the senior high school administrators along research uptake, utilization, and impact. As shown in the table in all indicators along this area are rated “less competent”.

Table 13; Level of Research Management Competency of School Administrator-Respondents Along Research Uptake, Utilization and Impact

Indicator	Xw/Interpretation	
1. Enhancement of the dissemination and communication of research	2.29	LC
2. Building research capacity to expand generation and application of evidence in developing practices.	2.18	LC
3. Encouragement of researchers to showcase research outputs locally or globally by publishing research studies in credible and reputable research journals online	2.06	LC
4. Measurement and demonstration of research impacts or effects in the school	2.10	LC

Grand Total	8.63	-
Grand Mean	2.15	LC

Legend:

4.51 - 5.00 - Highly Competent (HC)/w/ 91-100% sufficiency level

3.51 - 4.50 - Competent (C)/w/ 61-90% sufficiency level

2.51 - 3.50 - Moderately Competent (MC)/w/ 31-60% sufficiency level

1.51 - 2.50 - Less Competent (LC)/w/ 1-30% sufficiency level

1.00 - 1.50 - Not Competent (NC)/w/ 0% sufficiency level

The findings imply that the senior high school administrators of DepEd Samar Division were not that knowledgeable enough on the proper measurement, utilization, and sharing of research outcomes. Thus, they need for further improvement.

Relationship between the Level of Research Management Competencies of SHS

Administrator-Respondents and Their Profile Variates

This section displays the results of the analysis undertaken on the relationships between the level of research management competencies of senior high school administrators along the aforesaid areas and their profile variates.

Table 14: Relationship Between the Level of Research Management Competencies of the Senior High School Administrators along the different Areas and their Profile Variates in terms of Age, Work Experience, Research Trainings Attended and Researches Conducted

Area of Competencies	Profile	r-value	Sig.	Evaluation
Organization and Delivery of Research Services	Age	-0.156	0.203	Not Significant
	Work Experience			
	Administrative	-0.081	0.509	Not Significant
	Teaching	-0.232	0.057	Not Significant
	No. of Relevant Trainings	-0.106	0.392	Not Significant
	No. of Research Conducted	0.317	0.008	Significant
Research Planning, Strategy and Policy Development	Age	-0.209	0.087	Not Significant
	Work Experience			
	Administrative	-0.121	0.325	Not Significant
	Teaching	-0.289	0.317	Not Significant
	No. of Relevant Trainings	-0.102	0.410	Not Significant
	No. of Research Conducted	0.316	0.009	Significant
Partnerships and Collaboration	Age	-0.078	0.529	Not Significant
	Work Experience			
	Administrative	-0.068	0.582	Not Significant
	Teaching	-0.222	0.069	Not Significant
	No. of Relevant Trainings	-0.067	0.588	Not Significant
	No. of Research Conducted	0.289	0.017	Significant
Research Funding	Age	-0.128	0.297	Not Significant
	Work Experience			
	Administrative	-0.095	0.441	Not Significant
	Teaching	-0.190	0.120	Not Significant
	No. of Relevant Trainings	-0.080	0.515	Not Significant
	No. of Research Conducted	0.267	0.027	Significant

Research Integrity and Ethics		Age	-0.019	0.876	Not Significant
		Work Experience			
		Administrative	-0.021	0.866	Not Significant
		Teaching	-0.169	0.169	Not Significant
		No. of Relevant Trainings	-0.116	0.348	Not Significant
		No. of Research Conducted	0.288	0.017	Significant
Managing Research	Funded	Age	0.030	0.809	Not Significant
		Work Experience			
		Administrative	0.058	0.641	Not Significant
		Teaching	-0.168	0.171	Not Significant
		No. of Relevant Trainings	-0.013	0.916	Not Significant
		No. of Research Conducted	0.280	0.016	Significant
Research Data and Information Management		Age	0.028	0.823	Not Significant
		Work Experience			
		Administrative	0.093	0.449	Not Significant
		Teaching	-0.199	0.104	Not Significant
		No. of Relevant Trainings	-0.073	0.554	Not Significant
		No. of Research Conducted	0.188	0.024	Significant
Research Utilization and Impact	Uptake,	Age	0.017	0.892	Not Significant
		Work Experience			
		Administrative	0.044	0.720	Not Significant
		Teaching	-0.187	0.126	Not Significant
		No. of Relevant Trainings	-0.106	0.390	Not Significant
		No. of Research Conducted	0.257	0.034	Significant

*Significant at $\alpha = 0.05$

Table 14 shows the relationship between the level of research management competencies of the senior high school administrators along each of the aforementioned areas and their profile variates in terms of age, work experience, research trainings attended, and the number of researches conducted as one of the indicators under their research productivity.

As shown in the table, the relationship between the level of research management competency along organization and delivery of research services and the profile of the senior high school administrators, only the number of researches conducted has significant relationship with the r-value of 0.317 and p-value of 0.008 which turned less than the alpha of 0.05. The result of analysis indicates that the number of researches conducted by the school administrators have connection with the level of their research management competency along organization and delivery of research management services in school.

In the correlational analysis between the research planning strategy and policy development competency of the senior high school administrators and their profile, only the number of researches conducted obtained the r-value of 0.316 and p-value of 0.009 which turned less than the level of significance of 0.05. This only signifies that the number of research studies conducted by school administrators have significant connection with the level of their research management competency along research planning strategy and policy development in the school.

The result of correlational analysis between the partnership and collaboration competency of the senior high school administrators and their profiles shows that only the number of researches conducted has significant relationship with the r-value of 0.289 and p-value of 0.017 less than the $\alpha = 0.05$. The findings serve as evidence that the research studies conducted by the school administrators have relevant connection with the

level of their research management competency along research partnership and collaboration.

In terms of the relationship between the research funding competency of the senior high school administrators and their profile, table 14 shows that only the number of researches conducted with r-value of 0.267 and p-value of 0.027 which turned less than the alpha has significant relationship. The findings imply that the profile of senior high school administrators with respect to the number of their research studies conducted has significant connection to the level of their research management competency along research funding.

In the correlational analysis between the research integrity and ethics competency of the senior high school administrators and their profile, it was found out that only the number of researches conducted with r-value of 0.288 and p-value of 0.017 has significant relationship. The findings disclosed in the table imply that there is a significant connection between the number of research studies conducted by the school administrators and the level of their research management competency along research integrity and ethics.

In testing the relationship between the managing funded research competency of the senior high school administrators and their profile, only the number of researches conducted obtained the r-value of 0.280 and p-value of 0.016 which turned less than the alpha of 0.05. The rest of the profile variates namely: age, work experience in administrative, and the number of relevant trainings have no significant relationship to the managing funded research competency of the senior high school administrators. Therefore, those senior high school administrators with researches conducted were determined to be competent in managing funded research.

In terms of the relationship between the research data and information management research competency of the senior high school administrators and their profile, table 14 shows that only the number of researches conducted with r-value of 0.188 and p-value of 0.024 has significant relationship. The findings signify a significant connection between the number of researches conducted by school administrators and the level of their research management

competency along research data and information management.

Table 14 also shows the result of correlational analysis between the research uptakes, utilization, and impact competency of the senior high school administrators and their profile. Only the number of researches conducted obtained the r-value of 0.257 and p-value of 0.034 which turn less than the $\alpha=0.05$. The result of analysis justifies a significant connection between the profile of school administrators in terms of the number of researches conducted and the level of their research management competency along research uptake, utilization, and impact.

Based on findings, the senior high school administrators with experiences of conducting research were more competent in research management than those of them with no research conducted in the field. These research skills, as pinpointed by Reachivy (2020), can help administrators to understand the existing problems and to collect, manage, and utilize necessary information to come up with appropriate solutions to solve the problems. The school administrators that are into research have the enthusiasm to manage the research and to implement research policies and initiatives in the organization of their jurisdiction.

Table 15 shows the relationship between the level of research management competencies of the senior high school administrators along each of the aforementioned areas and their profile in terms of sex, educational background and research productivity such as research funding facility availed, research presentation, and research awards received. As shown in the table in the relationship between the organization and delivery of research services competency and the profile of the senior high school administrators, the educational background and the research presentation obtained chi-square values of 12.4 and p-value of 0.04, and 26.7 and p-value of 0.04 respectively which turned less than the significance level of 0.05. It can be gleaned from the table that the educational background and the research presentation of senior high school administrators have significant relationship with the level of their research management competency along the area of organization and delivery of research services.

Table 15: Relationship Between the Level of Research Management Competencies of the Senior High School Administrators along the different Areas and their Profile in terms of Sex, Educational Background, and Research Productivity

Area of Competencies	Profile	Chi-square value	Df	P-value	Evaluation
Organization and Delivery of Research Services	Sex	2.5	4	0.63	Not Significant
	Educational Background	12.4	12	0.04	Significant
	Research Funding	12.7	8	0.12	Not Significant
	Facility	26.7	16	0.04	Significant
	Research Presentation	5.0	8	0.76	Not Significant
	Research Awards				
Research Planning, Strategy and Policy Development	Sex	3.3	4	0.52	Not Significant
	Educational Background	13.5	12	0.03	Significant
	Research Funding	13.3	8	0.01	Significant
	Facility	16.7	16	0.40	Not Significant
	Research Presentation	5.1	8	0.75	Not Significant
	Research Awards				
Partnerships and Collaboration	Sex	5.2	4	0.27	Not Significant
	Educational Background	13.8	12	0.02	Significant
	Research Funding	15.1	8	0.01	Significant
	Facility	30.9	16	0.06	Not Significant
	Research Presentation	7.8	8	0.45	Not Significant
	Research Awards				
Research Funding	Sex	6.4	4	0.17	Not Significant
	Educational Background	18.6	9	0.53	Not Significant
	Research Funding	6.2	6	0.04	Significant
	Facility	24.9	12	0.02	Significant
	Research Presentation	3.5	6	0.04	Significant
	Research Awards				
Research Integrity and Ethics	Sex	1.7	4	0.80	Not Significant
	Educational Background	14.2	12	0.03	Significant
	Research Funding	16.6	8	0.03	Significant
	Facility	18.0	16	0.02	Significant
	Research Presentation	5.0	8	0.01	Significant
	Research Awards				
Managing Funded Research	Sex	4.1	5	0.32	Not Significant
	Educational Background	12.7	12	0.39	Not Significant
	Research Funding	13.8	8	0.02	Significant
	Facility	15.7	16	0.03	Significant
	Research Presentation	3.9	8	0.01	Significant
	Research Awards				
Research Data and Information Management	Sex	0.7	4	0.87	Not Significant
	Educational Background	8.8	9	0.04	Significant
	Research Funding	4.8	6	0.03	Significant

Research Utilization, Impact	Uptake, and	Facility				
		Research Presentation	12.6	12	0.40	Not Significant
		Research Awards	1.6	6	0.95	Not Significant
		Sex	3.1	4	0.39	Not Significant
		Educational Background	18.6	9	0.03	Significant
		Research Funding Facility	13.9	6	0.03	Significant
		Research Presentation	13.2	12	0.02	Significant
		Research Awards	3.4	6	0.76	Not Significant

**Significant at 0.05 significance level*

In terms of the relationship between the research planning, strategy, and policy development competency and the profile of the senior high school administrators, educational background with chi-square of 13.5 and p-value of 0.03 and research funding facility with chi-square of 13.3 and p-value of 0.01 have significant relationships. The findings stated in the table signify that the profile of senior high school administrators in terms of educational attainment had significant relationship with the level of their research management along research planning, strategy, and policy development. Based on the analysis, there is also a basis to disclose that there is statistically significant relationship between the research funding facilities availed by senior high school administrators and the level of their research management along research planning, strategy, and policy development.

In the analysis conducted on the relationship between the partnership and collaboration competency and the profile of the senior high school administrators, educational background obtained the chi-square of 13.8 and p-value of 0.02 and research funding facility with chi-square of 15.1 and p-value of 0.01 in which both profile variates have p-values less than $\alpha=0.05$. This led to the rejection of hypothesis. So, both of the profile variates have significant relationship to partnership and collaboration competency of school administrators, while the other profiles which include sex, research presentation, and research awards received have computed p-values which turned greater than the alpha which meant that these profiles have no significant relationship to the partnership and collaboration competency of the senior high school administrators. These findings disclose that the profile of the school

administrators in terms of educational attainment and research funding availed have significant connection with the level of their research management competency in the area of research partnership and collaboration.

The result of analysis on the relationship between the research funding competency and the profile of the senior high school administrators, the research funding facility with chi-square of 6.2 and p-value of 0.04; research presentation with chi-square of 24.9 and p-value of 0.02; and research awards with chi-square of 3.5 and p-value of 0.04 have significant relationships. The results signify a significant connection between the level of their research management competency along research funding and their profile variates in terms of research funding facilities availed, research presentations done, and research awards received.

In terms of the relationship between the research integrity and ethics competency of the senior high school administrators and their profiles, educational background with chi-square of 14.2 and p-value of 0.03; research funding facility with chi-square of 16.6 and p-value of 0.03; research presentation with chi-square of 18.0 and p-value of 0.02 and research awards with chi-square of 5.0 and p-value of 0.01 have significant relationships. While only the profile in terms of sex has no significant relationship to the research integrity and ethics competency of the senior high school administrators. Therefore, the senior high school administrators with higher educational attainment, those who availed research funding, those of them with research studies presented in any research conference, and those who received any research award were determined to be competent in the area of research integrity and ethics.

The results of analysis on the relationship between the managing funded research competency of the senior high school administrators and their profiles, it was shown in the table that: research funding facility with chi-square of 13.8 and p-value of 0.02; research presentation with chi-square of 15.7 and p-value of 0.03; and research awards with chi-square of 3.9 and p-value of 0.01 have significant relationships. The data imply that the senior high school administrators who availed research funding, and those of them with research presentations, and research awards received are better in managing funded researches in school.

In the analysis conducted on the relationship between the research data and information management competency of the senior high school administrators and their profiles, educational background with chi-square of 8.8 and p-value of 0.04 and research funding facility with chi-square of 4.8 and p-value of 0.03 have significant relationships. It can be gleaned from the table that the senior high school administrators with higher educational attainment, and those of them who have already availed research funding possessed better competency in the area of research data and information management.

In terms of the relationship between the research uptake, utilization, and impact competency of the senior high school administrators and their profiles: educational background with chi-square of 18.6 and p-value of 0.03; research funding facility with chi-square value of 13.9 and p-value of 0.03; and research presentation with chi-square value of 13.2 and p-value of 0.02 have significant relationships. The findings imply that the senior high school administrators with highest educational attainment, those who received some research grants, and those of them who presented already their research studies in any research forum were found to be competent in the area of research uptake, utilization, and impact.

Research Management Experiences of Senior High School Administrators

Based on the results of the interview conducted to the participants there were two major categories where the themes emerged. The first category was on the strategies employed by the SHS Administrators in research management which had seven themes.

Strategies Employed by the SHS Administrators in Research Management

Below are the presentation and discussion of the themes emerged from the responses of the participants:

Theme 1: Selecting teachers to man the research committee and coordinatorship

Based on the five (5) participants, one of the strategies they employed in research management was selecting teachers to man the research committee and coordinatorship in the school, as shown in their utterances below:

"I organized a Research Team by Learning Area with terms of reference." – P₁

"I assigned competent personnel to handle research subjects and facilitate the activities involving research." – P₂

"The strategy that I used is that I created a committee in-charge of dealing the organization and delivery of research services in our school." – P₄

"I assigned a research coordinator who helped me in research activities and services in the school." – P₇

"I assigned competent teachers to man a research committee in the school." – P₈

Selecting the teachers to man the research committee and coordinatorship is the one of the themes that emerged among the responses of the senior high school administrators. The qualitative data presented above imply that there is no strict selection among teachers who can really perform the functions of research coordinators or members to organize and perform a functional research committee to help the school administrators in implementing the research policies, programs, and initiatives of the DepEd in the school level.

Theme 2: Encouraging teachers to conduct research

According to eight (8) key informants, they encouraged their teachers to conduct research, as evident in their answers below:

"All our master teachers and department heads are required to submit action research proposals." – P₁

“By telling them to conduct research pero I didn’t require them to do it since its only included in the KRA’s of master teachers but not in the KRA’s of those teachers.” – P₃

“I informed the teachers through a conference that the DepEd is encouraging everyone in the DepEd family to conduct a research. I also motivated them that additional points will be given to them in their IPCRF if they will conduct a research.” – P₄

“By asking everyone to be cooperative when someone is conducting a research study in the school.” – P₇

“I told them to write an action research. However, I didn’t require them to submit since they were busy doing other school works and activities.” – P₉

“I motivated them to engage in research by giving additional points in their IPCRF.” – P₁₀

“I encouraged them to do research for their promotion.” – P₁₁

“I told my teachers to do research to help them improve their teaching and get promoted.” – P₁₂

Encouraging teachers to conduct research is one of the themes that emerged from the responses of the senior high school administrators. The qualitative data imply that teachers were only encouraged but not required to conduct research except master teachers. It is part of the mandate of master teachers to conduct educational research to help improve the classroom instruction and contribute to school improvement (Basilio & Bueno, 2019). The school administrators need to motivate all of their teachers to engage into research works.

Theme 3: Capacitating teachers in doing research

Based on the seven (7) participants, they capacitated their teachers in doing research by school-based trainings, mentoring and coaching, and research collaboration, as evident in their responses below:

“I conducted in-service trainings on action research.” All master teachers are bound to do mentoring and coaching in the conduct of researches among colleagues – P₁

I assigned somebody in the school with knowledge in doing research to mentor other teachers and assigned him as resource speaker during SLAC sessions. – P₄

“We incorporate it during our SLAC session.” – P₆

“Teachers found it a bit difficult in doing research individual. So, I let them do a research as a group. – P₇

I instructed those teachers to have collaboration or create a group so that they would be able to do research in a group. – P₈

“We conducted school-based research capability of teachers in our school.” – P₁₀

“I conducted SLAC session among teachers on how to conduct basic research. I see to it that we have research collaboration in the school.” – P₁₁

Capacitating teachers in doing research is one of the themes that emerged among the feedbacks of the senior high school administrators. This implies that the research capability building program attended by the school personnel is limited only to the trainings conducted in the school. They need more trainings in research to improve their research skills. This was supported by Sheikh, Kaleem, and Waqas (2013) that more trainings must be provided to school personnel in order for them to enhance their skills in doing research.

Theme 4: Providing guidance to teachers in conducting their funded research

Four (4) participants meant that they provided guidance to teachers in conducting funded research in the school, as evident in their responses below:

“There was an issuance of a memorandum and research guidelines for funded researches with stipulations of a clear and well-defined roles and responsibilities. I strictly implemented the monitoring and evaluation guidelines of funded research” – P₁

“I secured an agreement that every guideline would be followed. I was updating my teacher-researchers time to time” – P₈

“I established constant communication with the funding institutions. Such necessary requirements were submitted and some protocols were followed,

accordingly. I see to it that they are following timetable of their studies” – P₁₀

“By letting the teachers understand the standards of the funding institution like the DepEd under its BERF program. I was also asking the teachers the action plan of the conduct of their research studies and requiring them to follow these action plan” – P₁₂

Among the responses of senior high school administrators, the theme “providing guidance to teachers in conducting their funded research” emerged. Therefore, the qualitative data presented herein imply that teachers’ completion of funded researches was still guided by their school administrators. The responsibility of school administrators is to make sure that the funded research is being conducted following the standards of both DepEd and funding institution (DepEd, 2017).

Theme 5: Allocating amount from school MOOE for some expenses in research

Based on the three (3) participants, they slashed some amounts from school MOOE for research use, as shown in their responses below:

“We have provided research allocation in the school Maintenance and Other Operating Expenses as reflected in the Annual Implementation Plan subject to strict compliance of accounting and auditing rules and regulations.” – P₁

“The research funding is from school MOOE or personal funding.” – P₂

“I see to it that the research is included in our AIP. I also ensured that part of my KRA is conducting research.” – P₁₀

Among the responses of senior high school administrators, the theme “allocating amount from school MOOE for some expenses in research” emerged. This only implies that the conduct of research is not a priority in the school MOOE utilization of more senior high school administrators in Samar Division. The funds of more public schools are not sufficient enough to cover all the programs of the school including research works (Hussien, Jerusalem & Langam, 2019). The unavailability of funding for research works is a common barrier to research

involvement of the school personnel (Ibrahim et al., 2016).

Theme 6: Showcasing research outputs

According to eight (8) participants, one of their strategies in research management was to showcase research outputs in the school, as shown in their utterances below:

“The teachers and the SHS learners in the Senior High School are likewise required to submit a group research study during Research Caravan Activity to showcase the Best Research Study of the Year. I also disseminated and presented the findings of researches conducted during research forum.” – P₁

“Sharing the results of research during INSET or SLAC sessions. The copy of the result of research was submitted to the Division Office.” – P₃

“During our SLAC sessions.” – P₄

“We conducted School-Based Science Fair, and SLAC sessions where research outputs are presented” – P₅

“By school-based seminars.” – P₆

“When there was a research forum in the Division.” – P₇

“During research congress in the district, division, or region.” – P₈

“By putting the copy of research in the library so that teachers or students can have opportunity to read.” – P₁₂

Showcasing research outputs is a theme emerged from the responses of the senior high school administrators. The cited scenarios have an implication that only very few school administrators in the Division had initiated school-based research activities that would include not only the teachers, but also the students to showcase their research outputs.

Theme 7: Keeping the research data and information

The six (6) participants responded that one of their strategies in research management is keeping the data and formation obtained from doing research for future use, as shown in their utterances below:

“Treated the research data and information obtained with utmost confidentiality that were

archived in the SBM or School-Based Management Hub.” – P₁

“The data gathered in research conducted by teachers are kept by themselves while those conducted by the students, data are kept by their research teachers.” – P₂

“The data and information were treated with confidentiality and they were reported according to the format in reporting research results. The copies of researches are displayed in the library.” – P₇

“By following the Data Privacy Act. The final copy of research was displayed in the library.” – P₈

“We kept the data on research in our SBM Hub.” – P₁₁

By letting the researcher submit the final copy of his study and keep it in the library for future reference.” – P₁₂

Keeping the research data and information is the one of the themes that emerged among the feedbacks of senior high school administrators. These qualitative data imply that the research data storage system adopted by the senior high schools was limited only to displaying the copies of researches in the SBM Hubs or School Libraries. It is very important for school administrators to have an established data storage system so that this could be geared toward realizing the research data for effective dissemination and utilization (Omeluzor et al., 2012).

Problems Encountered by SHS Administrators in Research Management

The participants also revealed that they encountered some problems on research management in the school. Below are the presentation and discussion of the themes emerged from the utterances of the key informants:

Theme 1: Lack of resources such as time, financial, and relevant knowledge in research management including conducting research

One of problems encountered by SHS Administrators was lack of resources as to the time, money, and knowledge in conducting research and in research management, as noticeable in their statements below:

“The time element is of the essence considering the overflowing implementation of various programs and projects of DepEd, and Technical knowledge in the conduct of research relevant to the profession remains a challenge. The inadequacy of financial resources to conduct research is also a problem.” – P₁

Because of the many responsibilities of teachers, which is, performing their main functions, they can hardly make time to accommodate other tasks such as implementing school research program and initiatives like conducting research. – P₂

“Lack of knowledge in the provision of data services related to storage, sharing and management” – P₃

“No enough time for research works. We had lack of knowledge on how to store, share and manage the research data properly” – P₄

“No ample time to attend the research activities in the school. Lack of knowledge in research management such as on storage, sharing and management of research data.” – P₅

“Many of our teachers were just starting their Master’s Degree, that is why they are not so into making research, knowing that they have a lot of important things to do for teaching and other reports, and they cannot find time to make one. I don’t have knowledge on research data storage, sharing and management in the school.” – P₆

“Lack of teachers with skills in research.” – P₇

“I attended more seminars, conferences and managerial works in which most of the time research in the school was not given attention.” – P₈

“No research facilities and budget available.” – P₉

“No enough time for teachers in accomplishing research works since there were more activities, reports and programs in the school that they must have to prioritize first. If ever there was a research conducted, no such enough resources for school application of research recommendations” – P₁₁

“We were bounded with paper works, reports, activities and program implementation required by the DepEd. The DepEd didn’t give much

attention on the research and development of the school.” – P₁₂

“Lack of resources such as time, financial and relevant knowledge in research management including conducting research” was one of the themes that emerged among the qualitative answers of the participants. These qualitative data presented previously imply that research is not a priority in the work of school administrators and teachers due to heavy workloads that they need to attend first; other than BERF, there is no provision of incentives by the top management to motivate school administrators and teachers to conduct research in the field; and lack of effective trainings on the conduct of research and other research-related works such as on research data management as to storage, sharing, demonstration, and application provided to school personnel. The findings were supported by Borg (2009) that only few school personnel had only limited research engagement due to some hindering factors like lack of time, knowledge, and access to research materials.

Theme 2: The negative view of teachers towards research-related works and initiatives

The negative view of teachers toward research-related works and initiatives was also a challenge to school administrators, as shown in their utterances below:

“The challenge commonly faced in RM is the passive attitude of teachers and other employees towards research. They perceive research as an additional work, hence, a burden.” – P₂

“Kulang ng interest ang mga guro sa paaralan na gawin ang mga trabaho na related sa research.” (Teachers were lack of interest to do the research-related works in the school– P₃)

“No enough time for research works. More school personnel are not into research. They are not cooperative in the implementation of research program. However, I had encouraged and motivated them in order to cooperate.” – P₄

“There was lack of cooperation among the teachers.” – P₅

“Lack of teachers’ initiative to succeed in the implementation of research program.” – P₇

“Only few from the school personnel had passion in research. There was passive participation of

others teachers in research activities in school. I reminded them during our conference to be cooperative and give interest in doing research.” – P₈

“Lack of teachers’ initiatives, supports and dedication in doing research-related tasks.” – P₁₀

“Teachers were passive in research. Some of them were doing it for compliance only. I told my teachers to do research to help them improve their teaching.” – P₁₂

One of the themes that emerged among the feedbacks of the participants regarding their challenges encountered in research management was the negative attitude of teachers toward research-related works and initiatives. This implies that teachers lack initiatives, support and dedication in doing research-related services in school. More teachers perceived that it is not their duty to do research; instead, it is the duty of research experts. These teachers have passive participation in research activities (Dehghan & Sahragard, 2015).

Theme 3: No rigorous quality assurance of research proposals and outputs in the school level

The four (4) participants meant that in the school level, there was no strict quality assurance of research proposals and outputs. This is noticeable in their statements reflected below:

Action research submitted was sometimes of sub-standard quality. I encouraged the research team of the school to extend support and assistance by strictly checking the details of action researches. Sometimes, the result or findings of action researches conducted became subjective or detrimental to the teacher concerned that there was a need of acceptance and broad understanding and patience in order to safeguard the confidentiality and integrity of the research population.” – P₁

“Some data were not accurate.” – P₅

“Actually, no quality assurance of the researches conducted in the school. Although we asked permission in doing research no supports given to the researchers in the school.” – P₁₁

“Some of the phrases in the contents of their researches were copied and pasted. I assigned

some teachers to check the authenticity of the contents.” – P₁₂

One of the themes that emerged among of the feedbacks of the participants was “no rigorous quality assurance of research proposals and outputs in the school level.” The data presented imply that in the school level, the quality assurance of research was not given due emphasis since there was no strict evaluation system of research proposals and outputs adopted by school administrators. It is their responsibility to ensure that the quality standards in conducting research are observed and the roles, responsibilities, and accountability of the researchers are clearly expressed and conveyed (Jhonson, 2013).

Theme 4: No supports from external stakeholders for research works and activities

The ten (10) participants stressed out that there were no supports extended by external stakeholders to the implementation of research programs and initiatives in the school level, as observed in their statements below:

“At present, the school has not received yet any research support from external stakeholders.” – P₂

“We didn’t gain any research support from our external stakeholders. We prioritized other programs and projects in the school whenever the stakeholders extended their supports to the school.” – P₄

“No. I cannot look for a stakeholder who has a heart to support us in research.” – P₅

“We didn’t have any support from our external stakeholders. We were hesitant to ask supports because we did not have research conducted or to be conducted in the school.” – P₆

“Some of my teachers gained supports only from the DepEd through its BERF.” – P₇

“We have not gained any research supports from the stakeholders because we didn’t present any research proposal.” – P₈

“No research support from external stakeholders but one of my teachers availed the BERF.” – P₉

“We didn’t have fund available coming from our stakeholders. It was my weakness in linkages and networking especially soliciting fund for the purpose of conducting research.” – P₁₀

“I didn’t gain any support for research from stakeholder.” – P₁₁

“We didn’t gain any support from the stakeholders. It was not our priority in the school for now.” – P₁₂

“No support given by the external stakeholders for the implementation of research-related works and programs in the school” was one of the themes that emerged among the responses of the participants. The responses presented above gives an implication that there is no strong research partnership between the school and the external stakeholders. The school administrators do not exert efforts to solicit support from external stakeholders since the culture of research in their school is not yet fully embraced. That is why, they are hesitant and have difficulty to establish a strong support system with the external stakeholders. Worrall (2004) reported that a lack of external support is one of the hindering factors why school leaders cannot sustain research engagement in schools.

Theme 5: No clear and systematic research data-based system and storage

The five (5) participants admitted that they did not have clear and systematic research databased system and storage, as shown in their utterances below:

“There is a need to have a databased system and storage of research studies conducted. The school is still planning to have an electronic compilation of researches.” – P₁

Some data were incomplete and inconsistent. No appropriate knowledge on storage, sharing and management of research data. There was a need for further improvement in research works. There was also a need for sufficient justification of research data and outputs. – P₅

Research office was chosen temporarily. It was not designed completely and appropriately for research information system. – P₇

There are no appropriate mechanisms of data storage, sharing and management. – P₈

We didn’t have permanent storage area where the hard copies of researches are kept. We didn’t have any stable electronic system on storage, sharing and management of research outputs. – P₉

One of the themes that emerged among the responses of the participants on the challenges they encountered in research management was “no clear and systematic data-based system and storage.” The above qualitative data imply that the school administrators were not fully aware on appropriate mechanisms of research data management including data storage and sharing. The engagement of school staff in research is deteriorating due to lack of comprehensive research libraries or data management (Firth, 2016).

Theme 6: Poor dissemination and application of research outputs

Based on the ten (10) participants, one of their challenges encountered in research management was on the measurement, demonstration, and utilization of research outputs, as evident in their responses below:

“The results of the research are not felt because of poor dissemination due to lack of technical know-how. We should be oriented on how to share and communicate research outputs.” – P₂

“No research outputs to be measured and demonstrated in the school.” – P₃

“Poor application of teachers on the results of research as being observed. The teachers should develop first their passion in doing research. They must be oriented on how to use and share properly the research outcomes.” – P₄

“Teachers should be well equipped in doing research. The DepEd should provide full support not just in doing research but also on how to publish research outputs.” – P₆

“There was no consistent mechanism to measure and demonstrate research outcomes.” – P₇

“Lack of implementation of research outputs because of unavailability of resources such as time, money, etc. We should be aware on the proper utilization of research and should know some online journals where we can publish our studies so that we can share it to others even those individuals outside the school.” – P₈

“Lack of knowledge on proper sharing of research outputs through publishing research paper.” – P₉

“There is a need for the teachers to be acquainted on the online publication of research so that it would be very easy to share the results of their studies even outside the school.” – P₁₀

“The school should offer opportunities for the teachers to be able to share their researches to others.” – P₁₁

“The DepEd through the school should train school personnel on how to utilize research outputs to address school needs.” – P₁₂

One of the problems that emerged among of the responses of the participants was the “poor dissemination and application of research outputs.” The presented data imply that most of the senior high school administrators and teachers had no further knowledge on the effective utilization of research outputs. The more effective utilization of research, the more the school administrators and teachers can improve the quality of education (Thomas, 2004). These also imply that the senior high school administrators were not yet well-oriented on the processes to be undertaken in research dissemination as to the publication of research.

Conclusions and Recommendations

Most senior high school administrators were in the late 40s relatively young for their positions, and were dominated by female. They possessed educational qualifications necessary for their present positions based on the qualification educational standards set by the DepEd. However, most of them were neophytes considering that they had been in the administrative positions for at most 10 years. There was less provision of trainings relevant to research management for senior high school administrators. The DepEd Samar Division had no strict policy on research management trainings for school administrators. That is why, they could not afford to enhance their competencies in research management. The less engagement in research-related works of senior high school administrators made them less productive in research.

The senior high school administrators are less competent in research management. Their competencies in research management were not yet well-developed since they lacked years of practice in getting along with people, cultivating people’s research potentials, implementing

research policies and initiatives, and using research outputs for the benefits of the school. Research management in senior high schools was not fully given much priority by senior high school administrators due to the lack of technical knowledge in research management, unavailability of research funding and incentives provided by the top management, passive participation of teachers and other school personnel, poor research partnership and collaboration, and the overflowing implementation of various programs, activities, and projects of the DepEd.

Moreover, the profile of senior high school administrators in terms of the number of researches conducted significantly related to their level of research management competencies along organization and delivery of research services; research planning, strategy and policy development; partnerships and collaboration; research funding; research integrity and ethics; managing funded research; research data and information management; and research uptake, utilization, and impact. Since the senior high school administrators were not fully knowledgeable about research management, they could not fully implement all the necessary research services in school, had no clear and defined plan in research data management as to storage, dissemination, and utilization, and they did not put in place a systematic monitoring and evaluation (M&E) for research.

It is recommended that in the selection and promotion of school heads in all levels, elementary, junior and senior high school, there must be a strict criterion on the research management competencies of the applicant-school heads. The school administrators should be provided with more opportunities of training in such a way that essential areas of research management would be given much priority. Identify research gaps so that the schools can identify and offer relevant programs and more opportunities in the different areas of research interests. They should continue enriching their knowledge in research management by attending post-graduate education and research-related conferences. The school should develop infrastructure to assist funded research and be provided with more opportunities for research funding. The DepEd should establish strong

research support system and ease the assessment process of granting the Basic Education Research Fund (BERF) to school personnel. Those who demonstrate good research performance be fairly compensated both socially and financially. In addition, improve research productivity by embracing research culture at the school level. Promote a positive research culture and refine the existing standards and norms in the schools so that all school personnel should be engaged in research by motivating and providing them more research incentives and benefits, and increasing more chances for interdisciplinary and collaborative research activities. Finally, a capability building for school administrators is proposed focusing on the research management competencies of the school administrators.

References

- [1] Abramo, G. & Angelo C.A.D. (2014). How do you define and measure research productivity? *Scientometrics*, 101(2), 1129-1144. DOI: 10.1007/s11192-014-1269-8. Retrieved from <https://link.springer.com>.
- [2] Agostinho, M., Trindade, M., Aresta, S., & Varela, C.S. (2018). The Interface of Science: The Case for a Broader Definition of Research Management. *Perspectives: Policy and Practice in Higher Education*. <https://doi.org/10.1080/13603108.2018.1543215>.
- [3] Ahmed, F. (2016). *Urbanizing deltas of the world: research uptake*. Vietnam: Ho Chin Minh City, International Water Management Institute. Retrieved from <https://www.nwo.nl>.
- [4] Arinato, W. & Daboonmee, W. (2014). "Relationship between Strategic Leadership and School Effectiveness" – Retrieved from www.sciencedirect.com.
- [5] Armstrong, K. & Kendall, E. (2010). Translating knowledge into practice and policy: the role of knowledge networks in primary health care. *Health Information Management Journal*, 39(2), 9-17. Retrieved from <https://www.ncbi.nlm.nih.gov>.
- [6] Armstrong, P. (2015). *Effective school partnerships and collaboration for school improvement: a review of the evidence*. Retrieved from <https://assets.publishing.service.gov.uk>.

- [7] Austin, R. (2020). *Ask an Expert*. Retrieved from <https://uk.sagepub.com/en-gb/eur/what-are-the-benefits-of-educational-research-for-teachers>
- [8] Borg, S. (2009). English language teachers' conceptions of research. *Applied linguistic*, 30(3), 358-388.
- [9] Bosch, A. (2011). *Research management and research output*. South Africa: Department of Industrial Psychology and People Management, University of Johannesburg. pp. 19-30. <https://doi.org/10.4102/ac.v11i2.148>.
- [10] Brandman University (2019, March 11). *Everything you need to know about being a school administrator*. Retrieved from <https://www.brandman.edu>.
- [11] Braun, V., & Clarke, V. (2013). *Successful qualitative research: A practical guide for beginners*. Sage. Retrieved from <https://www.statisticssolutions.com/thematic-analysis>.
- [12] Bukvova, H. (2010). Studying research collaboration: A literature review. *Sprouts: Working Papers on Information Systems*, 10(3). Retrieved from <https://www.researchgate.net>.
- [13] Calma, A. (2010). *Research training in the Philippines: Exploring the issues for a nation striving to enhance research quality*.
- [14] Cardona, R.S. (2020). The enablers and outcomes of research productivity among junior high school mathematics teachers: A structural model. *EURASIA Journal of Mathematics, Science and Technology Education*, 16(11). <https://doi.org/10.29333/ejmste/8563>.
- [15] Carling, J. (2019). *Research ethics and integrity*. Oslo: Peace Research Institute Oslo. <https://www.mignex.org/d013>.
- [16] Cooper, A. & Levin, B. (2013). Research use by leaders in Canadian school districts. *International Journal of Education Policy & Leadership*, 8(7). Retrieved from www.ijep.l.org.
- [17] Creswell, J.W. (2002). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications.
- [18] DepEd Order No. 24, s. 2010, *Guidelines for the Basic Education Research Fund*. Retrieved from <https://www.deped.gov.ph>.
- [19] DepEd Order No. 43, s. 2015, *Revised Guidelines for the Basic Education Research Fund*. Retrieved from <https://www.deped.gov.ph>.
- [20] DepEd Order No. 39, s. 2016, *Adoption of Basic Education Research Agenda*. Retrieved from <https://www.deped.gov.ph>.
- [21] DepEd Order No. 16, s. 2017, *Research Management Guidelines*. Retrieved from <https://www.deped.gov.ph>.
- [22] DepEd Region 8 Memo No. 681, s. 2017, *Results of the 2017 DepEd Eastern Visayas Basic Education Research Conference*. Retrieved from <https://sites.google.com/a/deped.gov.ph/deped-region-8/regional-memoranda>.
- [23] DepEd Region 8 Memo No. 554, s. 2018, *Results of the Eastern Visayas Basic Education Research Conference*. Retrieved from <https://sites.google.com/a/deped.gov.ph/deped-region-8/regional-memoranda>.
- [24] DepEd Region 8 Memo No. 608, s. 2019, *Results of the Eastern Visayas Basic Education Research Festival*. Retrieved from <https://sites.google.com/a/deped.gov.ph/deped-region-8/regional-memoranda>.
- [25] DepEd Samar Division Planning and Research Section, 2019.
- [26] DepEd Samar Division Memo No. 243, s. 2017, *List of Qualified Presenters to the First Division Research Summit*.
- [27] DepEd Samar Division Memo No. 078, s. 2019, *Division-District Based Research Presentations*.
- [28] Derrick, G., and Nickson, A. (2014). Invisible intermediaries: a systematic review into the role of research management in university and institutional research processes. *Journal of Research Administration*, 45 (2). Retrieved from <https://eric.ed.gov>.
- [29] Dehghan, F., & Sahragard, R. (2015). Iranian EFL teachers' views on action research and its application in their classrooms: A case study. *Journal of Teacher Education and Educators*. 4(1), 39-52. <http://jtee.org/document/issue7/MAKALE%203.pdf>

- [30] Dobbins, M., Robeson, P., Ciliska, D., Hanna, S., Cameron, R., O'Mara, L., DeCorby, K. and Mercer, S. (2009). A description of a knowledge broker role implemented as part of a randomized controlled trial evaluating three knowledge translation strategies, *Implementation Science* 4(23) doi: 10.1186/17485908-4-23. Retrieved from <https://implementationscience.biomedcentral.com>.
- [31] Drennan, R. (2018). *Research Management: A Handbook for Southern African Research Management Offices (2nd Edition)*. Southern Africa: Southern African Research and Innovation Management Association (SARIMA). Retrieved from <https://www.sarima.co.za>.
- [32] Ellis, N. & Loughland, T. (2016). The challenges of practitioner research: A comparative study of Singapore and NSW. *Australian Journal of Teacher Education*, 41(2). <http://dx.doi.org/10.14221/ajte.2016v41n2.8>.
- [33] Firth, J. (2016). Research engagement for the school teacher and its role in the education community. *Education in the North*, 23(2), pp. 161-166. Retrieved from <https://grdspublishing.org/index.php>.
- [34] Formoso, C.B. (2016, May 01). *Primer: What you should know about the K to 12 senior high school*. Retrieved from [https://www. Newsinfo.inquirer.net](https://www.Newsinfo.inquirer.net).
- [35] Fox, N.S., Brennan, J.S., Chasen, S.T. (2008). "Clinical estimation of fetal weight and the Hawthorne effect." *Eur. J. Obstet. Gynecol. Reprod. Biol.* 141(2): 111-4. Doi: 10.1016/j.ejogrb.2008.07.023.
- [36] Grima-Farrell, C. (2017). *What matters in a research to practice cycle? Teachers as researchers*. Springer Singapore: Springer science+Business Media Singapore. <https://doi.org/10.1007/978-981-10-2087-2>.
- [37] Guzder, k. (August 28, 2019). *How do I Become a head teacher?* Retrieved from [https://www. highspeedtraining.co.uk/hub/headteacher-career-guide](https://www.highspeedtraining.co.uk/hub/headteacher-career-guide).
- [38] Hair, J., Balck, W., Barry, J., Anderson, R. (2006). *Multivariate Analysis (6th ed.)*. New Jersey: Prentice Hall.
- [40] Hanover Research. (May 2014). *Building a culture of research: recommended practices*. Retrieved from <https://www.hanoverresearch.com>.
- [41] Hassel E.A., & Bryan. (April 22, 2016). *Every school can have a great principal: a fresh vision for how*. Retrieved from <https://publicimpact.com/every-school-can-have-a-great-principal-a-fresh-vision-for-how/>
- [42] Hine, G. S. C. (2013). The importance of action research in teacher education programs. *Issues in Educational Research*, 23(2): Special Issue. Retrieved from <https://www.iier.org.au>.
- [43] Huang, J.S. (2014). Building Research Collaboration Networks –An interpersonal perspective for research capacity building. *Journal of Research Administration*, 45(2), 89-112. Retrieved from <https://eric.ed.gov>.
- [44] Huang, J. S. & Hung, W. L. (2018). Building the science of research management - What can research management learn from education research? *Journal of Research Administration*, 49(1), 11-30. Retrieved from <https://files.ed.gov>.
- [45] Hussien, O.Q., Jerusalem, R.Y. & Langam, H.L. (2019). Research Barriers of Public School Teachers of the Division of Ilagan City. *PUPIL: International Journal of Teaching, Education and Learning*, 3(1), 189-204. <https://dx.doi.org/10.20319/pijtel.2019.31.189204>.
- [46] Ibrahim, A.A., Nazmy, H.A., Mahmoud, O.I., Mahmoud Y.M., Fayez, E.K., & Gad, M.A. (2016). *Attitudes and Perceived Barriers among Medical students towards clinical research:A cross-sectional study in an Egyptian medical school journal of biomedical education*, 2016.
- [47] Jansen, W., Warmenhoven, B., Fikkers, D. J., Poel, M., & Hendrik Schretlen, J. H. (2014). *Study on Assessing the Research Management Performance of Framework Programmes Projects*. European Commission. Retrieved from <https://ec.europa.eu>.
- [48] Johnson, A.M. (2013). *Improving your research management*. Amsterdam, The Netherland: Elsevier B.V. Retrieved from <https://www.elsevier.com>.

- [49] Kolin, M. (1978). *Dynamic Managing*. Manlo Park. California: Commings Pub. Co.
- [50] Laerd Dissertation, Lund Research Ltd. Total Population Sampling. Retrieved from <http://dissertation.laerd.com/total-populaion-sampling.php> on December 08, 2019.
- [51] Lesch, S. (2010). Learning achieved by the end of a course or program: knowledge-skills-attitudes. Retrieved from <http://dental.gbrownc.on.ca/programs/insadulit/currlo.htm>.
- [52] Llego, M.A. (2016). Qualification standards for the position of head teachers and principals. Deped Order no. 39, s. 2007. Retrieved from <https://www.teacherph.com/qualification-standards-head-teachers-principals>.
- [53] Llego, M.A. (2017). Updated deped gender responsive basic education policy. DepEd order no. 32, s. 2017. <https://www.teacherph.com/gender-responsive-policy/>
- [54] Llego, M.A. (2017). DepEd research management guidelines. DepEd order no. 16, s. 2016. <https://www.teacherph.com/deped-research-management-guidelines/>
- [55] Memisoglu, S.P. (2016). Teachers' and administrators' perceptions of knowledge management competence of high school administrators. *Academic Journals. Educational Research and Reviews*, 11(4), pp. 125-133. DOI: 10.5897/ERR2015.2558.
- [56] 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 Science*, 2(1), 156-165. <https://eric.ed.gov/?id=EJ1105165>.
- [57] Nonaka, I. & Toyama, R. (2005). The theory of the knowledge creation firm: Subjectivity, objectivity, and synthesis. *Industrial and Corporate Change*, 14/3, 419-436.
- [58] Ochada, N.R.C. & Gempes, G.P. (2018). Operating expenses (MOOE) allocation in basic education system: unherad voices of public-school teachers. *International Journal of Scientific & Technology Research*, 7(4).
- [59] Omeluzor, S.U., Madukoma, E., Bamidele, I., & Ogbuiyi, S.U. (2012). Use of electronic information resources and research output by academic staff in private universities in Ogun State. *Nigeria Canadian social science*, 8(3). 8.
- [60] Origenes, B.S. (2009). "Strategic Leadership, Strategic Management Practices and Peak Performance of Public Secondary School Heads in the Division of Davao City." Unpublished Dissertation, University of Southern Philippines, Davao City, Philippines.
- [61] Organization for Economic Co-operation and Development (OECD). (2015). Frascati Manual. The Measurement of Scientific, technological and Innovation Activities. Retrieved from <https://en.m.wikipedia.org>.
- [62] Prihatin, T. (2017). Classroom action research management training model for senior high school teachers aided by E-module. *International Journal of Advance Research*, 59(2), 1769-1780.
- [63] Rattanaprom, W. (2019). Failure of research-based learning implementation in basic education. *International Education Studies*; Vol. 12, No. 4; 2019. Retrieved from <https://doi.org/10.5539/ies.v12n4p19>.
- [64] Reachivy: Boutique Educational Advisory. (2020). *Why are research skills important?* Retrieved from <https://www.reachivy.com>.
- [65] Research Africa Team. 2010. *Universities urged to develop research strategies*. INORMS Daily Cape Town. Retrieved from <https://www.who.int>tdr>R...PDF>
- [66] Rouse, M. (2013, August). *Data destruction*. Retrieved from <https://www.searchstorage.techtarget.com>.
- [67] San Miguel, V.G. (2019, February 04). *Research in basic education*. Retrieved from <https://www.depedmalaybalay.net/articles/research-in-basic-education.html>.
- [68] Sawati, M.J., Anwar, S., & Majoka, M.I. (2013). Do qualification, experience and age matter for principals' leaderships styles? *International Journal of Academic Research in Business and Social Sciences*, 3(7), 403-413. <http://dx.doi.org/10.6007/IJARBS/v3-i7/63>.
- [69] Schiffauerova, E.A. (2015). How to receive more funding for your research? Get connected to the right people! *PLoS ONE*, 10(7), e0133061. doi: 10.1371/journal.pone.0133061.

- [70] Sheikh, A.S.F., Sheikh, S.A., Kaleem, A., Waqas, A. (2013). Factors contributing to lack of interest in research among medical students. *Advances in Medical Education and Practice*. 4:237-43. <https://doi.org/10.2147/AMEP.S51536>
- [71] Shulsinger, T. (July 19, 2017). *The benefits of a master's degree in today's job market*. Retrieved from <https://www.northeastern.edu>.
- [72] Sokhanvar, S. (2015). *Investigating the role of knowledge management at various levels of project management office*. Australia: Science and Engineering Faculty, Queensland University of Technology. Retrieved from <https://eprints.qut.edu.au>.
- [73] Taherdoost, H. (2016). Sampling methods in research methodology; how to choose a sampling technique for research. *International Journal of Academic Research in Management*, 5(2). DOI: 10.2139.
- [74] Teodorescu, D. (2000). Correlates of faculty publication productivity: A cross-national analysis. *Higher Education*. 39(2), pp.201-222.
- [75] Turk, M., Roncevic, N., & Ledic, J. (2016). *Research Management competencies: Croatian Academics' Perspective*. <http://dx.doi.org/10.15405/epsbs.2016.11.18>.
- [76] Ulla, M.B. (2018). Benefits and Challenges of Doing Research: Experiences from Philippine Public School Teachers. *Issues in Educational Research*, 28(3), 797-810. <http://www.iier.org.au/iier28/ulla.pdf>.
- [77] Ulla, M.B., Barrera, K.I.B., & Acompañado, M.M., (2017). Philippine Classroom Teachers as Researchers: Teachers' Perceptions, Motivations, and challenges. *Australian Journal of Teacher Education*, 42(11). Retrieved from <http://ro.ecu.edu.au/ajte/vol42/iss11/4>.
- [78] Vásquez, V. E. L. (2017). *Teachers as researchers: Advantages, disadvantages and challenges for teachers intending to engage in research activities*. <https://www.academia.edu/719736>.
- [79] Vitae. (2011.) *Researcher development framework*. UK: Careers research and Advisory Centre (CRAC). Retrieved from <https://www2.le.ac.uk/> [September, 11, 2019].
- [80] 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.