

Research Culture and Organizational Learning on Professional Development of Secondary Teachers

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Received July 03, 2023; Revised August 04, 2023; Accepted August 11, 2023

Abstract This study examined the relationships between research culture, organizational learning, and the professional development of teachers at Dologon National High School. This study aimed to resolve the following questions: 1) Determine the level of professional development of the secondary teachers in terms of trainings and seminars, self-efficacy, and advanced degree; 2) Determine the level of research culture of the secondary teachers in terms of infrastructure, capability, funding, collaboration, and interest; and 3) Ascertain the level of organizational learning of the secondary teachers in terms of managerial commitment and empowerment, experimentation, and professional development opportunities. 4) evaluate the relationship between overall professional development and organizational learning and research culture of secondary teachers; and 5) identify the variable, singly or in combination, that best predicts overall professional development of secondary teachers. During the 2022–23 school year, the investigation was conducted with 70 secondary teachers. The instrument measured teachers' perceptions of organizational learning, research culture, and professional development based on their responses to a Likert scale. The findings revealed that teachers' perceptions of professional development and the organizational learning they received from their institutions were both extremely high. However, in terms of research culture, teachers were uncertain as to whether they had the skills and motivation to conduct action research studies at the classroom level. In addition, there was no correlation between professional development and the independent variable research culture. Despite this, a significant relationship existed between organizational learning and professional development. Lastly, professional development is predicted by five sub-variables of organizational learning: managerial commitment and empowerment, experimentation, risk-taking, openness and interaction with the external environment, and knowledge transfer and integration. This research concludes that organizational learning is necessary for the sustained professional development of teachers. According to this definition, "perceived organizational learning" refers to "an employee's perception that the organization values his or her contributions and cares about his or her welfare."

Keywords: *Organizational Learning, Research Culture, Professional Development, action research*

Cite This Article: Gilbert J. Ballenas, Yasir P. Tidong, Rubylen D. Granaderos, and Jessiel V. Tagadiad, "Research Culture and Organizational Learning on Professional Development of Secondary Teachers." American Journal of Educational Research, vol. 11, no. 9 (2023): 580-593. doi: 10.12691/education-11-9-7.

1. Introduction

The Continuing Professional Development (CPD) Act of 2016 (Republic Act 10912) is a crucial legislation in the Philippines that mandates all professionals to fulfill CPD requirements to maintain their license identification card and continue practicing in their respective fields. This statutory requirement ensures that Filipino professionals continuously update their skills and knowledge, making the argument for lifelong learning a compelling one [1]. In the context of this Act, several terms play a significant role: organizational learning, professional development, and research culture.

Organizational learning refers to the process by which an organization or group of professionals collectively acquire, share, and apply knowledge to improve their

performance and adapt to changing circumstances [1]. It involves not just individual learning but also the collective capacity of an organization to learn, innovate, and grow as a cohesive unit.

Professional development, in the context of the CPD Act, pertains to the ongoing efforts and activities undertaken by professionals to enhance their skills, knowledge, and competencies within their specific fields [1]. It is a deliberate and purposeful pursuit of learning opportunities that help professionals stay abreast of the latest advancements, technologies, and best practices in their industries.

Research culture refers to the prevailing atmosphere and practices that promote and support research activities within a profession or organization [1]. It encompasses encouraging a spirit of inquiry, fostering a collaborative environment, and valuing evidence-based decision-making.

With these fundamental terms understood, it becomes evident that the CPD Act serves as an evaluation criterion to ensure that Filipino professionals remain up-to-date with both local and global best practices. By continuously engaging in professional development and contributing to a thriving research culture, professionals can keep their skills relevant and aligned with the demands of a constantly evolving learning society [2]. However, it is important to acknowledge that certain concerns, such as cost and availability, need to be addressed to effectively resolve any issues and fully leverage the potential benefits of this statute.

Are teachers interested in upgrading their skills and continuing to learn as part of their professional development? It is critical to stress that the information provided in professional development aligns with the desired knowledge and abilities of teachers. Professional development must prioritize both content components and standards. This requirement must be kept in mind at all times. As a result, professional development considers the demands of teachers. Focusing on teachers' ability to implement educational techniques that they believe are useful, both in written and abstract form, may give teachers opportunities to develop their competence. These options might be made more accessible by stressing teachers' ability to use these strategies. Consequently, their activities demonstrate what they see as effective and efficient. Teacher professional development via instructional coaching is now widely accepted.

One of the factors that was considered in conducting this was the organizational learning that the secondary teachers were receiving to develop themselves professionally.

This study was conducted based on this assumption to uncover the research attitudes, knowledge, and involvement of the secondary teachers and identify the present state of the faculty members' skills, capacities, and competencies in the context of conducting research activities. Because the department of education's dedication to quality will rely on the research skills of its faculty members, excellence will be realized. Many individuals dislike research despite its necessity. The research helps advance civilization. The research study's conclusions support personal reflection, reflective teaching, and smart decision-making. Solid evidence supports societal expectations. Research underlies all advancements. Research and feasibility studies comprise a big part of countries' goals and activities in agriculture, communications, transportation, trade, industry, and commerce. Despite initiatives to enhance research production, the Philippines is still unable to create a research culture throughout a broad variety of enterprises, especially educational institutions, which may considerably add to the country's overall research output. In the Philippines, the Commission on Higher Education (CHED) mandates that only higher education institutions (HEIs) perform research [3].

However, the question that needs to be addressed in cultivating the research culture and professional development of the secondary teachers in the Department of Education must be posed. Is the organization's department providing a high level of support for instilling a research culture that will eventually lead to teacher

professional development? Are teachers truly encouraged by the organization to pursue professional development, bearing in mind that teachers who are professionally developed will produce quality learners? These are important questions that need to be addressed. That is why the researchers were keen on finding answers to these questions, particularly from the respondents to this research, the secondary teachers in Dologon National High School.

Based on the school data that the researchers gathered, there were 70 teachers in the school. 58 teachers were not pursuing graduate studies, 5 had completed the academic requirement and are eligible to pursue their thesis writing but had not pursued yet, 5 were masters' degree holders 2 were pursuing doctorate degrees and 2 were already doctorate degree holders. There were also very few teachers who were sent to trainings and seminars. It was in this connection that the researchers saw the gap in terms of the professional development of the teachers. In terms of the prevailing research culture among the teachers in the said school, there were very few teachers who had already completed a school research. When it came to organizational learning, the researchers wanted to find out whether there was enough organizational support that the teachers received from their school heads to pursue graduate studies, or do action research.

Statement of the Problem

This study examined the relationship between professional development, organizational learning and research culture of secondary teachers in Dologon National High School for the school year 2022-2023. Specifically, it sought to answer the following questions:

1. What level of professional development do secondary teachers have in the following areas:
 - a. Trainings and Seminars;
 - b. Self-Efficacy
 - c. Advance degree?
2. What is the level of the research culture of the secondary teachers in terms of:
 - a. Infrastructure;
 - b. Capability;
 - c. Funding;
 - d. Collaboration; and
 - e. Interest?
3. What is the level of organizational learning secondary teachers receive in the aspects of:
 - a. Managerial Commitment and Empowerment;
 - b. Experimentation;
 - c. Risk Taking;
 - d. Openness and Interaction with the External Environment; and
 - e. Knowledge Transfer and Integration?
4. What is the relationship between professional development and organizational learning and research culture of the secondary teachers?
5. Which variable, singly or in combination, best predicts the professional development of the secondary teachers?

2. Methodology

The descriptive-correlational research design was utilized to carry out this research. It consists of attempting to find any possible relationships by comparing and contrasting the variables under consideration, as well as performing comparisons and contrasts between them. This research technique is best suited for describing and generating conclusions about the current condition of secondary teachers at Dologon National High School since it focuses on the current status of the issues being examined. This is due to the fact that this method of study concentrates on the present state of the issues being studied.

This study was carried out at Dologon National High School and the respondents of this research were all the secondary teachers of the said institution.

Being among the teachers in the school, the researchers wanted to find out the organizational learning, research culture and the professional development of the secondary teachers.

The participants of this study were the 70 secondary teachers of Dologon National High School. As one of the teachers, who wanted to know the professional development, research culture and organizational learning of the teachers in the said school, the researchers determined to include all the respondents in the said school in order to have an accurate analysis of the data.

This study utilized the fully adopted survey questionnaires on Organizational learning, Research culture and Professional development [1]. The questionnaire on organizational learning elicited secondary teachers' thoughts on the amount of organizational learning in terms of infrastructure, capacity, money, cooperation, and interest. In the second half of the surveys, respondents were asked about their impressions of their research culture in terms of their viewpoint, familiarity, and engagement in the area. Finally, the last part inquired about their professional development, which was classified into training and seminars, self-efficacy, and advanced degrees. The researchers asked the permission from the school principal of the said institution.

The questionnaires used on this research for the three variables are all adopted. The combined Cronbach alpha for all questions in all the items is 0.91, which is excellent. Since these questionnaires are used within the province of Bukidnon, the researchers determined that all the questionnaires are reliable and there is no need for pilot testing and further validation.

The scoring procedure for the questionnaire are all the same for the organizational learning, research culture and professional development. Table 1 presents the scoring procedure for the three variables.

Table 1. Scoring Procedure

Weight	Scale/Range	Description
5	4.51 – 5.00	Strongly Agree
4	3.51 – 4.50	Agree
3	2.51 – 3.50	Uncertain
2	1.51 – 2.50	Disagree
1	1.00 – 1.50	Strongly Disagree

Statistical Analysis

The statistical tool used for Questions 1, 2, and 3 were analyzed using descriptive statistics, including mean and standard deviation. In order to answer question 4, the researchers investigated the relationships between research culture, organizational learning, and professional development using Pearson's correlation. For the purpose of answering question 5, the researchers used multiple regression analysis.

3. Results and Discussions

This chapter provides an explanation, interpretation, and conclusion of the study's results. The variables evaluated in this study are organizational support, research culture, and professional development of secondary teachers in Dologon National High School. The results presented here are arranged according to the objectives stated in the earlier part of this paper.

The two hypotheses stated are tested at 0.05 level of significance.

3.1. Level of Professional Development in the Aspect of Trainings and Seminars.

Table 2. Distribution of Respondents According to the Level of Professional Development In the Aspect of Trainings and Seminars

INDICATORS <i>As a teacher, I</i>	MEAN	Qualitative Description
keep on professional correspondence from other parts of the globe to keep me informed of the latest trends and development in the educational system	4.70	Strongly Agree
actively involve myself as member of various professional organizations.	4.67	Strongly Agree
discuss with my colleagues the recent trends and practices of school administrators.	4.63	Strongly Agree
attend forums, conferences, lectures and symposia	4.62	Strongly Agree
contribute articles to local and other publications to improve my expertise.	4.62	Strongly Agree
subscribe journal and magazines related to my work	4.61	Strongly Agree
participate in seminars, workshops and trainings related to my work.	4.59	Strongly Agree
take graduate courses to help improve my professional ability	4.53	Strongly Agree
avail scholarship opportunities and other grants relative to my professional growth.	4.52	Strongly Agree
Sub-mean	4.70	Strongly Agree

Table 2 displays the amount of professional development achieved by trainings and seminars, as elicited by the respondents. The independent variable professional development includes the sub-variable trainings and seminars, which is comprised of nine individual indicators. As can be seen in the table, the indicator with the highest mean is "As a teacher, I keep on professional correspondence from other parts of the globe to keep me informed of the latest trends and development in the educational system," with a value of 4.70. The indicator with the lowest mean is "As a teacher, I avail scholarship opportunities and other grants relative to my professional growth," with a mean of 4.52. The fact

that both the highest and lowest means fall under the qualitative category of "strongly agree" suggests that teachers have optimistic views on the value of trainings and seminars. Educators have high hopes that workshops and conferences will help them develop their skills, as shown by the sub-mean of all indicators being 4.70. This result suggests that educators who take part in professional development opportunities like seminars and trainings have high expectations for their own growth as educators. Consistent efforts to enhance teaching methods via professional development for teachers are essential. They may further their professional development via formal schooling as well as through trainings and seminars.

Darling Hammond et al. [4], who contend that educators need access to high-quality professional development opportunities in order to be prepared to allow complex learning for their students, supports this finding. It is essential that educators be able to take advantage of professional development opportunities that are tailored to their specific needs. It is of the utmost importance to have an understanding of what teachers desire from professional development. During the whole planning process, discussions with teachers should be focused on the most important problems that they encounter in the classroom. The influence that a teacher's decisions have not only on their students but also on the leadership of the school should not be underestimated.

Professional development programs rarely adapt to participants' true needs. According to Darling-Hammond et al. [4], these individuals should have access to opportunities for professional growth of the highest possible caliber. It is essential that educators be able to take advantage of professional development opportunities that are tailored to their specific needs. It is of the utmost importance to have an understanding of what teachers desire from professional development. During the whole planning process, discussions with teachers should be focused on the most important problems that they encounter in the classroom.

3.2. Level of Professional Development in the Aspect of Self Efficacy

Table 3. Distribution of Respondents According to the Level of Professional Development of Teachers in the Aspect Of Self- Efficacy

INDICATORS <i>As a teacher, I</i>	MEAN	QD
can express views freely on important school matters	4.68	Strongly Agree
can influence the decisions made in the school	4.64	Strongly Agree
can influence the teachers size in the school	4.59	Strongly Agree
can provide myself with equipment I need	4.59	Strongly Agree
Sub-mean	4.61	Strongly Agree

The level of professional growth in terms of self-efficacy is outlined in Table 3. There are five different indicators that may be used to evaluate one's level of self-efficacy in relation to the independent variable professional growth.

Among all indicators, the statement "As a teacher, I can express my views freely on important school matters" had the highest mean score, at 4.68. The statement "As a teacher, I can get through the most difficult teachers"

receives the lowest mean score, at 4.59. The fact that the highest and lowest averages are both consistent with a qualitative definition of "strongly agree" provides support for the idea that teachers have positive assessments of their own levels of self-efficacy. The fact that the sub-mean of all indicators is 4.61 suggests that teachers have a lot of faith in their own abilities as educators.

Important inferences may be derived from this study's findings concerning teachers' confidence in their own abilities to convey knowledge to their students. This is evidence that teachers possess the skills and knowledge to help their students achieve outstanding results in both teaching and learning.

Djigic et al. [5] showed that teachers who were accepting of their own skills and weaknesses were more likely to report feeling competent in their teaching roles. Djigic et al.'s [5] research corroborates our results. Teachers have an equal chance of success when they are not only encouraged, but also given space, to voice their thoughts and concerns. Sousa et al.'s [6] study on frontline service workers found, among other things, that workers' individual perspectives significantly impacted their sense of self-efficacy.

3.3. Level of professional development in the aspect of advance degree.

Table 4. Distribution of Respondents According to the Level of Professional Development in the Aspect of Advance Degree

INDICATORS <i>As a teacher, I</i>	MEAN	QUALIFYING DESCRIPTION
am interested in continuing academic development offered by the department.	4.64	Strongly Agree
believe division office offers professional development for teachers.	4.59	Strongly Agree
believe professional development updates my professional knowledge	4.54	Strongly Agree
Sub-mean	4.59	Strongly Agree

The level of professional development in the aspect of advance degree are shown in Table 4. There are three indicators to choose from when evaluating the sub-variable advanced degree, which is part of the independent variable professional development. The indicator that "As a teacher, I am interested in continuing academic development offered by the department" had the highest mean score (4.64), making it the clear the highest mean, while the indicator that received the lowest mean was "As a teacher, I believe division office offers professional development for teachers."

The fact that both the highest and lowest means correspond to a qualitative description of "strongly agree" suggests that teachers have positive perceptions of their pursuit of advanced degrees in order to enhance their professional skills and knowledge. The sub-mean of all variables is 4.59, indicating that educators have a strong desire to further their education to enhance their professional development. In addition, it suggests that they have the potential to enhance their professional development through advanced study and degree attainment. As a result of this finding, it is of the uttermost significance for educators to pursue master's and doctoral degrees in the future. Many educators believe that

pursuing graduate degrees is necessary to further develop their expertise in the disciplines of education and student instruction after completing their undergraduate degrees.

Acera's study [7], which demonstrates that a higher level of education is frequently associated with improved performance in the majority of fields, lends support to the conclusion that this was the correct pursuit.

However, DepEd Order No. 42 [8] requires aspiring school principals to have at least 18 MA units and five years of teaching experience. These requirements are the bare minimum, indicating that doctoral degrees as prerequisites for top institutions are not particularly significant. These findings lend credence to Romeo and Caingcoy's [9] conclusion that individuals with PhD degrees share a high level of leadership and essential behavioral skills. These results corroborate the findings of Romeo and Caingcoy [9]. This was true regarding every aspect of leadership. According to the findings, there were discernible differences in levels of demonstrated competence based on the highest level of education attained. According to these findings, school administrators with advanced degrees have a greater opportunity to learn, grow, and demonstrate competence than their counterparts. The results have repercussions for those who work for the Department of Education, and those who provide funding should assist teachers who wish to pursue additional degrees.

3.4 Level of Research Culture in the Area of Infrastructure

Table 5 displays the level of research culture in the area of infrastructure. There are sixteen distinct indicators that make up infrastructure. The indicator with the highest mean score is the statement that "My school or district encourages teachers to publish their work," with a mean score of 3.89. The fact that this is the strongest indicator suggests that educators have a strong perception that their school or district encourages them to publish their research. The indicator with the lowest mean score is "There is building and updating of reviewers and research screening committee databases," which has a mean of 2.62. The lowest indicator indicates that teachers are uncertain as to whether a database exists and whether these databases are maintained for the purpose of reviewers or the research screening committee screening or evaluating any research study that a teacher is conducting. The qualitative descriptor for the sub-mean of 3.48 is "uncertain," indicating that teachers have an uncertain view of their research culture in the field of research infrastructure.

This finding suggests that educators have a skewed perception of whether or not they have the necessary research facilities. It is crucial to cultivate a research culture and vocation, to update physical resources and research infrastructure, and to recruit, retrain, and retain a new generation of researchers in order to increase research productivity, quality, and impact and to produce quality and efficient learners. These stages can be performed separately or in tandem. Knowledge and expertise gained through experimentation are essential when attempting to manage complex problems, and both can be obtained through research.

Table 5. Distribution of Respondents According to the Level of Research in the Area of Infrastructure

INDICATORS	MEAN	QUALIFYING DESCRIPTION
My school/district encourage teachers to publish their work.	3.89	Strong agree
My school/ district ensure reviewers/research screening committee in undertaking the review of early drafts to appropriate time scales.	3.84	Strongly Agree
My school/district computerizes all information on research activities.	3.83	Strongly Agree
The research proposal template is accessible and easy to download.	3.80	Strongly Agree
My school/district actively organized research training and teaching, and develop research and experimentation capacity.	3.80	Strongly Agree
My school/district ensure the researchers complete corrections to appropriate time scales.	3.78	Strongly Agree
My school/district encourage all teachers to conduct and publish at least one (1) paper annually.	3.72	Strongly Agree
Information resources to researchers are not free of charge.	3.68	Strongly Agree
Improve electronic system is visible in school/district that support the research activities.	3.67	Agree
There is a define rewards & incentives for those who publish more papers annually.	3.65	Agree
There is elimination of unnecessary meetings or processes in research activities.	3.62	Agree
There is a sufficient research archives and database for scientific information in school.	3.56	Agree
Good Internet connections and computers are observed in school.	2.81	Uncertain
My school/district had highly specialist-skill base in a wide range of disciplines, including data analysts and statisticians.	2.76	Uncertain
My school/district does not provide all information resources to researchers.	2.71	Uncertain
There is building and updating of reviewers/research screening committee database.	2.62	Uncertain
Sub-mean	3.48	Uncertain

This finding is supported by Brown, et al. [10], who emphasized that research is all about evaluating what has previously been discovered. More participation in the research process leads to enhanced skills and the ability to conduct relevant research, both of which are required for constructing a firm evidence base to support practice decision-making [11]. This is an imperative requirement for building a body of credible evidence. As a result, it is recommended that educators conduct research, undertake in-depth investigations of the issues, and offer appropriate solutions and treatments. According to Borg and Alshumaimeri [12], departmental research culture revealed a disparity between anticipated and actual research output. It is the responsibility of the researchers to fill this void with their own work.

Borg and Alshumaimeri [12] reflect the attitude of teachers in this result when they report that teachers would conduct research studies as required by their supervisors, but they were not provided with the necessary resources to complete their research studies. This finding demonstrates that teachers believe their supervisors do not provide them

with the necessary resources to perform their duties effectively.

3.5. Level of research culture in the area of research capability

Table 6. Distribution of Respondents According to the Level of Research Culture in the Area of Research Capability

INDICATORS	MEAN	QUALIFYING DESCRIPTION
I often feel confused about what information to include in a research paper.	4.7	Strongly Agree
I need more experience with writing a research paper.	4.68	Strongly Agree
Searching on the Internet for information is easy.	4.65	Strongly Agree
I know what plagiarism is.	4.6	Strongly Agree
I do not feel confident taking notes from my readings for a research project.	4.60	Strongly Agree
I need more experience in critical reading in order to write a research paper.	4.51	Strongly Agree
I get help from the statisticians to analyze the data.	3.50	Uncertain
Locating information for a research paper in the library is easy.	3.49	Uncertain
Writing research paper is easy.	2.85	Uncertain
It is easy for me to blend my ideas with those of the experts.	2.83	Uncertain
I am not confident in using supporting materials in my writing.	2.8	Uncertain
Reading books and articles for a research project is easy.	2.78	Uncertain
I have a lot of experience in writing research papers.	1.84	Disagree
Looking up information for a research project in books and journals easy.	1.81	Disagree
Sub-mean	3.43	Uncertain

Table 6 displays the level of research culture in the area of research capability. There are fourteen indicators for the independent variable research culture's sub-variable research capability. The indicator with the highest mean is "I often feel confused about what information to include in a research paper," with a mean of 4.70, which implies that teachers find it difficult to decide what information or ideas they are going to include in their research studies. This also suggests that teachers have indicated a lack of research skills. The statement "I have a lot of experience in writing research papers" has the indicator with the lowest mean, with a mean of 1.81 and a qualitative description of "disagree." This implies that the majority of the respondents do not agree with this statement and shows that teachers do not have a lot of experience in writing research studies.

The sub-mean of all indicators is 3.63 with a qualitative description of "uncertain", which indicates that teachers have an uncertain perception of their research capability. This also implies that they do not believe in themselves enough to think they can make good research studies by themselves. It further suggests that teachers lack the self-belief that they have the capability that they can surely do action research of their own without external help.

Wong's [3] research lends credence to this idea, as he found that 59% of master teachers who responded to his

survey and were considered experts in their field also reported never having received any sort of training related to research. This finding suggests that educators have reservations about their ability to conduct research. Ninety-one percent of those who filled out the survey said they had never performed their own study, and 94% had never participated in a research project. More than ninety-nine percent of respondents said "none" when asked whether or not they had presented or published their findings. Their ability to investigate is adequate, yet they only know what they do because of a small subset of the available information. All three of these aspects of research—how to use research, how to share information, and how to do research—lie beyond the scope of their expertise. The fact that even the master teachers, who are supposed to be role models for students and are considered experts in their field, lacked significant expertise in research provides support for this hypothesis.

3.6. The level of research culture in the area of research funding

The research culture in the area of research funding is shown in Table 7. The sub-variable research funding under the independent variable research culture has fourteen indicators. With a mean of 4.66, "My school/district requires to be informed about applications for research funding" is the most telling indicator. This indicates that educators believe it is crucial that their institution or system be made aware of the need for research funding. With a mean of 1.63, "My school/district communicates information about research funding schemes and calls to the researchers" is the indicator with the lowest mean.

The lowest mean score indicates that teachers are not confident that their school or district will convey to them any information about research funding opportunities or how to apply for them. Teachers have a generally positive outlook on the financial assistance they get from their school or district for research projects, as shown by the sub-mean of all variables being 4.13. This also suggests that educators should make use of the resources provided by the Department of Education for doing research.

This finding suggests that the majority of teachers do not believe their school or district provides them with sufficient resources to conduct action research projects. Research can always improve the quality of classroom instruction, but it requires an investment of time and money. Educators frequently fund their own research, despite the fact that their pupils stand to gain the most in terms of knowledge and skill development. However, there has been a paucity of funding specifically designed to assist teachers with action research expenses.

According to research by Ulla et al. [13], researchers in the Philippines receive less funding and support than their counterparts in other nations. This means that fewer studies on the roles and challenges of teachers as researchers have been conducted in the Philippines. This was the case when compared to nations with a far greater number of investigations. Similarly, Ulla et al. [13] state that there is a paucity of studies in the Philippines that concentrate on the obstacles educators encounter when conducting research. As a result of the recent changes

made to the educational system in the Philippines, additional research is required to determine the pedagogical strategies that teachers should employ at all phases of the teaching and learning process. And research is key in improving the quality in teaching and learning therefore, funding should be allocated more in this area. To support their study, teachers might look into research grants, crowdfunding sites, and cooperation with universities. However, the government and stakeholders in the Philippines should provide more financing to encourage teachers' research activities.

Table 7. Distribution of Respondents According to the Level of Research Culture of teachers in Dologon National High School in the Area Of Research Funding

INDICATORS	MEAN	QUALIFYING DESCRIPTION
My school/district has no access to relevant information about funding schemes.	4.66	Strongly Agree
My school/district requires to be informed about applications for research funding.	4.62	Strongly Agree
Research funding/grants have not been relevant for me as I have had no/very little research time (i.e. employed in a teaching position or mainly administrative obligations).	4.61	Strongly Agree
My school/district normally/often has a prescreening of research funding/grants and may not allow all applicants.	4.61	Strongly Agree
Obtaining research funds/grants is important for personal career advancement in my school/district.	4.54	Strongly Agree
I/my research group did not apply for research funding/grants because the rejection rate is too high to warrant an application.	4.54	Strongly Agree
My school/district has no restrictions on applying for research funds/grants (researchers may normally apply for the kind of grants they wish).	4.5	Strongly Agree
Grant holders are required to pass a part of research funds/grants on to my institution to cover indirect costs.	3.7	Agree
I/my research group had sufficient funding from other sources.	3.64	Agree
I/my research group do not have information about research funding/grants.	3.63	Agree
It is easy to understand information about funding schemes and options.	3.58	Agree
My school/district encourages me/my research group to apply for research funding/grants.	3.43	Agree
My school/district provides support service for writing research applicants.	2.55	Uncertain
My school/district communicates information about research funding schemes and calls to the researchers.	1.63	Disagree
Sub-mean	4.13	Agree

3.7. Level of research culture in the area of research Collaboration

Table 8 displays level of research culture in the area of research collaboration. There are sixteen indicators for the sub-variable research collaboration under the independent variable research culture. "There is sharing of ideas regarding research techniques in the school or district" has the highest mean (4.72), making it the indicator with the highest mean overall. There is a lowest mean score of 4.37 for the statement "There is a formal structure in the school or district to help teachers collaborate on research." The fact that both the highest and lowest averages correspond to a qualitative description of "strongly agree" suggests that educators have positive perceptions of their lowest averages correspond to a qualitative description of "strongly agree" suggests that educators have positive perceptions of their research culture. In addition, it appears that educators are collaborating on research initiatives to enhance their teaching abilities.

Table 8. Distribution of Respondents According to the Level of Research Culture in the Area Of Research Collaboration

INDICATORS	MEAN	QUALIFYING DESCRIPTION
There is sharing of ideas in research techniques in school/district.	4.72	Strongly Agree
I am aware of research activities in school/district.	4.66	Strongly Agree
Researchers in school shared resources in conducting research.	4.65	Strongly Agree
My school/district had little communication in conducting research activities.	4.64	Strongly Agree
All decisions are made independently by a researcher in conducting research.	4.64	Strongly Agree
Research collaboration were tried once but it did not work.	4.53	Strongly Agree
There is shared decision making in improving research method in school/district.	4.51	Strongly Agree
Our principal in school currently foster research collaborative environments for teachers.	4.50	Strongly Agree
There are formal structures currently in place in school/district to help teachers work together in conducting research.	4.37	Agree
Sub-mean	4.59	Strongly Agree

This suggests that teachers are collaborating on action-research initiatives to improve classroom instruction. By collaborating, educators can reduce the expense and time commitment of action research. Also, by collaboration, teachers break the cycle of teacher isolation.

These findings align with those of Taylor et al. [14 and Ampartzaki et al. [15], who also highlighted the importance of inter-institutional collaboration. Even more important than educating yourself is surrounding yourself with like-minded people with whom you can share and deepen your comprehension. Because learning is most effective in a group setting, institutions exist. The ability to derive conclusions and make sense of one's experiences is necessary for lifelong learning. Learning is analogous to undergoing a metamorphosis into a new individual; it results in significant personal development and change. People with the highest level of education are better

equipped to discover their life's purpose. Individual and social environments shape the development of learners over time [16].

3.8. Level of research culture in the area of research interest

Table 9. Distribution of Respondents According to the Level of Research Culture in the Area of Research Interest

INDICATORS	MEAN	QUALIFYING DESCRIPTION
I find fulfillment when I discuss the research findings with my colleagues.	3.82	Agree
Developing funding proposals is interesting.	3.78	Agree
I spend time in developing a data analysis strategy for a research study.	3.77	Agree
I find it hard and tasking in conducting research at the site of my educational practice.	3.75	Agree
I do not want to conduct research works with a team.	3.74	Agree
Writing for publication / presentation is fulfilling.	3.74	Agree
It is not my interest in designing a study.	2.74	Uncertain
I am interested in reading a research journal article.	2.7	Uncertain
I am interested in conceptualizing a research study.	2.68	Uncertain
Having research activities is part of my work every week.	2.66	Uncertain
Taking a research design course is fun and interesting.	2.64	Uncertain
Sub-mean	3.29	Uncertain

Table 9 displays level of research culture in the area of research interest

The research interest component of the of the research culture independent variable has sixteen indicators in total. "I find fulfillment when I discuss the research findings with my colleagues" had the highest mean of 3.82. This suggests that teachers are willing and pleased to communicate the findings of their research investigations with their coworkers at school. The notion that "taking a research design course is fun and interesting" has the lowest mean score of 2.64, indicating that teachers are dubious whether or not conducting research design courses is pleasurable and engaging.

The fact that the sub-mean of all indicators is 3.29 suggests that educators have mixed feelings regarding their research interests. This also suggests that teachers have inconsistent sentiments about doing research, and it is reasonable to presume that they are not confident that they like it.

This suggests that teachers lack the motivation to engage in research. This might be due to a variety of factors working in concert. One thing that may be deduced is that teachers lack confidence in their capacity to do research. Another conclusion that can be derived from this is that academics do not have enough time to do research. In conclusion, as indicated in the previous finding about research funding, educators do not engage in action research or any other kind of study because they believe they will have to spend their own money to undertake research. Teachers' lack of desire to do research is impacted by a variety of variables, including financial

restrictions, a lack of confidence, and restricted time owing to large timetable loads and classroom obligations. To address this, universities should explore altering schedules to accommodate dedicated research hours as well as providing assistance and training to improve teachers' research abilities and confidence. This will motivate educators to engage in research and support evidence-based teaching approaches, thereby increasing educational quality in the Philippines.

A number of additional studies have supported this finding, which is further explained in the paragraph that follows.

'The results of Shank and Brown [17], who claimed that there seems to be a lack of interest from educational sectors in doing research to enhance teaching and learning in the classroom, add credence to the conclusions of this study. This is in stark contrast to the excitement shown by scientific groups. According to the study's conclusions, this might be due to the teachers' inability to do enough research.

According to Taylor's [18] study, there is evidence that teachers and schools have the greatest effect on students' academic performance. It is critical to investigate methods for optimizing research in order to support the development of teacher education programs and allow teachers' ongoing professional growth in a way that results in "high-quality teaching" [19]. To put it another way, the ultimate objective is to promote student learning. According to Wilson, et al. [20], in order to achieve this goal, researchers and educators must become more familiar with each other's contributions to the field of education. It is critical that researchers and educators work together to foster an environment favorable to "true professional learning" (also known as TPL). As a result, it may become viable to design professional development programs to improve the quality of education received by both students and their teachers.

3.9. Level of Organizational Support in the Aspect of Managerial Commitment and Empowerment

Table 10. Distribution of Respondents According to the Level of Organizational Learning in the Aspect Of Managerial Commitment and Empowerment

INDICATORS	MEAN	QUALIFYING DESCRIPTION
Employee learning is considered more of an expense than an investment.	4.77	Strongly Agree
People feel involved in main decisions of the school.	4.74	Strongly Agree
Principal /school head in this organization can accept criticism without becoming overly defensive	4.61	Strongly Agree
In our school, principal frequently involve employees in important decisions.	4.60	Strongly Agree
Principal in our school resist change and are afraid of new ideas.	4.58	Strongly Agree
Policies are significantly influenced by the view of employees.	4.57	Strongly Agree
Sub-mean	4.65	Strongly Agree

Table 10 displays Level of organizational support in the aspect of Managerial Commitment and Empowerment

Six indicators are associated with the independent variable organizational learning's sub-variable managerial

commitment and empowerment. "Employee learning is considered more of an investment than an expense" has a mean of 4.77, indicating that management is extremely devoted to and supportive of their educators. The indicator with the lowest mean, "Policies are significantly influenced by the viewpoint of employees," has a qualitative description of "strongly agree" (4.57), implying that teachers believed their school leaders and supervisors always took their input into account when making major policy decisions.

The fact that the highest and lowest means correspond to a qualitative description of "strongly agree" indicates that educators have positive opinions of their organization's support in the fields of management commitment and empowerment. A sub-mean of 4.65 across all variables shows that teachers get considerable support from the institution and administration for whatever efforts they make to improve their classroom performance. This result suggests that, despite teachers' lack of interest in action research, which could be attributed to a lack of research funding, teachers continue to believe that they receive managerial commitment and that their school leaders empower them to do whatever they believe will improve teaching and learning inside the classroom. This might also imply that teachers have a favorable opinion of the leadership at their schools and the Department of Education as a whole.

Tindowen's [21] finding adds to the evidence supporting this finding. Tindowen's [21] study on administrative support as an indication of school culture in the classroom found that teachers valued such assistance. He further said that students strongly believed that their teachers cared about them. This demonstrates that teachers believe their administration considers their aims and beliefs, values their involvement, and values their comments. Administrators' worldviews evolve in reaction to negative feedback from higher-ups, according to Dysvik and Kuvaas [22]. This is due to the fact that administrators often serve as spokespersons for the schools they oversee. Teachers' desire to assist supervisors is a good predictor of the administrative assistance they get since supervisors are believed to be representatives of school administrators [23].

3.10. Level of Organizational Learning in the Aspect of Experimentation

Table 11 shows organizational support for experimentation. Organizational support's exploratory component may be examined in four aspects. The high mean score of 4.81 on the statement "Experiences and ideas provided by external sources (advisors, customers, training firms, etc.) are considered a useful instrument for this firm's learning" indicates that management is fully invested in and supportive of its educators when the educators conduct experimentation in order to discover better strategies to improve learning in the school. For the indicator, "Teachers here receive support and encouragement when presenting new ideas" has the lowest mean. The indicator's mean score of 4.69, also meets the qualitative description of "strongly agree," showing that teachers generally feel their school's management considers their input when proposing new projects.

Both extremes qualitatively agree with "strongly agree," indicating that teachers have a favorable perception of the institutional support they get in the area of experimentation.

Table 11. Distribution of Respondents According to the Level of Organizational Learning in the Aspect of Experimentation

INDICATORS	MEAN	QUALIFYING DESCRIPTION
Experiences and ideas provided by external sources (advisors, customers, training firms, etc.) are considered a useful instrument for this firm's learning.	4.81	Strongly Agree
From my experience, people who are new in our school are encouraged to question the way things are done.	4.76	Strongly Agree
Innovative ideas that work are often rewarded by management.	4.73	Strongly Agree
Teachers here receive support and encouragement when presenting new ideas.	4.69	Strongly Agree
Sub-mean	4.75	Strongly Agree

The sub-mean of 4.75 for all variables suggests that teachers' efforts to experiment in the classroom are received with enthusiastic support from their institutions and superiors.

The findings of the Perra et al.'s [24] investigation are consistent with these findings. According to their study, leadership has a favorable impact on experimentation, notably on the capacity of schools to conduct experiments). New data supports the notion that inclusive leadership is a key predictor of workplace creativity. Both of these claims may be supported by evidence [25].

Leaders that promote involvement and decision-making from all team members are more likely to create an environment favorable to achieving the greatest potential results for the team's efforts. A leader who values experimentation encourages people to take the initiative to get things done, holds them accountable for their own actions, emphasizes getting things done, and creates a climate in which employees feel secure taking risks. However, empowerment is what makes this a reality. People who have agency have greater faith in collective decision-making, are more prepared to take chances, and are more likely to affect positive change. This enables us to do all of our tasks. Chen and Hou [26] have shown that for a favorable connection to exist in corporate conduct, executives and workers must have a high degree of psychological empowerment.

3.11. Level of organizational support in the aspect of Risk Taking

Table 12 shows the extent of organizational learning for taking risks. There are three indicators for the sub-variable risk taking. The fact that the indicator "People are encouraged to take risks in our school" has a mean of 4.79, making it the highest mean, indicates that the organization's support for teachers is quite strong. With a mean score of 4.62, the indicator with the lowest mean is "Principal in this school tolerates risk and accepts its consequences," indicating that teachers perceive their school administrators and supervisors to always take them into account when teachers are taking risks and support them in their endeavors, as well as accepting the

consequences of risk taking. These two indicators, the greatest and lowest means, correlate to a qualitative description of "strongly agree," showing that teachers are satisfied with the risk-taking assistance provided by their school.

Table 12. Distribution of Respondents According to the Level of Organizational in the Aspect of Risk Taking

INDICATORS	MEAN	QUALIFYING DESCRIPTION
People are encouraged to take risks in our school.	4.79	Strongly Agree
People here often venture into unknown territory	4.75	Strongly Agree
Principal in this school tolerate risk and accept its consequence.	4.62	Strongly Agree
Sub-mean	4.72	Strongly Agree

The sub-mean of all indicators is 4.72, indicating that teachers get strong support from both the school and its school administrators in their attempts to raise their professional development or improvement in order to increase their effectiveness as teachers. This implies that school administrators trust in their teachers' endeavors and accept responsibility if the hazards associated with them become evident.

This research contradicts the findings of Creely et al. [27], who found that although taking risks is necessary for creative development, this feature is often penalized in the classroom. Policy frameworks focused on standardization and metrics foster monolithic thinking and uniformity and policy and assessment framings in schools may often create a punitive attitude toward failure [28]. As a consequence, individuals may be less likely to try new things or take chances, and their attempts and failures may go unnoticed. Individuals often learn more if they fail and confront a problem, then regroup and reflect, rather than if they cruise through a job without difficulty. We learn much more from our failures than we do from our victories" (p. 49). According to Manalo and Kapur [29], narratives that foster these ideas have value, and schools should consider them when developing learning environments that reward creative risk and allow for constructive failure.

3.12. Level of organizational learning in the aspect of Openness and Interaction with the External Environment

Table 13 shows the level of organizational learning in terms Openness and Interaction with the External Environment. This sub-variable has four indications. Teachers feel that engagement with external stakeholders will result in a high-quality learning environment, as shown by the highest mean score (4.79) for "People are encouraged to interact with the environment: competitors, customers, technological institutes, suppliers, etc." "From my experience, this school disregards competitors' strategies and progression." is the indicator with the lowest mean value at 4.62 and a qualitative description of "strongly agree," suggests that teachers feel school administrators and supervisors don't mind competition as long as everyone benefits.

Teachers' assessments that the administration values and respects them lend credence to this viewpoint. The

high and low means as represented by the sub-mean of 4.70, meet the qualitative criterion for "strongly agree," suggesting that teachers are very happy with the organization's support for openness and contact with the outside world.

This finding implies that teachers receive substantial support from the school and their school leaders in advancing their professional development and other types of professional improvement, especially in terms of being receptive to new ideas gained from interacting with the outside environment. This demonstrates that teachers view their school administration as advantageous in terms of being receptive to new ideas and cooperating outside the classroom to improve teaching and learning.

This study is supported by the research of McDaniels et al. [30], Bolander et al. [31], and Athens [32], who emphasized the significance of interactions between the school's outside environment and children's learning.

Table 13. Distribution of Respondents According to the Level of Organizational Learning in the Aspect of Openness and Interaction with the External Environment

INDICATORS	MEAN	QUALIFYING DESCRIPTION
People are encouraged to interact with the environment: competitors, customers, technological institutes, suppliers etc.	4.79	Strongly Agree
There are systems and procedures for receiving, collating and sharing information from outside the school.	4.72	Strongly Agree
It is part of the work of all staff to collect, bring back, and report information about what is going on outside the school.	4.67	Strongly Agree
From my experience, this school neglects strategies and progression of competitors.	4.62	Strongly Agree
Sub-mean	4.70	Strongly Agree

3.13. Level of organizational learning in the aspect of Knowledge Transfer and Integration

Table 14 displays level of organizational learning in the aspect of Knowledge Transfer and Integration. There are five indicators for this sub-variable. The statement "The firm has instruments (manuals, databases, files, organizational routines, etc.) that allow what has been learned in previous situations to remain valid, even though the employees are no longer the same" has a high mean of 4.74, indicating that teachers perceive their schools to have practices, materials, or knowledge from the past that are still applicable to their current teaching. The indication with the lowest mean, "In this school, teamwork is a typical method of producing better results" (4.53), remains in the qualitative category of "strongly agree," suggesting that the majority of teachers feel teamwork is the normal method of producing better results.

Both the "highest means" and "lowest means" indicators are qualitatively congruent with "strongly agree," demonstrating that teachers value the institutional assistance they get from their institutions in terms of knowledge transfer and integration. The sub-mean of 4.66

for all indicators suggests that teachers have a positive opinion of their organization's assistance for knowledge transfer and integration. This shows that teachers feel school administrators and other supervisors support their attempts to convey and integrate information. It is critical that the teachers' confidence be boosted by organizational assistance. Regardless of the result of their best efforts, teachers believe they have the organizational support of their school administrators and other education officials.

Table 14. Distribution of Respondents According to the Level of Organizational in the Aspect of Knowledge Transfer and Integration

INDICATORS	MEAN	QD
The firm has instruments (manuals, databases, files, organizational routines, etc.) that allow what has been learnt in past situations to remain valid, although the employees are no longer the same.	4.74	Strongly Agree
In this department, employees are encouraged to communicate	4.70	Strongly Agree
New work processes that may be useful to the organization as a whole are usually shared with all employees.	4.69	Strongly Agree
Employees have the chance to talk among themselves about new ideas, programs, and activities that might be of use to the firm.	4.54	Strongly Agree
In this school, teamwork is a usual way to work.	4.53	Strongly Agree
Sub-mean	4.66	Strongly Agree

Darling-Aduana, [33] observed that successful classroom learning happens when school administrators actively help teachers in creating a suitable atmosphere for the transmission of information and learning. According to the findings of a "true pedagogy" research project [33] educators should focus on three areas of pedagogy: intellectual quality, a quality learning environment, and significance, as well as a full synthesis of research on components of pedagogical practice that are critical to student outcomes [34]. Each of these dimensions is made up of six sub-elements, and they are presented as questions that may influence teachers' observations and arguments rather than inflexible guidelines for how every lesson or classroom should be arranged.

3.14. Relationship between overall professional development and organizational support and research culture of teachers

Table 15 displays the correlations between professional development as the dependent variable and the independent variables. Organizational learning has a low positive correlation with professional development with an r value of 0.234 and a p-value of 0.000. All of its sub-variables show significant relationship with professional development (Managerial Commitment and Empowerment, p-value of 0.000 and r value of 0.603**; Experimentation, p-value of 0.000 and r value of 0.409**; Risk Taking, p-value of 0.000 and r-value of .348**; Openness and Interaction with the External Environment, p-value of 0.000 and r-value of 0.608**; and Knowledge Transfer and Integration, p-value of

0.000, r-value of 0.723) All of these sub-variables have highly significant relationship with professional development.

Table 15. Correlation Between the Dependent and Independent Variables

INDEPENDENT VARIABLES and ITS SUB-VARIABLES	P-VALUE	CORRELATION COEFFICIENT (r)
Organizational Learning	.000	.234**
Managerial Commitment and Empowerment	.000	.603**
Experimentation	.000	.409**
Risk Taking	.000	.348**
Openness and Interaction with the External Environment	.000	.608**
Knowledge Transfer and Integration	.000	.723**
Research Culture	.273	.022 ^{NS}
Research Infrastructure	.355	.043 ^{NS}
Research Capability	.230	.419 ^{NS}
Research Funding	.095	.007 ^{NS}
Research Collaboration	.270	.075 ^{NS}
Research Interest	.635	.620 ^{NS}

P < 0.05, *NS* = not significant ** = significant

The other variable, research culture (p value = 273, r value = 0.022), with its sub-variables, research infrastructure (p-value 0.355, r value = 0.043), research capability (p value = 0.230, r value = 0.419), research funding (p value = 0.095, r value = 0.007), research collaboration (p value = 0.270, r value = -0.075), and research interest (p value = 0.635, r value = 0.620) has no significant relationship with professional development

As a result, the hypothesis stating that there is no significant association between professional development and independent variables must be rejected.

This suggests that organizational learning plays an important role in fostering teachers' professional growth. Teachers are able to perform well as teachers and continue to excel in their responsibilities because they know that the organization to which they belong provides them with the essential support for professional development. This indicates that the degree of organizational support that teachers get from their organization corresponds to the level of professional growth that they may attain.

This is supported by Leat et al. [35] who discovered that teachers who invest in their own professional growth and development are more likely to remain at the forefront of their fields and to acquire new knowledge and abilities throughout their careers with strong institutional support. Universities in the Philippines must now give chances for professional development in order to guarantee that their academic members continue to develop professionally [35]. As a result of this commitment, institutions must provide equitable access to opportunities for continuing education for teachers. Joining a professional organization is one option, as is attending academic seminars, in-service training and programs, and seminars and workshops hosted all over the world. They might also present their results or publish them in an ISI- or SI-indexed peer-reviewed international publication. Professional development for teachers has been found to have a major influence on student outcomes, notably

access to and accomplishment of high-quality education and instruction [36].

3.15. The variable, singly or in combination, that best predicts the overall professional development

Table 16. Regression Analysis Between the Independent and Dependent Variable

Model	UC		SC	t	Sig.
	B	Std. Error	Beta		
(Constant)	5.345	.201	.304	12.321	.000
Managerial Commitment and Empowerment	.624	.056	.308	20.361	.000
Experimentation	.350	.056	.391	21.567	.000
Risk Taking	.254	.045	.089	8.456	.000
Openness and Interaction with the External Environment	.532	.012	.321	15.898	.000
Knowledge Transfer and Integration	.547	.002	.234	24.567	.000
$R = .841^c$ $F = 45.123$					
$R^2 = .702$ $p = 0.000^d$					

Dependent Variable: Professional Development

UC = Unstandardized Coefficient, SC = Standardized Coefficient

Table 16 presents the regression analysis between professional development and the independent variables which are highly correlated to professional development.

The R- value of 0.841 signifies high correlation between the predictors and the dependent variable. The r-squared shows the total variation for the dependent variable that could be explained by the independent variables. The r-squared value of 0.702 means that the model is effective to determine the relationship between the independent and dependent variables. The p-value of 0.000(sig.) and the F= value of 45.123 means the result is highly significant, which also means that the independent variables that are used in regression analysis are predictors of professional development.

All the sub-variables of organizational learning are all predictors of professional development as indicated by their respective B values and p-values:(Managerial Commitment and Empowerment, B-value 0.624, p-value of 0.000; Experimentation, B-value 0.350, p-value of 0.000; Risk Taking, B-value 0.254, p-value of 0.000; Openness and Interaction with the External Environment, B-value 0.532, p- value of 0.000; and Knowledge Transfer and Integration, B-value 0.547, p-value of 0.000)

From the foregoing regression analysis, the equation useful in predicting teachers' performance(Y_1) as indicated by F- value of 45.123 with its corresponding probability value of 0.000 is significant at $p < 0.01$. This model can be illustrated in this equation:

$$Y' = 5.345 + 0.624X_1 + 0.350X_2 + 0.254X_3 + 0.532X_4 + 0.547X_5$$

Where:

5.345 is the constant

Y' = Professional development

X_1 = Managerial Commitment and Empowerment

X_2 = Experimentation

X_3 = Risk taking

X_4 = Openness and interaction with the external environment

X_5 = Knowledge Transfer and Integration

Hence, the null hypothesis which states that are no variables singly or in combination that best predict professional development is rejected, since, managerial commitment and empowerment, experimentation, risk taking, openness and interaction with the external environment, and knowledge transfer and integration are predictors of professional development.

The regression equation implied that the teachers' professional development was significantly predicted by five factors indicated above. As to the extent of the direct effect of the said variables to the teachers' professional development, for every one-point increase of managerial commitment and empowerment, the teachers' professional development increases by 0.624. One point increase of experimentation, the teachers' professional development increases by 0.350, for one point increase of risk taking, teachers' professional development increases by 0.254, for one point increase of openness and interaction with the external environment, teachers' professional development increases by 0.532, and for one point increase of knowledge transfer and integration, teachers' professional development increases by 0.547. This result implies that these variables are good predictor of teachers' professional development.

Darling-Hammond [4] supports this result, as do Hairon and Dimmock [37]. Educators who engage in their own professional growth and development, according to them, are more likely to stay at the forefront of their fields and gain new material and abilities throughout their careers. Universities in the Philippines must now give chances for professional development to guarantee that their academic members continue to progress in their disciplines [38]. Schools must guarantee that all members of their teaching staff have access to professional development opportunities. Academic seminars, in-service training and programs, seminars and workshops conducted throughout the world, and membership in a professional group are all feasible possibilities. They might present their results or submit them to a publication indexed by the International Science Index (ISI) or the Science Index (SI). It has been shown that teacher preparation programs boost student outcomes, especially pupils' exposure to and comprehension of difficult curriculum.

4. Conclusion

In pursuit of Objective 1, it became clear that DNHS basic education teachers place a high value on the advantages of attending trainings and seminars for professional development. They also have a high sense of self-efficacy, suggesting belief in their ability to offer excellent education. Furthermore, after finishing their undergraduate studies, the teachers understand the need to obtain higher degrees to improve their teaching and learning techniques.

The research culture at DNHS is showing good indicators for Objective 2, with professors agreeing on the availability of required research facilities. Their lack of confidence in undertaking independent research studies, especially action research, is a major source of worry. Because research funding is scarce, many teachers fund their own research projects, notwithstanding the

advantages to students' learning outcomes. While cooperation among action research teachers is beneficial, there is a general lack of interest in research among the teaching staff.

According to Objective 3, management commitment, empowerment, experimentation, risk-taking, openness to new ideas, and active involvement with the outside world are signs of good organizational support for DNHS teachers. Positive feedback is also received on knowledge transfer and integration within the company, demonstrating a supportive atmosphere for professional advancement.

Concerning Objective 4, the research found a significantly substantial relationship between organizational support and professional growth. This suggests that a supportive corporate environment motivates teachers to pursue continual professional development and advancement.

Finally, as predictors of total professional growth among DNHS teachers, Objective 5 highlights management commitment and empowerment, experimentation, risk-taking, openness, contact with the external world, and information transfer and integration. These sub-variables have a significant impact on teachers' growth and development as educators inside the institution.

Finally, the research underlines the need for continual professional development for teachers as well as the value of a supportive corporate culture in supporting their progress. It also emphasizes the need for increasing research interest and funding to improve teaching and learning experiences at DNHS. By addressing these issues, the school may continue to empower its teachers while also fostering a vibrant research and learning culture that benefits both teachers and students.

Recommendation

The following recommendations are drawn based on the important findings of this study:

The Department of Education's policymakers will be able to establish a policy that addresses the problems of the teachers' uncertain research capabilities and interests, which contribute to the teachers' uncertain research culture. They would also be able to create policies that incentivize teachers to pursue professional development, given that teachers view professional development activities such as trainings, seminars, and advanced degrees favorably. They are expected to develop programs that will further enhance teachers' sense of self-efficacy.

Administrators of schools will be aware that instructors are more productive in their jobs when they feel respected by their employer. The greater a person's recognition for their accomplishments, the more likely they are to adhere to new management procedures and rules.

Future researchers will have a point of reference for comparing their own research to this study. In contrast, additional research is required to either confirm or refute the findings of this study, and the current study will play a crucial role in identifying solutions pertaining to the research culture of the teachers, the organizational support provided by school administrators, and the teachers' professional development.

Since organizational support is essential and plays a significant role in the professional development of teachers, government agencies should be able to provide more funding and scholarships to department of education instructors who wish to pursue professional development. Currently, it is important to note that teachers who wish to attend seminars must pay a significant amount of money out of pocket; if they pursue advanced degrees, they must pay their tuition fees; and they are not given study leave during their thesis or dissertation.

References

- [1] Maribao, R. J. (2022). Organizational learning and research culture on professional development of basic education teachers: Unpublished master's thesis. Central Mindanao University.
- [2] Alvarez, A. V. Jr., (2019). Experiences and perceptions: A journey towards lifelong practices. *Maestra Journal*, 1(1), 43-47
- [3] Wong, A. M. (2019). Driving forces of master teachers' research capability: Towards building a research culture in the division of Romblon, Philippines. *International Journal of Advanced Research and Publications*, 3(7), 92-97.
- [4] Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). Effective teacher professional development. Palo-Alto, CA: Learning Policy Institute. Accessed August 26, 2021 at: https://learningpolicyinstitute.org/sites/default/files/product-files/Effective_Teacher_Professional_Development_REPORT.pdf
- [5] Djigic, G., Stojiljković, S., and Dosković, M. (2014). Basic personality dimensions and teachers' self-efficacy. *Proc. Soc. Behav. Sci.* 112, 593-602.
- [6] Sousa, C. M. P., Coelho, F., and Guillaumon-Saorin, E. (2012). Personal values, autonomy, and self-efficacy: evidence from frontline service. *Barni et al. Teachers' Self-Efficacy employees*. *Int. J. Sel. Assess.* 20, 159-170.
- [7] Acera, F. S. (2022). Correlation of administrators' leadership practices of the school-based management and the teachers' performance (Unpublished doctoral dissertation). Capitol University, Cagayan de Oro City.
- [8] No, D. O. 42, series of 2007. The revised guidelines on selection, promotion and designation of school heads.
- [9] Romeo Jr, L., & Caingcoy, M. E. (2020). School Performance, Leadership and Core Behavioral Competencies of School Heads: Does Higher Degree Matter?. *Journal of Advances in Social Science and Humanities*.
- [10] Brown, L. D., Bammer, G., Batliwala, S., & Kunreuther, F. (2003). Framing practice-research engagement for democratizing knowledge. *Action Research*, 1(1), 81-102.
- [11] Flenady, T., Dwyer, T., Kahl, J., Sobolewska, A., Reid-Searl, K., & Indicator, T. (2022). Research Capacity Building for Clinicians: How Does the Research Facilitator Role Foster Engagement in the Research Process?
- [12] Borg, S., & Alshumaimeri, Y. (2012). University teacher educators' research engagement: Perspectives from Saudi Arabia. *Teaching and Teacher Education*, 28(3), 347-356.
- [13] Ulla, M. B., Barrera, K. I. B., & Acompanado, M. M. (2017). Philippine classroom teachers as researchers: Teachers' perceptions, motivations, and challenges. *Australian Journal of Teacher Education (Online)*, 42(11), 52-64.
- [14] Taylor, A., Puchner, L. D., Powell, M. B., Harris, V., & Marshall, R. (2012). Reconceiving with action research: working within and across communities of practice in a university/community college collaborative venture. *Educational action research*, 20(3), 333-351.
- [15] Ampartzaki, M., Kypriotaki, M., Voreadou, C., Dardioti, A., & Stathi, I. (2013). Communities of practice and participatory action research: the formation of a synergy for the development of museum programmes for early childhood. *Educational action research*, 21(1), 4-27.
- [16] Farnsworth, V., Kleanthous, I., & Wenger-Trayner, E. (2016). Communities of practice as a social theory of learning: A conversation with Etienne Wenger. *British journal of educational studies*, 64(2), 139-160.

- [17] Shank, G., & Brown, L. (2013). Exploring educational research literacy. Routledge.
- [18] Taylor, P. (2020). The complexity of teacher professional growth—unravelling threads of purpose, opportunity and response. *Professional development in education*, 1-14.
- [19] Winch, C., Oancea, A., & Orchard, J. (2015). The contribution of educational research to teachers' professional learning: Philosophical understandings. *Oxford Review of Education*, 41(2), 202-216.
- [20] Wilson, A., Åkerlind, G., Walsh, B., Stevens, B., Turner, B., & Shield, A. (2013). Making 'professionalism' meaningful to students in higher education. *Studies in Higher Education*, 38(8), 1222-1238.
- [21] Tindowen, D. J. (2019). Influence of empowerment on teachers' organizational behaviors. *European Journal of Educational Research*, 8(2), 617-631.
- [22] Dysvik, A., & Kuvaas, B. (2013). Perceived job autonomy and turnover intention. The moderating role of perceived supervisor support. *European Journal of Work and Organizational Psychology*, 22(5), 563-573.
- [23] Tindowen, D. J. C., & Baricaua, T. C. (2016). Catholicity of the students as manifested in their participation to religious activities: A basis for an enhanced campus ministry program. Paper presented at the 1st International Conference on Teacher Education and Indigenous Peoples Education, Cagayan, Philippines.
- [24] Perra, D. B., Sidhu, J. S., & Volberda, H. W. (2017). How do established firms produce breakthrough innovations? Managerial identity - dissemination discourse and the creation of novel product - market solutions. *Journal of Product Innovation Management*, 34(4), 509-525.
- [25] Evans, L. (2014). Leadership for professional development and learning: Enhancing our understanding of how teacher develop. *Cambridge Journal of Education*, 44(2), 179e198.
- [26] Chen, A. S. Y., & Hou, Y. H. (2016). The effects of ethical leadership, voice behavior and climates for innovation on creativity: A moderated mediation examination. *The leadership quarterly*, 27(1), 1-13.
- [27] Creely, E., Henderson, M., & Henriksen, D. (2019, March). Failing to succeed: The value of failure in creativity. In *Society for information technology & teacher education international conference* (pp. 1403-1411). Association for the Advancement of Computing in Education (AACE).
- [28] Hartlaub, V., & Schneider, T. (2012). Educational choice and risk aversion: How important is structural vs. individual risk aversion? (No. 433). SOEPpapers on multidisciplinary panel data research.
- [29] Manalo, E., & Kapur, M. (2018). The role of failure in promoting thinking skills and creativity: New findings and insights about how failure can be beneficial for learning. *Thinking Skills and Creativity*, 30, 1-6.
- [30] McDaniels, M., Pfund, C., & Barnicle, K. (2016). Creating dynamic learning communities in synchronous online courses: One approach from the Center for the Integration of Research, Teaching and Learning (CIRTL). *Online Learning*, 20(1), 110-129.
- [31] Bolander Laksov, K., & McGrath, C. (2020). Failure as a catalyst for learning: Towards deliberate reflection in academic development work. *International Journal for Academic Development*, 25(1), 1-4.
- [32] Athens, W. (2018). Perceptions of the persistent: Engagement and learning community in underrepresented populations. *Online Learning*, 22(2), 27-57.
- [33] Darling-Aduana, J. (2021). Authenticity, engagement, and performance in online high school courses: Insights from micro-interactional data. *Computers & Education*, 167, 104175.
- [34] Heppen, J. B., Sorensen, N., Allensworth, E., Walters, K., Rickles, J., Taylor, S. S., & Michelman, V. (2017). The struggle to pass algebra: Online vs. face-to-face credit recovery for at-risk urban students. *Journal of Research on Educational Effectiveness*, 10(2), 272-296.
- [35] Leat, D., Lofthouse, R., & Reid, A. (2014). Teachers' views: Perspectives on research engagement. *Research And Teacher Education: The BERA-RSA Inquiry*.: <https://www.bera.ac.uk/wp-content/uploads/2013/12/BERA-Paper-7-Teachers-Views-Perspectives-on-research-engagement.pdf?noredirect=1>
- [36] Mukeredzi, T. G. (2013). Professional development through teacher roles: Conceptions of professionally unqualified teachers in rural South Africa and Zimbabwe. *Journal of Research in Rural Education*, 28(11), 1-16.
- [37] Hairon, S., & Dimmock, C. (2012). Singapore schools and professional learning communities: Teacher professional development and school leadership in an Asian hierarchical system. *Educational review*, 64(4), 405-424.
- [38] Kabilan, M. K. (2013). A phenomenological study of an international teaching practicum: Pre-service teachers' experiences of professional development. *Teaching and Teacher Education*, 36, 198-209.

