Research Capability of Teachers in The Schools Division of Mabalacat City: Basis for Scientific Research Capability Program

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Abstract — The professional profile of teachers encompasses their highest educational attainment, years of teaching experience, and relevant in-service training attendance, revealing a diverse range of qualifications and experiences among educators.

Teachers demonstrated varying levels of research capability across different dimensions, including formulating research problems, writing literature reviews, designing research methodologies, and completing other parts of the research proposal, indicating a need for targeted support and training in research methodology and proposal writing.

Statistical analysis revealed significant relationships between the professional profile of teachers and their research capability, with educational attainment, years of teaching experience, and in-service training attendance positively influencing various aspects of research capability.

Recommendations included the development of tailored research training programs for teachers to enhance their research skills, provide opportunities for continuous professional development in research methodology, and foster collaboration among educators to share best practices in research.

Furthermore, educational institutions should consider incentivizing and recognizing teachers' research efforts, providing resources and support for conducting research projects, and integrating research skills training into teacher education programs to cultivate a culture of inquiry and evidence-based practice in education.

I. Introduction

Progress on a national and international scale depends heavily on research. Its importance cannot be understated because it aims to maintain and enhance the quality of life. Additionally, research aims to improve human life and serve human needs. Therefore, because humans use the results of research, they advance as a result of research. Research provides solutions to societal issues that are evident at all levels of society, from local communities to various government and non-government organizations. As a result, the majority of governmental and nongovernmental organizations are adopting research agendas to identify solutions to persistent societal issues.

According to Ciocon (2016), research is widely acknowledged as a crucial instrument for addressing a variety of human problems and improving the quality of life. The majority of master teachers have not yet conducted any research and have not participated in research training at the divisional, regional, national, or international levels, according to a 2017 study by Avance titled

Master Teachers' Perception of their Research Capabilities: Base for the Development of a Training Program (Faltado et al.).

Bocar's (2021) study demonstrated that distributing a questionnaire and retrieving it are methods for collecting data during a research investigation; however, the student researchers found it challenging to locate and reach the respondents. However, Beverly (2021) found that for some students, gathering data from studies would be the simplest aspect of quantitative research.

Therefore, the Department of Education should actively participate in addressing issues, particularly those related to the teaching and learning process, as a government entity. As a result, the country's educational system was improved. In other words, instructors should do research into the answers to the issues in their classrooms. DepEd published DO No. 65, s. 2022, which formalizes the department's use of research-based decision-making and policy-making. This directive states that the department's policies must be supported by research. Theoretically, some teachers lack the expertise to undertake research, especially action or classroom-based research.

If these teachers lack research skills, how can they help address the issues being faced? The Department of Education and other institutions that are impacted by their outputs should not ignore this problem; instead, they should address it. It is a serious and rigorous pursuit of knowledge that should be encouraged, as the benefits of its findings are extensive. It broadens the field of knowledge by identifying and producing fresh ideas, methods, and concepts. These, in turn, have an impact on applications that help communities and socioeconomic enterprises advance (Formeleza & Patea, 2022).

Numerous studies demonstrate the importance of educational research, which is why policymakers have created several memos requiring both administrators and teachers to engage in research. Since conducting research is required by law and serves as one of the institution's primary functions, faculty members in higher education establishments are expected to do so. The administration offered numerous benefits, including financial incentives, to advance academics and incentivize faculty to pursue research.

In the study by Tamban and Maningas (2020), titled *"Research Capability of Public-School Teachers: A Basis for Research Capability Enhancement Program*," the findings concluded that there is no significant relationship between their profiles and their research capability, except for the highest educational attainment, which does show a significant relationship. As a result, the analysis's findings are only partially supported.

With this, they recommended the need for a thorough seminar or training write-shop for technical writing of completed research, the need for teachers to be highly capable of writing completed research that can be presented and published, and the researchers' recommendations for an action plan for the seminar or training write-shop activities, including the timetable, expected output, material needs, and the accountable entity or person.

The following activities involved in conducting a research project are covered in this training and write-shop (workshop): 1. Technical writing training and write-shop on research title; 2. Technical writing training and write-shop on research proposal; 3. Seminar Workshop on Data Gathering and Statistical Analysis; 4. Technical writing training and write-shop on completed research; 5. Seminar Workshop on Research Presentation; and 6. Seminar-Workshop on Publishable Formats for Research. In their study, "Assessment of Teachers' Research Capability towards the Promotion of Research Culture in Elementary Schools," Manila et al. (2022) found that elementary teachers lack writing and research experience, as indicated by the respondents' research activities. They have a limited ability to conceptualize research, formulate research questions, write literature reviews, design research studies, select a quantitative or qualitative research design, and complete other sections of the research proposal. The teacher-respondents are considered slightly capable if a research mentor is present to provide tight supervision while they complete the tasks.

With this, it is recommended that Mariveles' public elementary school teachers participate in a district-wide training workshop on research. There should be facilitators or research experts to closely supervise instructors' progress in the research process, from ideation to proposal submission, in order to ensure that the training workshop is productive.

Furthermore, when comparing instructors' research skills according to educational level, job title, and seminars/trainings taken, substantial differences were discovered. Teachers with better positions, more advanced educational backgrounds, and attendance at higher-level seminars are more qualified than other teachers. As a result, it is also highly recommended to allow teachers to attend international seminars and conferences and to encourage them to pursue professional development through postgraduate courses.

It is in this regard that the researcher aimed to assess the research capability of teachers in the Schools Division of Mabalacat City for the School Year 2023-2024 as the basis for a scientific research capability program.

Theoretical Framework

Several types of research were conducted on factors affecting teachers' research support, the effective research environment, and research capabilities. Any educational institution must respond to technological advancements as part of its primary mandate. Nowadays, economic and sustainable development is dependent on academic research. Research endeavors aim to find solutions and enhance intellectual skills and knowledge (Manongsong & Panopio, 2018).

Providing adequate research support is a crucial factor in promoting research activity. Funding, ICT equipment, books/references from libraries, and verbal encouragement from superiors are the most common research supports that a researcher needs to achieve excellent performance in research studies (Brewer, Brewer, & Hilton, 2020).

On the other hand, researchers have also demonstrated that research productivity is heavily dependent on the time spent on research-related activities. The teaching load has differential effects on research productivity, which vary across different fields and clusters of departmental areas (Hancock, 2015; Wodarski, 2021). This was affirmed by Morales (2016) and Kutlay (2022). A tight teaching schedule and teaching overload can demotivate teachers from conducting research.

Previous studies have shown that motivational factors, such as financial rewards, promotion, and performance, enhance research skills and Processes, and research dissemination is equally important. The financial reward could be a symbol of success, a reinforcer and motivator, a reflection of one's performance, and a source of reduced anxiety. Promotion leads to a higher salary, increased social status, improved work conditions, greater administrative power, greater respect from colleagues and students, and other fringe benefits (Lai, 2020; Rowley, 2016). Providing adequate research support is one of the most crucial factors in promoting research activity. Funding, ICT equipment, books/references from libraries, and verbal encouragement from superiors are the most common research supports that a researcher needs to achieve excellent performance in research studies (Brewer, Brewer, & Hilton, 2020). Ferrance (2020) posited that the role of administrators has a significant influence on school improvement and teachers' skills enhancement. Administrators support teachers by working collaboratively to enhance their professional development.

Additionally, earlier studies have shown that academic staff need to be research-competent and productive. The declining research skills, knowledge, and productivity of teachers hamper the development of academic education. There is a need to strengthen institutional support and enhance research attitudes and skills for improved research productivity (Wong, 2019; Vogrinc & Zuljan, 2019; Hong & Lawrence, 2021).

Moreover, Witchian et al. (2019) also found a direct link between research productivity and the characteristics of an institution that enhance research competence, as well as various attributes that enhance research capability. Once teachers' research capability is established, research productivity increases. Formeloza and Pateña (2022) determined the level of competency in writing a research paper and the level of satisfaction with the facilities/resources provided by the institution. The results revealed that both respondents demonstrated moderate competence in technical aspects and made significant contributions to the research paper as well. On the other hand, they are satisfied with the facilities provided by the university.

Lovat, Davies, and Plotnikoff (2015) recognized that integrating research in the teacher education curriculum has a positive effect on teachers. The study of Papanastasiou (2015) emphasizes the development of positive attitudes towards research to enhance teachers' capability and increase awareness. Understanding these attitudes is necessary to help instructors facilitate the learning of research for their students. The usefulness of research, anxiety, and affect, indicating positive feelings about research, as well as the life relevance of research to the students' daily lives.

The difficulty of the research was a factor considered, which helped mitigate negative views on the research.

Bell (2016) conducted a study on the challenges faced in developing research competencies. The study found that the centered approach has a significant relationship with learner performance compared to the traditional semester approach, and it helped develop research competencies within learners.

Conceptual Framework

In the field of education, research is an academic activity conducted by educators who continually advocate for learning, discover new information, evaluate data, modify behavior, and enhance modern educational standards and teaching quality. This would lead to valid scientific conclusions in research that could be applied to solve problems, enhance teaching, and improve students' learning outcomes.

Furthermore, conducting research is essential for school administrators and instructors to address challenges, thereby improving their educational effectiveness. Research has long been considered a tool for transforming educational practice while also contributing to the body of knowledge in the field. Research has the potential to enhance and transform educational practices.

The Commission on Higher Education (CHED) is responsible for the development of research functions of HEIs in the Philippines, as stated in Section 8 of Republic Act (RA) No. 7722. CHED is also mandated to facilitate collaboration and the sharing of expertise between and among educational institutions, research agencies/organizations, and individual scientists and researchers, all of which are deemed critical mechanisms for promoting and developing research capabilities and increasing research productivity.

Universities in the Philippines, by mandate, take the lead in conducting research, whether individually or cooperatively, by their academic members. This is to encourage high-quality instruction, expand knowledge, and improve people's lives, which makes teaching an evidence-based profession (Papanastasiou, 2014).

Collaboration in research among university professors and elementary school teachers not only strengthens their linkages but also results in professionally competent, research-oriented, and productive faculty members who are capable of the university's growth and sustainability toward greatness.

Higher education has a primary mandate to conduct research, whereas in basic education, research is secondary to the teaching tasks of teachers. The Department of Education has a strong drive to motivate teachers to conduct research. The Department of Education (DepEd) has issued several directives to provide funding and promote a research culture. These can be seen in DepEd Orders that are intended to finance the conduct of education-related research/studies through the

Basic Education Research Fund (BERF), such as the DepEd Order (DO) No. 24 s. 2020, DO No. 43 s. 2015, and DO No. 4 s. of 2016.

Also, DepEd Order No. 16, s. 2017 provides the Research Management Guidelines (RMG). Furthermore, the policy identifies research as one of the critical performance indicators in the new Result-based Performance Management System (RPMS); therefore, it becomes part of the teacher's tasks. The DO No. 39s. In 2016, the Basic Education Research Agenda (BERA) was promulgated, which sets different research priorities.

Despite the department's mandates, initiatives, and programs, the research productivity of teachers in our country's basic education remains low (Vinluan, 2021). Furthermore, a study revealed that teachers in basic education are still adjusting to action research as part of their educational culture (Salazar-Clemena, 2016).

This is likewise the case in the Schools Division of Mabalacat City. This scenario prompted researchers to conduct this study, which will assess the research capability of teachers in the Schools Division of Mabalacat City for the school year 2023-2024 as the basis for a scientific research capability program.

This study further included: describing the professional profile of the teachers along the following: highest educational attainment, number of years of teaching experience, and relevant research trainings attended; determining the research capability of teachers in terms of: formulating research problems, writing the literature review, designing research, determining quantitative research, determining qualitative research, and completing other parts of the research proposal; and testing the significant relationship between the professional profile of the teachers and their research capability.

The results served as the basis for a scientific research capability program designed to enhance the research capabilities of teachers.

Figure 1 illustrates the study's paradigm.
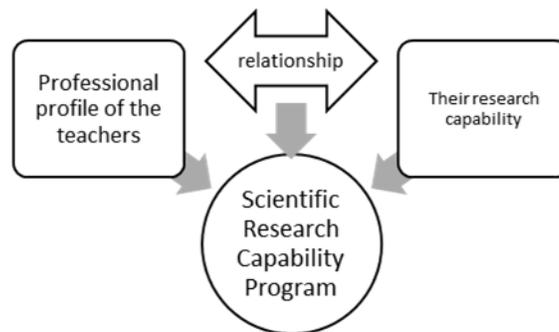
Figure 1. Paradigm of the Study

Statement of the Problem

This study aimed to assess the research capability of teachers in the Schools Division of Mabalacat City for the school year 2023-2024 as the basis for a scientific research capability program.

Specifically, it aimed to answer the following questions:

1. What is the professional profile of the teachers along the following:

    1.1. highest educational attainment;

    1.2. number of years of teaching experience; and

    1.3. relevant research trainings attended?

1. How is the research capability of teachers in terms of:

    2.1. Formulating research problems;

    2.2. writing the literature review;

    2.3. designing research;

    2.4. Determining quantitative research;

    2.5. determining qualitative research; and

    2.6. Completing other parts of the research proposal?

1. Is there a significant relationship between the professional profile of the teachers and their research capability?

2. What scientific research capability program can be proposed to enhance the research capabilities of teachers?

Hypothesis

The study's hypothesis was tested at a 0.05 level of significance.

There is no significant relationship between the professional profile of the teachers and their research capability.

II. Methodology

This chapter discusses the methodology used in assessing the research capability of teachers in the Schools Division of Mabalacat City for the school year 2023–2024. The study employed a descriptive-correlational research design to evaluate teachers' professional profiles, which included educational attainment, teaching experience, and research training, as well as their research capabilities, such as problem formulation, literature review, research design, and familiarity with quantitative and qualitative methods. The descriptive component focused on profiling the respondents and evaluating their research capabilities, while the correlational component examined the relationship between their professional profiles and research capabilities.

Data were gathered from 120 teachers selected through simple random sampling. A researcher-made questionnaire was used as the primary data collection tool, crafted based on related literature and designed to align with the respondents' knowledge levels. The questionnaire was divided into two parts: professional profile and research capability. For data analysis, frequency and percentage were used to describe teacher profiles, while weighted mean assessed research capability levels. To test the relationship between profile and capability, the Pearson correlation coefficient (r) test was employed. The study was conducted within the Schools Division of Mabalacat City during the 2023–2024 academic year.

Ethical Considerations

For ethical considerations, the identities of the respondents were not revealed, and their scores in this study did not affect their performance ratings. Privacy and anonymity of respondents were of paramount importance. Furthermore, no school funds were utilized in the collection of data, nor should any fees be collected from the respondents.

III. Results and Discussion

This chapter presents the discussion of findings brought from the data gathering procedure. The data gathering procedures were based on the questions posited in the beginning of this study.

1. Professional Profile of the Teachers

1.1 Highest Educational Attainment

Table 1.1
Highest Educational Attainment
N=120

Highest Educational Attainment	f	%
Doctoral degree	2	2
Earned doctoral units	7	6
Master's degree	16	13
Earned masteral units	86	72
Bachelor's degree	8	7
Total	120	100

From the data, it's evident that the majority of teachers, constituting 72%, have earned masteral units, while 13% have completed a Master's degree. This indicates a significant portion of teachers have pursued postgraduate education beyond their Bachelor's degree. Additionally, 6% of teachers have earned doctoral units, suggesting a smaller but notable percentage may be in progress toward earning a doctoral degree. Only 2% of teachers hold a doctoral degree, reflecting a minority within the sample.

The distribution of educational qualifications implies a relatively high level of academic attainment among teachers in the division. The prevalence of earned masteral units indicates a commitment to professional development and continuous learning, as teachers have pursued advanced coursework beyond their initial Bachelor's degree. This suggests a positive inclination towards furthering their education to enhance their knowledge and expertise in their respective fields.

1.2 Number of Years of Teaching Experience

Table 1.2
Number of Years of Teaching Experience
N=120

Number of Years of Teaching Experience	f	%
20 years and over	6	5
15-19 years	16	13
10-14 years	22	18
5-9 years	31	26
less than 5 years	46	38
Total	120	100

The data indicates that the largest proportion of teachers, comprising 38%, have less than five years of teaching experience. This suggests a considerable portion of the teaching workforce in the division is relatively new to the profession. Conversely, only 5% of teachers have been teaching for 20 years or more, indicating a smaller proportion of veteran educators within the sample.

The distribution further reveals that 26% of teachers have been teaching for 5-9 years, while 18% have 10-14 years of experience, and 13% have 15-19 years of experience. These findings suggest a diverse range of experience levels among teachers, with significant representation across various stages of their teaching careers.

The prevalence of teachers with fewer than five years of experience could have implications for professional development initiatives within the division. Newer teachers may benefit from targeted support and mentorship programs to help them navigate the challenges of their early years in the profession and build their research capabilities.

Conversely, the presence of veteran educators with over 20 years of teaching experience highlights a valuable resource of institutional knowledge and expertise. These experienced teachers could play pivotal roles in mentoring and guiding their less-experienced colleagues, contributing to the overall enhancement of research capability across the division.

1.3 Relevant In-Service Trainings Attended

Table 1.3
Relevant In-Service Trainings Attended
N=120

Relevant In-Service Trainings Attended	f	%
International	2	1
National	4	3
Regional	11	9
Division	38	32
District	40	33
School	26	21
Total	120	100

The data indicates that the majority of teachers, comprising 33% of the sample, attended district-level in-service trainings, followed closely by division-level trainings at 32%. This suggests that a significant portion of teachers have engaged in professional development opportunities organized within their respective districts and divisions. These trainings likely cover a range of topics aimed at enhancing teaching skills, curriculum knowledge, and instructional practices.

Furthermore, 21% of teachers participated in school-based trainings, indicating a substantial investment in professional development at the individual school level. These trainings

may focus on school-specific initiatives, pedagogical approaches, or technology integration tailored to the unique needs of each school community.

Additionally, 9% of teachers attended regional-level trainings, which may offer broader perspectives and insights into educational trends and policies at the regional level. Meanwhile, 3% attended national-level trainings, which likely provide exposure to best practices, research findings, and policy developments at the national level.

2. Research Capability of the Teachers

2.1 Formulating Research Problems

Table 2.1
Formulating Research Problems

Statistic	Assessment
Number of Test Items	10
Mean	4.07
Standard Deviation	0.71
Mean Percentage Score	40.70
Proficiency Level	41.51

The mean score of 4.07 out of 10 suggests that, on average, teachers scored below 50% in this aspect of research capability. The relatively low mean percentage score of 40.70 indicates a need for improvement in teachers' ability to formulate research problems effectively. This finding highlights an area where teachers may require support and development to enhance their research skills.

The standard deviation of 0.71 suggests that there was some variability in the scores among teachers, with some potentially demonstrating stronger proficiency in formulating research problems than others. However, the overall mean score falling below the proficiency level of 41.51 indicates that there is room for improvement across the board.

Effective formulation of research problems is crucial as it lays the foundation for the entire research process. It involves identifying gaps in knowledge, posing relevant research questions, and framing inquiries in a clear and concise manner. A lack of proficiency in this area may hinder teachers' ability to conduct meaningful research that addresses pertinent educational issues and contributes to the advancement of knowledge in the field.

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2.2 Writing the Literature Review

Table 2.2
Writing the Literature Review

Statistic	Assessment
Number of Test Items	10
Mean	2.96
Standard Deviation	0.67
Mean Percentage Score	29.60
Proficiency Level	30.19

The mean score of 2.96 out of 10 indicates that, on average, teachers scored below 30% in writing the literature review. This finding suggests a significant area of weakness in teachers' research capabilities within the division. The mean percentage score of 29.60 falls below the proficiency level of 30.19, underscoring the need for improvement in this fundamental skill.

The standard deviation of 0.67 suggests some variability in scores among teachers, indicating that while some may have performed slightly better than others, overall, the majority of teachers demonstrated insufficient proficiency in writing literature reviews. This lack of consistency highlights a widespread gap in understanding and application of research methodologies, particularly in synthesizing and critically analyzing existing literature.

Writing a literature review requires not only summarizing relevant studies but also critically evaluating their methodologies, findings, and contributions to the field. It involves identifying gaps in existing research and articulating how one's own study addresses these gaps. A low proficiency level in this area may impede teachers' ability to situate their research within the broader scholarly discourse and contribute meaningfully to knowledge advancement.

2.3 Designing Research

Table 2.3
Designing Research

Statistic	Assessment
Number of Test Items	10
Mean	2.76
Standard Deviation	0.87
Mean Percentage Score	27.60
Proficiency Level	28.15

With a mean score of 2.76 out of 10, teachers, on average, scored below 30% in designing research. This indicates a significant area of weakness in teachers' research capabilities within the division. The mean percentage score of 27.60 falls below the proficiency level of 28.15, further emphasizing the need for improvement in this fundamental skill.

The relatively high standard deviation of 0.87 suggests considerable variability in scores among teachers. While some may have performed slightly better than others, the majority demonstrated insufficient proficiency in designing research. This variability underscores the need

for targeted interventions and professional development programs tailored to teachers' specific needs and skill levels.

Designing research is a multifaceted process that requires careful planning and consideration of various factors, including research objectives, methodologies, sampling techniques, and ethical considerations. A low proficiency level in this area may hinder teachers' ability to conceptualize and execute research projects effectively, limiting their capacity to contribute meaningfully to the field of education.

2.4 Determining Quantitative Research

Table 2.4
Determining Quantitative Research

Statistic	Assessment
Number of Test Items	10
Mean	3.33
Standard Deviation	0.86
Mean Percentage Score	33.30
Proficiency Level	33.97

The mean score of 3.33 out of 10 indicates that, on average, teachers scored around 33.30% in determining quantitative research. While this suggests a slightly higher proficiency compared to other research components assessed, such as designing research or writing literature reviews, it still falls below the proficiency level of 33.97. Despite the mean percentage score being above 30%, indicating some level of proficiency, there remains room for improvement in this area.

The standard deviation of 0.86 signifies a notable degree of variability in scores among teachers. While some may have demonstrated relatively stronger capabilities in determining quantitative research, others may have struggled more significantly. This variability underscores the importance of targeted interventions and professional development initiatives tailored to address individual teachers' specific needs and skill levels.

Determining quantitative research involves various tasks, including selecting appropriate statistical analyses, interpreting numerical data, and understanding the principles of quantitative research design. Teachers need to be proficient in these areas to effectively evaluate research studies, design their own quantitative research projects, and accurately interpret findings.

2.5 Determining Qualitative Research

Table 2.5
Determining Qualitative Research

Statistic	Assessment
Number of Test Items	10
Mean	3.10
Standard Deviation	0.87
Mean Percentage Score	31.00
Proficiency Level	31.62

The mean score of 3.10 out of 10 indicates that, on average, teachers scored around 31.00% in determining qualitative research. While this suggests a basic level of proficiency, the score falls slightly below the proficiency level of 31.62. Despite the mean percentage score being above 30%, signifying some understanding of qualitative research principles, there is still considerable room for improvement in this area.

The standard deviation of 0.87 reveals a notable degree of variability in scores among teachers. This variability underscores the diverse range of competencies and experiences among educators in determining qualitative research. While some teachers may have demonstrated stronger capabilities in this aspect, others may require additional support and guidance to enhance their understanding and application of qualitative research methods.

Determining qualitative research involves several complex tasks, including identifying appropriate qualitative research designs, understanding data collection techniques, and analyzing qualitative data effectively. Teachers need to develop proficiency in these areas to conduct rigorous qualitative research studies that yield meaningful insights into educational practices and processes.

2.6 Completing Other Parts of the Research Proposal

Table 2.6
Completing Other Parts of the Research Proposal

Statistic	Assessment
Number of Test Items	10
Mean	4.76
Standard Deviation	0.54
Mean Percentage Score	47.60
Proficiency Level	48.55

With a mean score of 4.76 out of 10, teachers achieved an average percentage score of 47.60% in completing other parts of the research proposal. While this suggests a moderate level of proficiency, the score falls slightly below the proficiency level of 48.55%. The mean percentage score indicates that, on average, teachers demonstrated understanding and competence in completing various components of the research proposal, albeit with some room for improvement.

The standard deviation of 0.54 indicates a relatively low degree of variability in scores among teachers, suggesting a relatively consistent level of performance in completing other parts of the research proposal. This consistency may reflect a shared understanding among educators regarding the key components and requirements of a research proposal, indicating a foundational level of knowledge and skills in this area.

Completing other parts of the research proposal is crucial for ensuring the clarity, coherence, and feasibility of a research study. Teachers need to articulate their research questions or objectives clearly, select appropriate research methods aligned with their research aims, and outline a comprehensive plan for data collection, analysis, and interpretation.

3. Significant Relationship Between the Professional Profile of the Teachers and their Research Capability

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Table 3

Significant Relationship Between the Professional Profile of the Teachers and their Research Capability

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Professional Profile of the Teachers		Research Capability					
		formulating research problems	writing the literature review	designing research	determining quantitative research	determining qualitative research	completing other parts of the research proposal
Education	Pearson r	0.52	0.416	0.418	0.589	0.041	0.131
	Value	0.003	0.022	0.021	0.001	0.830	0.490
	Interpret	Sig.	Sig.	Sig.	Sig.	Not Sig.	Not Sig.
Years of Teaching	Pearson r	0.146	0.414	0.97	0.106	0.31	0.691
	Value	0.441	0.022	0.000	0.577	0.095	0.000
	Interpret	Not Sig.	Sig.	Sig.	Not Sig.	Not Sig.	Sig.
Trainings Attended	Pearson r	0.724	0.438	0.644	0.247	0.416	0.414
	Value	0.000	0.015	0.000	0.187	0.022	0.022
	Interpret	Sig.	Sig.	Sig.	Not Sig.	Sig.	Sig.
Total	Pearson r	0.85	0.797	0.856	0.798	0.485	0.89
	Value	0.000	0.000	0.000	0.000	0.006	0.000
	Interpret	Sig.	Sig.	Sig.	Sig.	Sig.	Sig.

In terms of educational attainment, there is a significant positive correlation (Pearson r ranging from 0.416 to 0.589) between teachers' level of education and their research capability across all aspects measured. The correlation coefficients indicate that as teachers' educational attainment increases, their proficiency in formulating research problems, writing literature reviews, designing research, and determining quantitative research also improves. This suggests that higher levels of education equip teachers with the necessary skills and knowledge to conduct research effectively.

Regarding years of teaching experience, the correlation analysis indicates mixed results. While there is a significant positive correlation between years of teaching experience and the ability to write literature reviews and design research, no significant relationship is found with formulating research problems, determining qualitative research, and completing other parts of the research proposal. This suggests that teaching experience may have a more pronounced impact on certain aspects of research capability than others.

The number of relevant in-service trainings attended by teachers shows a consistently significant positive correlation (Pearson r ranging from 0.414 to 0.724) with their research capability across all aspects measured. This implies that participating in professional development opportunities related to research enhances teachers' skills and competencies in conducting various

aspects of research, including formulating research problems, writing literature reviews, designing research, determining quantitative research, and completing other parts of the research proposal.

The total correlation analysis indicates a strong positive relationship (Pearson r ranging from 0.797 to 0.89) between the professional profile of teachers and their research capability across all aspects measured. This underscores the importance of continuous professional development and educational attainment in enhancing teachers' research skills and competencies. The findings suggest that investing in teachers' professional growth and providing opportunities for advanced education and relevant training can significantly contribute to improving their research capability, ultimately benefiting the quality of education and the overall academic environment within the Schools Division of Mabalacat City.

4. Proposed Scientific Research Capability Program to Improve the Research Capability of the Teachers

Program Components	Description	Objectives	Activities	Timeline
Advanced Research Workshops	Series of workshops aimed at enhancing teachers' research skills, including formulating research problems, writing literature reviews, and designing research studies.	- To improve teachers' proficiency in various aspects of research.	- Conduct workshops led by experienced researchers. - Provide hands-on training on research methodologies and techniques.	First semester of the year
Mentorship Program	Pairing experienced researchers with teachers to provide guidance and support throughout the research process.	- To provide personalized assistance and feedback to teachers.	- Assign mentors to teachers based on research interests and needs. - Schedule regular meetings for mentorship sessions.	Throughout the year
Research Grants	Allocation of funds to support teachers' research endeavors, including funding for research materials, data collection, and dissemination activities.	- To encourage teachers to conduct research projects.	- Establish criteria for grant applications. - Review and select proposals based on merit and relevance.	Second semester of the year
Research Forums	Organize forums where teachers can present their research findings, share insights, and receive constructive feedback from peers and experts.	- To foster a culture of research collaboration and knowledge exchange.	- Schedule regular research forums. - Invite guest speakers and experts to provide insights and feedback.	Throughout the year
Online Research Resources	Provide access to online databases, research journals, and other resources to support teachers' research endeavors.	- To facilitate teachers' access to relevant research materials.	- Subscribe to online databases and journals. - Conduct training sessions on utilizing online research resources.	Throughout the year

The proposed Scientific Research Capability Program aims to address the need for enhancing the research capability of teachers within the Schools Division of Mabalacat City. The program encompasses various components designed to provide comprehensive support and resources to teachers interested in conducting research.

Firstly, the Advanced Research Workshops component focuses on offering a series of workshops covering essential aspects of research methodology, including formulating research problems, writing literature reviews, and designing research studies. These workshops was led by experienced researchers and will provide teachers with hands-on training to improve their proficiency in conducting high-quality research.

The Mentorship Program is another vital aspect of the proposed program, aiming to pair experienced researchers with teachers seeking guidance and support in their research endeavors. This personalized mentorship will offer teachers the opportunity to receive one-on-one assistance, feedback, and advice throughout the research process, thereby fostering their professional growth and development as researchers.

Research Grants constitute a significant component of the program, as they provide financial support to teachers for their research projects. By offering funding for research materials, data collection, and dissemination activities, these grants aim to incentivize teachers to undertake research initiatives and contribute to the advancement of knowledge in their respective fields.

Research Forums serve as platforms for teachers to present their research findings, exchange ideas, and receive constructive feedback from peers and experts. These forums promote collaboration, knowledge sharing, and networking among teachers, thereby fostering a research culture within the division and encouraging ongoing professional development.

IV. Conclusion

This chapter summarizes the findings, conclusions, and recommendations based on data collected regarding teachers' research capabilities and professional profiles. The study revealed that most teachers hold master's degrees and have 5 to 9 years of teaching experience, with district-level in-service training being the most attended. While teachers demonstrated strong performance in completing the general parts of a research proposal, they struggled with more complex areas, such as designing research and writing literature reviews. A significant relationship was found between professional qualifications—such as education level, teaching experience, and training—and research skills. This indicates the need for professional development tailored to research competencies, especially in areas where teachers showed weaker performance.

Conclusions drawn from the study highlight the importance of leveraging teachers' existing strengths, such as training participation, while addressing skill gaps in research-related tasks. The

study recommends developing specialized training focused on research design and literature writing, promoting continuous learning through research methodology workshops, and fostering peer learning through collaborative environments. Additionally, mentorship programs are encouraged to guide novice researchers, ultimately cultivating a research-oriented culture among educators that supports continuous improvement and academic growth.

REFERENCES

[1] Abarro, J. and Mariño, W. (2016). Research Capabilities of Public Secondary andElementary School Teachers in the Division of Antipolo City. International Journal of Scientific and Research Publications, Volume 6, Issue 6, ISSN 2250-3153

[2] Beverly, A. (2021). What are the areas in research that you find it easy and difficult to do?Vol. 6, Issue 3,pp: (23-30), Month: July -September 2018, Available at: www.researchpublish.com

[3] Avance, C. (2017). Master Teachers Perception on their Research Capabilities: Basis for the Development of a Training Program. Division of

[4] Bocar, A. (2021). Difficulties encountered by the student-researchers and the effects on their research output. Faculty of College of Arts and Sciences, La Salle University-Ozamiz

[5] Ciocon , J. L. (2018). Research Capability of Grade 12 Students. International Journal of Thesis Projects and Dissertations (IJTPD) (Vol. 6, Issue 3, pp: (23-30), Month: July -September 2018, Available at: www.researchpublish.com

[6] Creswell, J. W. (2018). Educational Research: Planning, conducting, and evaluating quantitative and qualitative research (3rd ed.). Upper Saddle River: Pearson.

[7] Faltado III, EdD, et.al. (2016). Practical Research 2 (Quantitative Research for SHS) , p.1 by Lorimar Publishing Inc., Quezon City Copyright 2016, ISBN 978-621-8035-10-2)

[8] Formeloza, R. and Pateña, A.(2022). Research Capability of the Maritime Faculty Members and Senior Students in Lyceum International Maritime Academy. International Journal of Physical and Social Sciences, IJPSS, Vol. 3,Issue 9,ISSN:2249-5894

[9] Manila, B., Bert, H., Dayanan, G., Barlis, J., & Fajardo, J. (2022). Assessment of Teachers' Research Capability towards the Promotion of Research Culture in Elementary Schools Asia Pacific Journal of Management and Sustainable Development. Asia Pacific Journal of Management and Sustainable Development |, 10(2). https://research.lpubatangas.edu.ph/wp-content/uploads/2022/09/6-APJMSD.10.2-Manila-et-al.pdf

[10] Mapa, D. S. (2017). Research culture in the Philippines. Presented during the National Academy of Science and Technology, Philippines (NAST PHIL). https://nast.ph/index.php/downloads/category/113-luzon-regional-scientificmeeting?download=387:technical-session-1-researchculture-in-the-philippines

[11] Papanastasiou, E. C. (2014). Revised-Attitudes Toward Research Scale (R-ATR): A First Look at its Psychometric Properties. Journal of Research in Education, 146-159. https://doi.org/10.1037/t35506-000

[12] Salazar-Clemena, R. M. (2016). Higher education research in the Philippines: Policies, practices, and problems. In V. L. Meek and C. Suwanwela (Eds.), Higher education, research, and knowledge in the AsiaPacific region (pp. 185-201). New York: Palgrave Macmillan. Retrieved from https://www.scirp.org/(S(351jmbntvnsjt1aadkposzje))/reference/ReferencesPapers.aspx?ReferenceID=148451

[13] Tamban, V. E., & Maningas, O. B. (2020). RESEARCH CAPABILITY OF PUBLIC SCHOOL TEACHERS: A BASIS FOR RESEARCH CAPABILITY ENHANCEMENT PROGRAM. PEOPLE: International Journal of Social Sciences, 6(1), 222–235. https://doi.org/10.20319/pijss.2020.61.222235

[14] Vinluan, L. R. (2021). Research productivity in eduction and psychology in the Philippines and comparison with ASEAN countries. Scientometrics. Retrieved from https://www.researchgate.net/publication/257662961_Research_productivity_in_education_and_psychology_in _the_Philippines_and_comparison_with_ASEAN_countries