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## Empowering Educators: Exploring Professional Development and E-Fluency in Enhancing Research Capability of Basic Education Teachers

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### Abstract

This study determined the influence of professional development and e-fluency on the research capability of basic education teachers in the District of Kadingilan, Division of Bukidnon, for the school year 2025–2026. A quantitative descriptive-correlational research design was employed. Descriptive statistics, including mean and percentage, were used to describe the levels of professional development, e-fluency, and research capability among teachers. Pearson product-moment correlation and regression analysis were utilized to examine significant relationships and predictors of research capability, respectively.

The findings revealed that teachers demonstrated very high engagement in professional development activities, especially in mentoring support and participation in training and workshops, and exhibited a high level of e-fluency, particularly in evaluating online information and digital usage. Overall, teachers were found to be much capable in research knowledge and communication, although their application of research skills was comparatively lower. Professional development, specifically mentoring support, was negatively correlated with research capability, while e-fluency in virtual communication and evaluation of online information was positively correlated. Regression analysis identified mentoring support and motivation toward research as significant predictors of research capability, while participation in training and e-fluency variables was not found to be significant. Mentoring support emerged as the strongest predictor of research capability. The results suggest that targeted mentoring and motivation-centered interventions are essential to enhance the research capability of basic education teachers.

**Keywords:** Professional Development, E-Fluency, Research Capability

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### 1. Introduction

The research capability of basic education teachers remains a pressing concern in education. Many teachers face persistent obstacles in accessing professional development and building digital skills. These challenges limit their ability to engage in research that can improve teaching and learning. Addressing these issues requires a closer look at how professional development and e-fluency contribute to strengthening teachers' research capacity. This study examines these factors to provide evidence-based insights for empowering educators and advancing educational practice.

Empowering educators through professional development and e-fluency is crucial for enhancing the research capabilities of primary and secondary education teachers. The persistent challenge of limited research capability among teachers affects the quality of education and the advancement of evidence-based practices. Studies in the Philippines and other countries from 2017 to 2025 consistently show that teachers often possess only moderate research skills, with gaps in formulating research problems, writing, and conducting research (Servancia, 2025). International research echoes these findings, highlighting similar barriers and the need for targeted interventions (Kuzembayeva et al., 2025).

Professional development programs and digital competence initiatives have emerged as key strategies to address these gaps. In the Philippines, participation in research trainings, school-based mentoring, and collaboration with experts have improved teachers' research skills (Almonicar, 2022). Internationally, effective professional development is linked to increased research engagement and improved teaching outcomes (Lyu, 2024).

E-fluency is the ability to use digital tools for research and collaboration, further supports teachers in accessing resources, conducting studies, and sharing findings. Studies show that digital competence enhances action research capability and supports continuous professional growth (Esparza, 2022).

Empowering teachers through targeted professional development and enhanced e-fluency is essential for building strong research capability in basic education. A comprehensive investigation into these factors can inform strategies that address persistent barriers and support teachers in producing meaningful research. Previous studies have examined professional development and E-fluency separately, but there is a need to understand their combined impact in the context of Philippine basic education. In order to bridge the information gap, it is essential to understand the situation in the District of Kadingilan, Division of Bukidnon, Philippines. Different countries and regions face unique challenges in teacher research capability, shaped by their specific educational environments. This study aims to offer policy recommendations that strengthen teacher research capacity and contribute to the advancement of educational practice and scholarship.

### **Statement of the Problem**

This study determined the influence of professional development and e-fluency on the research capability in basic education teachers in the District of Kadingilan, Division of Bukidnon, for the school year 2025-2026. Specifically, this study sought to answer the following questions:

1. What level of professional development do basic education teachers engage in the following aspects?
  - a. training and workshops participation;
  - b. mentoring support;
  - c. attitude and motivation towards research; and
  - d. research skills application?
2. What level of E-fluency do basic education teachers possess in terms of:
  - a. technology proficiency;
  - b. digital usage;
  - c. virtual communication; and
  - d. evaluation of online information?

3. What is the extent of the research capabilities of basic education teachers in the following aspects:
  - a. research knowledge and understanding;
  - b. research skills and application; and
  - c. research communication and dissemination?
4. Is there a significant relationship between the research capabilities of basic education teachers and:
  - a. professional development;
  - b. E-fluency?
5. Which of the variables best predicts the research capabilities of basic education teachers?

## **2. Methodology**

This section outlines the procedures and techniques used for gathering and analyzing the study's data. It covers the research design, study locale, participants, sampling procedure, instruments, and data collection methods employed in the study.

### **2.1 Research Design**

This study utilized a quantitative research design, specifically a descriptive-correlational approach, to assess the relationships between two or more variables. The descriptive design was employed to describe the levels of professional development, e-fluency, and research capability of basic education teachers. Meanwhile, the correlational design was used to examine the relationships between the independent variables—professional development and e-fluency—and the dependent variable, research capability of basic education teachers.

### **2.2 Locale of the Study**

This study was conducted in public and private elementary and secondary schools of the Department of Education, Division of Bukidnon, specifically in the Kadingilan District.

### **2.3 Participants of the Study**

The participants of this study were selected through total enumeration to determine the two hundred fifty (250) public and private elementary and secondary teachers in the District of Kadingilan. The teachers rate themselves in professional development, e-fluency, and research capability.

### **2.4 Research Instrument**

The questionnaire, consisting of three parts, was distributed to respondents to gather data for the study. Pilot testing was conducted to assess instrument reliability, resulting in high reliability coefficients. To ensure the validity of the instruments, they were presented to expert professionals in educational administration. The experts were asked to assess whether the questions in the instrument were relevant and appropriately aligned with the research problem. Part 1 of the instrument focused on professional development, evaluating the level of basic education teachers' engagement in professional development. This questionnaire was patterned in the study of Romorosa (2025) entitled Professional Development in the Lens of Public-

School Teachers' Research Capability. It consists of four (4) aspects: participation in training and workshops, mentoring support, attitude and motivation toward research, and the application of research skills. This section had a Cronbach's Alpha coefficient of 0.92. Part 2 of the instrument measured e-fluency, which included four (4) aspects: technology proficiency, digital usage, virtual communication, and evaluation of online information was patterned in the study of Servancia III and Escarlos (2025) entitled Digital Competence and Professional Development on the Action Research Capability of Basic Education Teachers in Maramag 1 District, Bukidnon. This section had a Cronbach's Alpha coefficient of 0.90. Part 3 of the instrument assessed research capability using a tool patterned in the study of Amanonce, J. T. (2025) entitled Research Capability of Filipino Teacher Educators: Insights from a Criterion-Referenced Tool to measure the level of research capability among basic education teachers. This section had a Cronbach's Alpha coefficient of 0.93 and included three (3) dimensions: research knowledge and understanding, research skills and application, and research communication and dissemination.

## 2.5 Statistical Technique

The researcher statistically analyzed the data responses according to the study's objectives. Descriptive statistics such as mean, percentage, and standard deviation were used to determine the levels of professional development, e-fluency, and research capability of basic education teachers. Meanwhile, to examine the relationship between professional development and e-fluency with the research capability of basic education teachers, the researcher employed the Pearson Product-Moment Correlation Coefficient at a 0.05 level of significance. Furthermore, regression analysis was conducted to identify which variables best predict research capability.

## 3. Results and Discussion

This section presents the data gathered, along with a comprehensive discussion, interpretation, and implications of the study's findings. Results are presented in tables, which were analyzed and interpreted accordingly. The order of the presentation follows the sequence of the research problems identified in the study.

The first part determines the levels of professional development, e-fluency, and research capability among basic education teachers. The second part displays the correlation between professional development and e-fluency with research capability and identifies the variables that best predict research capability.

### 3.1 Professional Development

**Table 1: Level of Professional Development**

Indicators	Mean	Descriptive Rating	Qualitative Interpretation
Mentoring Support	4.60	Agree	Very High
Training and Workshops Participation	4.58	Agree	Very High
Attitude and Motivation Towards Research	4.48	Agree	High
Research Skills Application	4.44	Agree	High
Overall Mean	4.53	Strongly Agree	Very High

Legend

Range	Descriptive Meaning	Qualitative Interpretation
4.51-5.00	Strongly Agree	Very High
3.51-4.50	Agree	High
2.51-3.50	Neutral	Moderately High
1.51-2.50	Disagree	Low
1.00-1.50	Strongly Disagree	Very Low

Table 1 presents the level of professional development among basic education teachers. As shown in the table, Mentoring Support has the highest mean of 4.60, followed closely by Training and Workshops Participation with a mean of 4.58. Meanwhile, Attitude and Motivation Towards Research has a mean of 4.48, and Research Skills Application has the lowest mean of 4.44. Generally, the overall mean is 4.53, which indicates that basic education teachers demonstrate a very high level of engagement in professional development.

This finding aligns with the studies of Darling-Hammond et al. (2017), which emphasize that well-structured professional development programs significantly enhance teacher effectiveness and engagement. Similarly, Desimone and Garet (2018) highlight the importance of mentoring and workshop participation as critical components of teacher professional growth.

Furthermore, Kraft, et.al. (2018) found that mentoring support has a substantial impact on teacher performance and student outcomes, reinforcing the value of mentorship as a cornerstone of professional development. Recent research by Zayapragassarazan (2020) also underscores the role of targeted training programs in improving teachers' skills and motivation. These findings collectively suggest that professional development initiatives, particularly in mentoring support and participation in training and workshops, are highly effective in fostering teacher growth and improving educational practices.

### 3.2 E-Fluency

**Table 2: Level of E-Fluency**

Indicators	Mean	Descriptive Rating	Qualitative Interpretation
Evaluation Of Online Information	4.5100	Agree	Very High
Digital Usage	4.5024	Agree	Very High
Technology Proficiency	4.4122	Agree	High
Virtual Communication	4.3775	Agree	High
Overall Mean	4.4495	Strongly Agree	Very High

#### Legend

Range	Descriptive Meaning	Qualitative Interpretation
4.51-5.00	Strongly Agree	Very High
3.51-4.50	Agree	High
2.51-3.50	Neutral	Moderately High
1.51-2.50	Disagree	Low
1.00-1.50	Strongly Disagree	Very Low

Table 2 shows the summary of E-fluency in terms of evaluation of online information, digital usage, technology proficiency, and virtual communication

As shown in the data, Evaluation of Online Information has the highest mean of 4.51, followed closely by Digital Usage with a mean of 4.50. Meanwhile, Technology Proficiency and Virtual Communication have lower means of 4.41 and 4.38, respectively. The overall mean for e-

fluency is 4.45. From their perspectives, their ability to evaluate online information and effectively use digital tools is highly developed, while their proficiency in technology and virtual communication is slightly lower but still significant.

These findings align with research such as that by Ng (2017), who emphasized that e-fluency, particularly in evaluating online information and digital usage, is critical for educational professionals in adapting to 21st-century learning environments. Similarly, Reddy et al. (2020) highlight that technological proficiency and virtual communication are essential components of e-fluency, which directly influence teachers' ability to engage in research and innovation. The high level of e-fluency demonstrated by participants suggests that they are well-equipped to leverage digital tools and resources in conducting research and improving instructional practices. Additionally, Heitink et al. (2017) concluded that teachers with higher levels of digital fluency are more capable of integrating technology into their teaching practices and are better prepared to collaborate on research initiatives. The high level of e-fluency demonstrated by participants suggests that they are well-equipped to leverage digital tools and resources in conducting research and improving instructional practices.

### 3.3 Research Capability

**Table 3: Level of Research Capability**

Indicators	Mean	Descriptive Rating	Qualitative Interpretation
Research Knowledge and Understanding	4.48	Agree	Much Capable
Research Communication and Dissemination	4.34	Agree	Much Capable
Research Skills and Application	3.91	Agree	Much Capable
Overall Mean	4.24	Agree	Much Capable

#### Legend

Range	Descriptive Meaning	Qualitative Interpretation
4.51-5.00	Strongly Agree	Very much Capable
3.51-4.50	Agree	Much Capable
2.51-3.50	Neutral	Capable
1.51-2.50	Disagree	Less Capable
1.00-1.50	Strongly Disagree	Not Capable at all

The summary of research-related indicators in terms of research knowledge and understanding, research communication and dissemination, and research skills and application is shown in Table 18. Research knowledge and understanding recorded the highest mean of 4.48, followed by research communication and dissemination with a mean of 4.34. Research skills and application had the lowest mean of 3.91. In general, the overall mean of research-related indicators is 4.24. This implies that the research capabilities of basic education teachers are much capable. Furthermore, this indicates that while their research knowledge and communication are commendable, there is room to strengthen their research skills and application to achieve greater effectiveness in their roles.

In the recent study, Calleja (2020) highlighted that while teachers exhibit adequate research knowledge, they often face challenges in translating this knowledge into practical applications. Similarly, Basera (2019) emphasized the need for capacity-building programs to enhance teachers' research skills, particularly in areas such as data analysis and implementation of

findings. Mercado and Dela Cruz (2021) found that while teachers are motivated to conduct research, a lack of technical skills often hinders their productivity and effectiveness. Further supporting this, Santos (2023) argued that empowering teachers through hands-on training and mentorship programs significantly improves their ability to apply research findings in their teaching practices. These studies collectively underscore the importance of continuous professional development to address gaps in research skills and ensure that teachers can effectively contribute to the advancement of educational practices.

Other studies further echo these findings. For instance, Navarro and Gregorio (2022) emphasized that insufficient access to research resources and limited professional development opportunities often prevent teachers from conducting meaningful research. They argued that providing teachers with clear institutional support could address these barriers. Similarly, Torres et al. (2018) found that while teachers demonstrate enthusiasm for research, they frequently struggle with methodological rigor, highlighting the need for targeted workshops and sustained mentoring programs. These findings reinforce the importance of equipping teachers with both technical and practical research skills to maximize their potential and contribute to evidence-based improvements in education.

### 3.4 Relationship of Professional Development and E-fluency to Research Capability

**Table 4: Correlation of Professional Development and E-fluency to Research Capability**

Independent Variables	Pearson Coefficient (r-value)	Probability (P-Value)
Professional Development		
Mentoring Support	-0.138	.029*
E-fluency	0.206	.001**
Virtual Communication	0.216	.001**
Evaluation of Online Information	0.213	.001**

It can be observed in Table 4 that professional development, in terms of mentoring support, was negatively correlated with the research capability of basic education teachers. While E-Fluency, in terms of virtual communication and evaluation of online communication, was positively correlated with the research capability. Professional development, in terms of mentoring support, had a Pearson coefficient of -0.138 with a probability value of .029, while E-Fluency had a Pearson coefficient of 0.206. Specifically, the Pearson coefficients for virtual communication and evaluation of online communication were 0.216 and 0.213, respectively. Both coefficients correspond to a probability value of 0.001, which is lower than the alpha significance level of 0.05. Therefore, the first null hypothesis, which states that there is no significant relationship between the research capability of teachers and professional development or E-Fluency, was rejected.

Based on the result, mentoring support was negatively correlated with the research capability of basic education teachers. Limeri et al. (2024) developed the Mentoring in Undergraduate Research Survey and found that negative mentoring experiences—such as absenteeism, interpersonal mismatch, lack of career support, and misaligned expectations—can dampen mentees' beliefs about the value of research and lower their integration into the research community. These negative experiences are more common in formally assigned mentoring

relationships, where mentors and mentees may not have a natural fit, leading to less effective or even harmful outcomes.

Furthermore, Nabi et al. (2023) reviewed mentoring in higher education and concluded that the impact of mentoring is highly dependent on the approach and the relational dynamics between mentor and mentee. When mentoring is perceived as obligatory or is not tailored to the mentee's needs, it can result in disengagement or reduced motivation to pursue research. Nuis et al. (2023) also emphasized that mentoring must be conceptualized and implemented with attention to individual differences and institutional context to avoid unintended negative effects.

Similarly, Caingcoy (2020) observed that while mentoring and action planning skills are important correlates of research capability, the relationship can be negative if mentoring is reactive rather than proactive—meaning it is provided in response to low capability rather than as a means to further enhance already strong skills. This is further supported by findings that institutional and contextual barriers, such as lack of time, resources, and sustained support, can limit the effectiveness of mentoring, leading to situations where increased mentoring does not translate into higher research capability.

The result also shows that E-Fluency, in terms of virtual communication and evaluation of online communication, was positively correlated with the research capability. The findings align with recent Philippine studies emphasizing the crucial influence of E-Fluency, particularly in virtual communication and evaluation of online communication, on the research capability of basic education teachers. According to Dimaculangan and Tandilon (2025), increased proficiency in digital and virtual communication significantly boosts Filipino teacher educators' abilities to undertake and disseminate research, as digital platforms support collaboration and access to research resources. Servancia III (2025) similarly demonstrated that teachers with higher digital competence and e-fluency are more capable of conducting action research, since they can efficiently access, evaluate, and share information through virtual communication channels.

Research from Gleeson et al. (2017) and Kutluca et al. (2024) notes the pivotal role of E-Fluency in sustaining research collaboration, highlighting its significance for continuous professional development and the broader advancement of educational quality. Similarly, Dlamini & Tsotetsi (2024) emphasize that E-Fluency is foundational for fostering a research-rich professional culture among teachers, connecting frequent digital interaction with heightened inquiry and innovation in practice.

### 3.5 Variables that Best Predict Research Capability

**Table 5: Regression Analysis of Variables that Best Predict Research Capability**

	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	3.971	.446		8.908	.000
Professional Development					
Training and Workshops					
Participation	-.005	.085	-.004	-.055	.956
Mentoring Support	-.268	.085	-.248	-3.141	.002

Attitude and Motivation Towards Research	-.153	.059	-.169	-2.616	.009
Research Skills Application	.112	.077	.103	1.458	.146
<b>E-FLUENCY</b>					
Technology Proficiency	-.096	.075	-.130	-1.272	.205
Digital Usage	-.034	.098	-.038	-.349	.727
Virtual Communication	.055	.097	.057	.563	.574

R= 0.379, R<sup>2</sup>= 0.144, F= 5.028, p-value=.000

Table 5 shows the stepwise regression analysis in finding the best predictor of the research capability of basic education teachers. It shows the beta coefficient and the corresponding p-values. As revealed in the table, seven predictors were found to be the variables that predict research capability.

Mentoring support was found to be the strongest predictor of professional development, with a t-value of -3.141 ( $p = 0.002$ ), indicating its significance at the 0.01 level. Attitude and motivation toward research ranked second, with a t-value of -2.616 ( $p = 0.009$ ), falling under the 0.05 level of significance. However, participation in training and workshops was not a significant predictor, as shown by its t-value of -0.055 ( $p = 0.956$ ).

For e-fluency, none of the predictors reached statistical significance. Technology proficiency had a t-value of -1.272 ( $p = 0.205$ ), while digital usage and virtual communication had p-values of 0.727 and 0.574, respectively, indicating no significant contribution.

From the analysis, the regression equation is:

$$Y = 3.971 + (-.005) (X1) + (-.268) (X2) + (-.153) (X3) + .112 (X4) + (-.096) (X5) + -.034 (X6) + .055 (X7) \text{ where:}$$

Y= Research Capability of Basic Education Teachers

3.971= constant

X1= Training and Workshops Participation (Professional Development)

X2= Mentoring Support (Professional Development)

X3= Attitude and Motivation Towards Research (Professional Development)

X4= Research Skills Application (Professional Development)

X5= Technology Proficiency (E-Fluency)

X6= Digital Usage (E-Fluency)

X7= Virtual Communication

Moreover, the R<sup>2</sup> value is 0.144 indicates that 14.4% of the research capability of teachers is explained by professional development in terms of training and workshops participation, mentoring support, attitude and motivation towards research, research skills application, and E-Fluency in terms of technology proficiency, digital usage, virtual communication.

Negative regression coefficients that while mentoring support, training and workshop participation, and attitude and motivation toward research are highly rated among basic education teachers, they paradoxically predict lower overall research capability in regression model.

This result is aligned the study of Xu et al. (2022) argue that excessive or poorly structured professional development activities can lead to “initiative fatigue,” where teachers become

overwhelmed by numerous training requirements without seeing tangible improvements in their actual research skill application. Inadequate quality or relevance of mentoring and workshops may also discourage innovative practice, as noted by Alhassan and Zubairu (2021), who found that superficial or generic mentoring programs can sometimes stifle teacher agency and autonomy, ultimately reducing their ability to apply research skills independently.

Recent research shows that even when teachers rate professional development activities highly, their actual impact on research capability can be diminished by factors such as mentor-mentee mismatches, insufficiently targeted or overly generic training, and a lack of ongoing institutional support for research. Limeri et al. (2019) highlight that negative mentoring experiences—such as absenteeism, interpersonal mismatch, or lack of career support—can undermine teachers' growth rather than enhance their capabilities. Similarly, Gore et al. (2017) found that professional development efforts must be carefully structured and closely aligned with teachers' actual needs to result in meaningful skill enhancement, and that generic or poorly implemented programs may not translate to improved research practice.

In the Philippine context, recent findings (Servancia III, 2025) report that teachers often express high motivation for research but encounter persistent barriers like limited resources, high teaching loads, and limited time for research engagement, which collectively weaken the translation of positive attitudes and training into tangible research capability. Furthermore, mentoring support tends to decline in effectiveness as teachers advance in their careers, as aging and accumulated years of service can lead to reduced capability for research, especially if research was not emphasized in earlier training programs.

Moreover, attitude and motivation toward research as measured by self-reported scales may reflect teachers' perceived value of research rather than their practical ability to conduct it. Boholano et al. (2020) highlighted that while Filipino teachers often express high motivation for research, persistent structural barriers, lack of institutional support, and competing workload pressures prevent these positive attitudes from translating into increased research capability. In sum, high ratings in aspects of professional development do not guarantee improvement in actual research capability; rather, they may signal a mismatch between teacher perceptions and systemic or contextual realities that inhibit research practice.

Although basic education teachers demonstrate high levels of e-fluency in terms of digital usage, technology proficiency, and virtual communication, the fact that these factors are negative predictors of research capability can be explained by several contextual and behavioral dynamics. Recent studies indicate that excessive or unstructured engagement with digital technologies and online platforms can inadvertently undermine deeper cognitive skills and academic achievements. Navarro-Martinez et al. (2022) found that while digital usage improves technological competence and autonomy, excessive time on social networks, particularly social or recreational engagement, correlates with poorer academic performance, suggesting a misalignment between digital behaviors and academic tasks required for research.

Additionally, Joshi et al. (2025) further argue that the quality and context of digital resource utilization matter more than frequency; simply using technology does not guarantee the development of higher-order research capabilities if such activities are not targeted, scaffolded, or critically evaluated within instructional frameworks. Borgonovi et al. (2025) highlight that high levels of internet and digital tool use can hinder sustained attention, information integration, and reflective thought, which are crucial for effective research. As a result,

technology proficiency and digital usage become negative predictors because they do not translate directly into meaningful research engagement or capability, especially when digital activities are fragmented or lack academic focus.

#### **4. Conclusion**

Based on the findings of the study, the following conclusions were drawn:

The professional development of basic education teachers is very high. Teachers demonstrate strong engagement in mentoring support and actively participate in training and workshops, which have the highest ratings among professional development indicators. Teachers also show high motivation and positive attitudes toward research.

Teachers display a very high level of e-fluency, especially in their ability to evaluate online information and their overall digital usage. While technology proficiency and virtual communication received slightly lower scores, these aspects remain strong, demonstrating that teachers are generally proficient in digital engagement. This outcome highlights that ongoing technology integration initiatives equip teachers to adapt successfully and use digital resources effectively in learning environments.

Research capability among basic education teachers is commendable, with strong knowledge, understanding, and competence in communication and dissemination. However, the domain of research skills application is somewhat lower, revealing a need for additional experience-focused training and practical exposure. These results imply that, although conceptually prepared, teachers still require targeted programs to improve practical research competency.

Correlational analysis reveals that professional development, particularly mentoring support, shows a negative correlation with teachers' research capability, whereas e-fluency in virtual communication and evaluation of online information is positively correlated. These relationships indicate that higher engagement in digital communication and online information skills enhances research capability, whereas current mentoring approaches may need reevaluation to ensure positive impact.

The significant predictors of research capability were mentoring support and attitude and motivation toward research. In contrast, participation in training and workshops, as well as all tested e-fluency variables, were not significant predictors. Mentoring and motivation are thus the most influential factors in building research capability, while other contextual and institutional factors not captured in the current model may contribute to further development in this area.

Educational leaders and policymakers can utilize these findings to design more targeted mentoring initiatives, digital proficiency programs, and motivation-centered professional development interventions that aim to enhance the research capabilities of basic education teachers and address areas requiring improvement. Professional development may incorporate practical research activities and digital literacy modules to improve both research capability and e-fluency. Furthermore, policies promoting recognition and incentives for research engagement can reinforce teachers' motivation and sustain a culture of continuous professional and scholarly growth.

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