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RESEARCH ARTICLE

Empowering Educational Management: Research Competencies and Attitudes for Strategic Extension Services

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ARTICLE INFO	ABSTRACT
	Integrating research into educational management enhances the teaching profession by fortifying its foundational principles and mitigating vulnerability to external influences. This study investigates the research competencies and attitudes of school administrators within the Department of Education (DepEd) in Ifugao, identifying critical areas for improvement to inform the development of targeted extension services by Ifugao State University (IFSU). Employing a survey method, the research assessed 137 administrators across various districts, examining both their research competencies and attitudes toward research. Results indicate that administrators demonstrate low to moderate research competencies despite displaying a generally positive attitude toward research. Furthermore, the absence of a significant correlation between attitudes and competencies underscores the complexity of fostering research engagement. These findings emphasize the urgent need for capacity-building initiatives to bridge skill gaps and promote research proficiency. Consequently, a comprehensive extension project was designed, culminating in a formalized Memorandum of Agreement between IFSU and DepEd Ifugao to implement capacity enhancement programs for improving research capabilities of administrators.

INTRODUCTION

Educational management in both basic and higher education recognizes research as a cornerstone for achieving quality education. Incorporating research within educational management transforms teaching and learning dynamics, making them more resilient to external pressures and ideological influences. According to Gunter (2005), effective teacher-researchers engage through a multi-level framework that is critical (questioning existing conditions), practical (seeking improvements), technical (understanding facts), illuminative (interpreting meaning), and positional (recognizing authority and influence).

Globally, higher education institutions (HEIs) bear the responsibility of promoting research proficiency among students and faculty, advancing knowledge dissemination, and enhancing educational quality (Berchin et al., 2021). Faculty with extensive research experience often achieve superior performance ratings and produce high-achieving students (Patimo & Lucero, 2021). In the Philippines, both DepEd and HEIs are intensifying research efforts. Originally confined to theses and dissertations, research has evolved into a professional mandate driven by innovation and the demand for career advancement. Recognizing its pivotal role in national development, the Philippine government has integrated research into the Senior High School curriculum, equipping educators and students with the tools needed for success in a dynamic global landscape.

Research competencies encompass a spectrum of skills, from problem identification to data analysis and dissemination (Lopez, 2022). Research literacy, as emphasized by Castillo-Martínez and Ramírez-Montoya (2020), requires systematic exposure and training, while Gümüs (2022) categorizes these competencies into learning, literacy, and life skills. Researchers must master methodological design, statistical analysis, and effective communication to produce impactful studies.

Administrators play a pivotal role in fostering research-driven cultures within schools. Those with strong research skills model data-based decision-making and foster professional development (Güyel & Bilgivar, 2023). Conversely, administrators with limited competencies struggle to promote evidence-based innovation. Muthuswamy (2017) highlights that research engagement depends on institutional support, individual motivation, and professional development. Despite its recognized importance, many educators face barriers, including insufficient training and resources (Calma, 2014; Vecaldo et al., 2019).

In the Philippines, a lack of cohesive research culture hampers productivity. Factors include inadequate mentoring, multiple roles, and limited funding (Durante et al., 2023). Studies by Gacrama and Baptista (2019) reveal that faculty struggle with conceptualization, design, and publication regardless of academic background. Ulla (2017) emphasizes that teachers need access to research resources and ongoing development to overcome these limitations.

Efforts to enhance research capacity have been driven by CHED policies supporting international collaborations, research incentives, and development programs (Quimbo & Sulabo, 2014). Institutions must align their research priorities with national and stakeholder needs (Ramoso & Ortega-Dela Cruz, 2019). Sustainable improvements require funding mechanisms, partnerships, and academic leadership committed to cultivating research excellence (Rogayan & Corpuz, 2022).

The effectiveness of research programs depends on institutional support. Research-oriented leadership, hiring faculty with research expertise, and mentoring initiatives can foster vibrant research environments (Quitoras & Abuso, 2021; Gaikwad, 2021). Calma (2009) underscores that diverse research experiences, from coursework to mentorship, enhance competency. Advisors who balance constructive criticism with encouragement foster positive attitudes toward research (Casanova, 2021).

This study aligns with DepEd Order No. 39, s. 2016, which emphasizes research-based practices in basic education. However, without sufficient competencies and favorable attitudes, research initiatives will remain underutilized. This research seeks to address these gaps, providing a foundation for enhanced research capabilities in Ifugao's educational sector.

Objectives of the Study

The study aimed to determine the competencies and attitudes of DepEd administrators toward research. Specifically, the study intends to:

1. determine the level of research competencies of DepEd administrators according to perception, numeracy, application, analysis, and evaluation of research;

2. identify the level of attitudes toward research of DepEd administrators in terms of predisposition, purpose, perception, and participation;

3. determine if there is a significant relationship between the competencies and attitudes toward research of DepEd administrators; and

4. propose extension service framework to increase the research competencies and attitudes of DepEd administrators as an offshoot of the research.

RESEARCH METHODOLOGY

This study employed a survey method to gather data on the research competencies and attitudes of school administrators. A 50-item questionnaire developed by Balagtey (2022) was used to measure various research-related competencies. The instrument was divided into five dimensions:

1. Perception (13 items): This section assessed respondents' understanding of fundamental research concepts. Sample items addressed topics such as the characteristics of research, variable classification, review of related literature, and research design features.

2. Numeracy (8 items): These items evaluated respondents' ability to perform statistical computations, emphasizing the mathematical aspects of research.

3. Application (13 items): This component measured the ability to apply research concepts in various scenarios, including selecting appropriate research designs, identifying suitable sampling techniques, and recognizing ethical issues in research.

4. Analysis (8 items): Items in this category required respondents to examine relationships and structural elements of research. Tasks included interpreting diagrams of research designs, comparing sampling procedures, and identifying errors in problem statements.

5. Evaluation (8 items): This section involved making decisions based on internal and external criteria, such as determining appropriate statistical methods and ethical guidelines for specific research situations.

Additionally, a separate 30-item questionnaire by Balagtey (2022) was utilized to assess attitudes toward research of DepEd administrators. This tool categorized attitudes into four dimensions:

1. Predisposition (9 items): Items measured respondents' positive or negative tendencies and behaviors toward engaging in research.

2. Purpose (7 items): This dimension explored administrators' attitudes regarding the objectives and benefits of research.

3. Perception (8 items): These items captured sensory impressions and beliefs about research.

4. Participation (6 items): This component gauged the extent to which administrators actively engage in research-related activities.

A total of 137 out of 215 eligible DepEd administrators, including school supervisors, principals, assistant principals, head teachers, and teachers-in-charge from elementary and secondary schools within the Department of Education, Ifugao, participated in the survey.

The mean was used to describe the levels of research competencies and attitudes of the respondents. To examine the relationship between research competencies and attitudes, the Pearson product moment correlation was computed.

RESULTS AND DISCUSSION

Level of Research Competencies of DepEd Administrators

Table 1 presents the level of research competencies among Department of Education (DepEd) administrators at the elementary and secondary school levels, as measured across five competency dimensions: Perception, Numeracy, Application, Analysis, and Evaluation.

Table 1. Level of research competencies of DepEd administrators

Dimensions of Research Competencies	School level	Mean Score	Description
1. Perception	Elementary	6	Average/Moderate

		Secondary	7	Average/Moderate
2.	Numeracy	Elementary	2	Low
		Secondary	2	Low
3.	Application	Elementary	4	Average/Moderate
		Secondary	6	Average/Moderate
4.	Analysis	Elementary	3	Average/Moderate
		Secondary	3	Average/Moderate
5.	Evaluation	Elementary	2	Low
		Secondary	2	Low
Total mean scores		Elementary	17	Average/Moderate
		Secondary	20	Average/Moderate

 Legend: 0-14 = Low

                15-35 = Moderate/Average

                36-50 = High

Findings reveal that, in terms of **Perception**, administrators at both the elementary and secondary levels achieved mean scores of 6 and 7, respectively, indicating a **moderate/average** level of understanding of basic research concepts. This suggests a fair grasp of fundamental research principles, such as research design and variable classification, but points to potential room for improvement in foundational knowledge.

In terms of **Numeracy, b**oth groups scored a mean of 2, reflecting a **low** competency in statistical computation and quantitative data handling. This highlights a significant weakness in mathematical aspects of research, suggesting a need for targeted training or resources to improve statistical skills.

When it comes to **Application**, elementary administrators had a mean score of 4, while secondary administrators scored 6, both classified as **moderate/average**. This indicates that respondents are moderately capable of applying research concepts, though further strengthening could enhance practical decision-making in research contexts.

In terms of **Analysis**, scores of 3 for both groups indicate a **moderate/average** level of competency in examining and interpreting research relationships and structures. Improving analytical skills could refine administrators' ability to evaluate complex research problems more effectively.

When it comes to **Evaluation**, both groups scored 2, corresponding to a **low** competency in making evaluative judgments regarding research methods and ethical considerations. This finding emphasizes the need for development in critical thinking and evaluative decision-making within research scenarios.

In the **Overall Competency**, the total mean score for elementary administrators was 17, while secondary administrators scored 20, both falling within the **moderate/average** range. While administrators demonstrate average research competencies overall, the low scores in Numeracy and Evaluation indicate specific areas requiring immediate focus.

Results indicate that the moderate levels of research competencies suggest that DepEd administrators possess a foundational understanding of research but need further training to enhance their practical and evaluative skills. This highlights an opportunity for professional development programs tailored to addressing specific gaps in numeracy and evaluation.

Further**,** low numeracy scores point to a systemic need to strengthen quantitative research skills among administrators. Schools or divisions could implement ongoing workshops focused on statistical techniques, data interpretation, and research-based decision-making.

Moreover, given the critical role of research in educational planning and policy-making, enhancing evaluative competencies is essential. Institutions may consider integrating collaborative research projects or mentorship programs where experienced researchers guide administrators, fostering hands-on experience in real-world research applications. This approach could improve analytical and evaluative skills while promoting a culture of research-informed leadership.

The results of this study align with Roman (2021), who identified low research competencies among Philippine HEI faculty, particularly in research methods, data analysis, literature review, and citation management, with ethical competencies scoring the lowest. These skills are critical for research productivity and publication quality. Wald and Daniel (2019) highlight that mastering these research components requires complex cognitive skills and abstract reasoning. Huybers et al. (2020) stress that perceptions of research responsibilities influence integrity and conduct, while Guerrero-Alba et al. (2022) note that perceptions of management tools impact research performance more than structures. Effective, researcher-endorsed incentives are crucial for enhancing research engagement and productivity.

In this study, the low numeracy and evaluation competency scores among administrators highlight significant challenges in statistical analysis and research evaluation. These deficiencies hinder their ability to interpret educational data, evaluation results, and make evidence-based decisions. As education increasingly adopts digital and data-driven approaches, statistical literacy is essential. Galligan (2013) emphasizes that statistical analysis, or academic numeracy, involves both confidence and competence in applying mathematical concepts. Jain and Rogers (2019) note that varying levels of understanding and motivation in mathematics contribute to negative experiences with statistical tasks. Prince and Archer (2008) expand academic numeracy to include effective use of charts, tables, and symbols for presenting data, while Conolly et al. (2021) advocate embedding numeracy into higher education curricula to strengthen research skills.

Maxwell et al. (2021) highlight that data literacy—the ability to interpret data accurately—is foundational to research competencies. It encompasses understanding protocols, recognizing errors, and applying logical analysis. Jensen and Gunnulfsen (2023) further argue that educators' professional judgment plays a crucial role in translating data into teaching practices, with competencies depending on professional development, experience, and statistical aptitude. Pierce et al. (2014) emphasize the growing necessity for educators to interpret data effectively, which directly influences research quality and educational outcomes. The administrators' limited competencies in research evaluation could thus hinder high-quality research output and robust data-driven decision-making.

The moderate competencies in perception, application, and analysis suggest that while administrators have a foundational understanding, challenges remain. Lekamwasam (2013) emphasizes that selecting an appropriate research design is fundamental to sound research, as it structures data collection and analysis to address research questions effectively (Asenahabi, 2019). Toledo-Pereyra (2012) notes that well-grounded research designs improve data quality and validity, while Stichler (2018) highlights that research methodology connects hypotheses, problems, data, and conclusions, making it central to scholarly inquiry.

Level of Attitudes toward Research of DepEd Administrators

Table 2 presents the attitudes toward research of DepEd administrators, evaluated across four key dimensions. The mean scores indicate the level of attitude for each dimension, while the remarks summarize the interpretation of these scores

Table 2. Level of attitudes toward research of DepEd administrators

Dimensions of Attitudes	Mean	Remarks
1. Predisposition	2.82	High

2.	Purpose	2.17	Low
3.	Perception	2.70	High
4.	Participation	2.91	High
Overall Mean		2.65	High

Legend: 3.50-4.)0 = Very high

2.50-3.49 = High

1.50-2.49 = Low

1.00 -1.49 = Very Low

Results reveal that, in terms of **Predisposition** (Mean = 2.82), a high level of predisposition reflects that administrators generally have a favorable attitude toward research. They are inclined to support or engage with research efforts, which is crucial for promoting research culture within the department. This indicate that high predisposition suggests a strong foundation for encouraging research initiatives. Administrators can play a pivotal role in creating a conducive environment for research by setting clear expectations and providing initial support. The high predisposition may inspire administrators to actively advocate for research policies, integrate research into their professional development programs, and serve as role models for educators. This positive attitude can drive the administrators to allocate resources for research projects and advocate for their integration into the overall educational strategy.

In terms of **Purpose** (Mean = 2.17), the low mean for purpose indicates that administrators might have unclear or limited views regarding the purpose and importance of research. They may not fully recognize how research can contribute to the development of education and educational policies. Low awareness of the purpose of research suggests a need for better education and communication regarding the significance of research in improving teaching, learning, and policy-making. Administrators may engage in workshops, training, or seminars focused on demonstrating the practical benefits of research. This could help shift their perspectives on the value of research in achieving educational goals. A strategic intervention in clarifying the purpose of research is needed to increase their understanding, which may lead to stronger advocacy and support for research initiatives in their schools or regions.

When it comes to **Perception** (Mean = 2.70), the high perception score shows that administrators have a positive view of research, recognizing its value, but may still have some reservations or limited understanding of its implementation. While administrators perceive research as beneficial, they may need additional training or guidance to overcome any barriers that hinder their active involvement in research projects. High perception can lead to greater support for initiatives that integrate research into daily educational practices. However, it is important to reinforce the understanding of research methods and outcomes to increase practical engagement. Administrators should be encouraged to create research-driven policies, fostering a culture where research becomes a norm for decision-making and improvements in school systems.

In terms of **Participation** (Mean = 2.91), the high participation score indicates that administrators are actively involved in research activities or initiatives. They may be participating in research projects, committees, or planning processes. The active participation in research projects is encouraging and should be further cultivated. It indicates a willingness to engage with research directly, which is vital for influencing the implementation of research findings. Administrators can further increase their participation by actively collaborating with teachers and researchers on educational innovations or policies backed by research. High participation may be encouraged and expanded. Administrators may take leadership roles in creating networks of research collaboration

across schools and regions, supporting the integration of research outcomes into their educational leadership practices.

The **overall mean** of 2.65 reflects that, on average, DepEd administrators have a high level of attitude toward research, showing a generally positive outlook. With an overall high attitude, administrators are in a favorable position to lead by example and promote a research-focused environment within schools. Efforts should continue to build on this positive attitude to strengthen the role of research in educational development, such as fostering partnerships with academic institutions or facilitating professional research conferences. positive attitude toward research can be leveraged to push for policy changes or improvements in the curriculum that prioritize evidence-based practices and support research at all levels of education.

In general, DepEd administrators demonstrate a generally high level of attitude toward research, particularly in terms of predisposition, perception, and participation. However, the low score for purpose suggests that there is room to improve administrators' understanding of the significance of research. This provides an opportunity for targeted interventions to foster a more comprehensive and informed approach to research within the department.

Bergmark (2020) emphasized that creating fair conditions for voluntary teacher research involvement, clarifying intentions from the outset, and fostering teacher-centered processes increases the likelihood of achieving desired outcomes. Teachers engaged in research are more likely to advance their careers through promotions while enhancing student learning and the curriculum (Aguilar-de Borja, 2018). Researchers can make greater progress in professional development by aligning findings with evaluated teacher development interventions (Sims & Fletcher-Wood, 2020). A research-based education transforms the behavior, thinking, and interactions of teachers, principals, and researchers (Bergmark, 2020). Teachers' research inclinations are influenced by their interests in discovery, professional growth, anxieties, and the real-world application of their research topics (Muthuswamy, 2017). Educational institutions should offer research opportunities that align with teachers' interests to motivate them to excel (Khan et al., 2018).

Teachers often avoid research due to barriers like limited access to research, time constraints, lack of research knowledge, and skepticism about its relevance to their profession (Kostoulas et al., 2019). Positive attitudes toward research can be fostered through adequate investment of time, effort, and resources.

Teachers' involvement in research is shaped by their experience, knowledge, and training. Many recognize the value of research for improving teaching and learning outcomes (Sumahan et al., 2020). Research participation also provides teachers with a platform to express themselves creatively and have their voices heard (Iliko et al., 2010). Vogrinc and Zuljan (2009) found that both new and tenured teachers are eager to conduct research, though their focus is on improving practice rather than sharing findings publicly. Ultimately, teachers' research engagement depends not only on intrinsic and extrinsic motivation but also on the assurance of research autonomy (Kyaw, 2017).

Relationship between the Competencies and Attitudes toward Research of DepEd Administrators

Table 3 presents the relationship between the research competency of administrators and their attitudes toward research, broken down into four dimensions: predisposition, purpose, perception, and participation.

Table 3. Relationship between the research competency and attitudes of administrators toward research

	Dimensions of	r-value	p-value	Remark

	Attitudes toward Research			
Research Competencies	1. Predisposition	.058	.501	Not Significant
	2. Purpose	.013	.883	Not Significant
	3. Perception	.101	.238	Not Significant
	4. Participation	.029	.734	Not Significant

In terms of **Predisposition**, the very low r-value (.058) indicates a very weak positive relationship between administrators' research competencies and their predisposition toward research. The p-value of .501, which is greater than the typical significance level of 0.05, confirms that this relationship is not statistically significant. This suggests that administrators' research competencies do not significantly influence their predisposition (willingness or inclination) to engage with research. Their competencies in research do not appear to have an effect on how positively or negatively they view research, at least in a statistically measurable way.

In terms of **Purpose**, the r-value of .013 is virtually zero, indicating almost no relationship between research competencies and administrators' understanding or recognition of the purpose of research. The p-value of .883, far exceeding the 0.05 threshold, shows that this relationship is also not significant. This suggests that the research competencies of administrators have no significant effect on their perception of the purpose or importance of research. Their ability to conduct or understand research does not seem to influence how they value research in an educational context.

In terms of **Perception**, the r-value of .101 indicates a very weak positive relationship between research competencies and administrators' perceptions of research. However, with a p-value of .238, this relationship is again not significant. This weak correlation suggests that while there may be a slight tendency for administrators with higher research competencies to have a more favorable perception of research, the relationship is not strong enough to be considered statistically significant. Research competencies do not significantly influence how administrators perceive research.

In terms of **Participation**, the r-value of .029 is extremely low, indicating a negligible relationship between administrators' research competencies and their participation in research activities. The p-value of .734 indicates a lack of statistical significance, meaning this relationship is not significant. This indicates that the administrators' research competencies do not have a notable impact on their active involvement in research. This suggests that even with higher research competencies, administrators may not necessarily participate more in research activities.

The data shows no significant relationship between administrators' research competencies and their attitudes toward research, indicated by weak r-values and high p-values across all dimensions. This suggests that research skills do not strongly influence attitudes or engagement. Administrators may have positive research attitudes, but these do not necessarily lead to greater involvement or understanding. Separate strategies are needed to improve both competencies and attitudes. Enhancing research skills alone may be insufficient; interventions should also address perceptions of research value. Factors such as organizational culture, incentives, and institutional support may further shape attitudes and participation.

A positive attitude towards research enhances teachers' experiences in conducting and writing research papers, often leading to stronger research predisposition despite underlying anxieties (Laguador & Soverano, 2023). This attitude is linked to teachers' perception of research as crucial for professional development. Additionally, more experienced teachers tend to have higher research competencies (Abinan, 2021). However, Codilla (2023) argued that even teachers with advanced education and experience still need to improve their research literacy and analytical skills. This highlights the importance of emphasizing research competencies and engagement to improve educational outcomes, serving as the foundation for targeted research plans (Comon, 2024).

Research has shown that teachers' self-efficacy in conducting and applying research is tied to their attitude, with more confident teachers demonstrating a more positive demeanor (Van de Linden et al., 2015). Basilio and Bueno (2019) found that while teachers had average research skills, they highly valued research training to improve their teaching abilities. This aligns with the findings in Table 3, suggesting that research competencies do not significantly influence administrators' attitudes or participation in research activities.

Proposed Extension Service for DepEd Administrators

The results of the study indicate a need to elevate the research competencies and attitudes of DepEd administrators from a moderate to an excellent level. Therefore, an extension project was designed to empower and coach DepEd administrators to conduct research effectively.

The project follows the framework outlined in Figure 1. In the **socialization phase**, the proponent, together with colleagues from IFSU and DepEd stakeholders, will collaborate to identify the specific needs of DepEd administrators. This initial step, which was conducted prior to this study, revealed that only a few DepEd administrators demonstrated research interests and competencies.

A **Memorandum of Agreement (MOA)** between IFSU and DepEd Ifugao was signed, establishing the responsibilities of both parties before the research phase commenced. During the **research component**, the proponent presented the proposal to study the research competencies and attitudes of DepEd administrators at the IFSU Agency In-House Review (AIHR), which was subsequently approved and funded for implementation. The findings of the study will be shared with DepEd officials to launch the extension phase.

The **extension service** will include seminars, workshops, coaching, and mentoring sessions designed to help DepEd administrators craft and implement research proposals. These activities will be meticulously planned and executed to ensure that administrators are equipped with the necessary skills and knowledge to carry out impactful research.

The proposal has already received approval, and the **MOA** between IFSU and DepEd Ifugao was formally signed and endorsed by the IFSU Board of Regents on August 2, 2024.
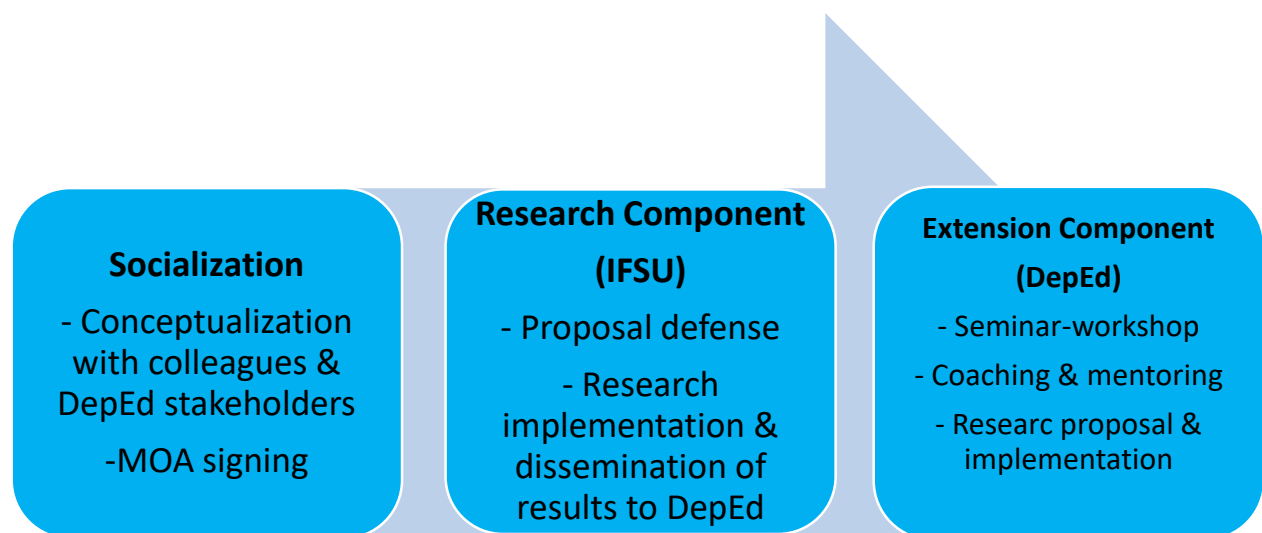

Socialization

- Conceptualization with colleagues & DepEd stakeholders

-MOA signing

Research Component (IFSU)

- Proposal defense

- Research implementation & dissemination of results to DepEd

Extension Component (DepEd)

- Seminar-workshop

- Coaching & mentoring

- Researc proposal & implementation

Figure 1: Extension Service Framework for DepEd Administrators

CONCLUSIONS

The research competencies and attitudes of DepEd administrators are crucial in fostering a culture of research excellence and motivating teachers and learners to engage in research activities at the elementary and secondary levels. The findings reveal that school administrators currently exhibit minimal research competencies, highlighting the need for targeted capacity-building initiatives to enhance their research skills and attitudes.

This lack of competency poses significant challenges for DepEd administrators, who face difficulties in conducting research themselves and in guiding teachers under their supervision. DepEd administrators with limited research competencies may struggle to integrate research findings into their leadership and management practices, which could negatively impact the performance of both teachers and students. Furthermore, administrators with moderate competencies are less likely to actively engage in or disseminate research, limiting their ability to promote evidence-based practices that can improve learning outcomes.

In addition, DepEd administrators with only average attitudes toward research may not fully support the professional development of their colleagues or actively promote research engagement within their schools. Resistance to change and the lack of support for research-based innovations can hinder the progress of educational reforms.

To address these challenges and improve research outcomes, it is imperative to elevate the research competencies and attitudes of administrators. This can be achieved through targeted seminar workshops and empowerment initiatives designed to enhance their research skills, foster positive attitudes, and ultimately drive meaningful changes in the school environment.

Implications to Theory and Practice

Theoretically, this study contributes to existing theoretical frameworks on educational leadership and research competencies by highlighting the critical role of school administrators in fostering a culture of research excellence. The findings underscore the need for a deeper understanding of how administrators' research competencies and attitudes influence the broader educational environment. The study supports the idea that leadership in education is not only about managing resources but also about actively promoting research and evidence-based practices that enhance teaching and learning outcomes. It suggests that research competencies and attitudes should be integrated into leadership models as essential components of effective school administration. The results may also inform future research on how administrators' research literacy and engagement shape the academic performance of both teachers and students, thus contributing to the body of knowledge on educational leadership.

From a practical standpoint, the findings of this study have important implications for educational policy and practice. First, the study emphasizes the necessity of professional development programs aimed at enhancing the research competencies and attitudes of school administrators. By offering targeted training, workshops, and mentoring, educational institutions can equip administrators with the skills and knowledge needed to lead research initiatives and foster a research-driven environment within schools.

Furthermore, the study highlights that administrators play a key role in influencing the research engagement of teachers and students. Thus, improving their research competencies can have a cascading effect on the school community, enhancing the overall quality of teaching and learning. Educational policymakers and school leaders should prioritize initiatives that support administrators in developing a research-oriented mindset, which in turn will encourage teachers to embrace research as an integral part of their professional practice.

In practice, this could involve creating structured opportunities for administrators to engage with research, participate in professional development programs, and collaborate with academic institutions. By fostering a culture where research is valued and supported at all levels of the educational system, administrators can lead by example, ensuring that research-based practices become embedded in the teaching-learning process and ultimately improve student outcomes.

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