Research Culture and Level of Engagement in Action Research among Elementary Teachers: Basis for Work Action Plan

Karen M. Caole

Bataan Peninsula State University

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ABSTRACT

This study examined the research culture and engagement in action research among public elementary teachers in Western Region III, specifically in Zambales, Bataan, Olongapo, and Balanga. Employing a convergent parallel mixed-methods design, data were collected from 312 participants, including 300 teachers and 12 school research coordinators. Respondents were purposively sampled to ensure representation across divisions. Quantitative data from survey questionnaires were analyzed using descriptive and inferential statistics (means, frequencies, percentages, ANOVA, t-tests, and Chi Square), while Spearman Rho's correlation measured relationships between teacher-related factors and trainings attended. Qualitative data from interviews and document analysis were examined through thematic analysis using MAXQDA. Findings revealed diverse demographic profiles and generally low engagement in action research, with limited training, research conduct, and publications. Significant differences in engagement were observed by age, experience, educational attainment, and position, but not by sex. Mid-career teachers and those with advanced degrees showed greater involvement in training, research, and publication. Correlation analysis indicated weak but significant relationships between contextual factors and research activities, though institutional opportunities largely determined training levels. Challenges included lack of mentoring, insufficient resources, compliance-driven attitudes, and limited ICT facilities. The qualitative strand highlighted five themes: structural time constraints, compliance-driven mindset, limited skills and training, insufficient institutional support, and weak collaboration. Triangulation provided a holistic view of practices and barriers. The study proposed an evidence-based developmental plan to strengthen teacher participation and foster a sustainable research culture in elementary schools.

Keywords: action research, research culture, elementary teachers, institutional support, mixed methods, professional development

INTRODUCTION

In the evolving landscape of education, research has become a vital mechanism for innovation and improved student outcomes. Global frameworks such as OECD and UNESCO emphasize teacher-led inquiry and evidence-based practices, with action research recognized as a transformative approach to classroom improvement. Cornell (2024) demonstrated its effectiveness in addressing digital literacy and student well-being, while Naldo and Ubayubay (2024) underscored the role of mentorship and institutional support in strengthening research culture. In the Philippines, the Department of Education has advanced initiatives such as the Basic Education Research Agenda and DepEd Orders, yet elementary teachers continue to face barriers including limited time, inadequate training, and insufficient institutional support. Despite supportive policies, implementation at the school level remains inconsistent, creating a gap between directives and practice. This study addresses that gap by examining teacher engagement in action research and proposing strategies—capacity-building, mentorship, and resource access—to foster sustainable research culture and empower teachers as instructional leaders.

Objectives of the Study

This study aimed to explore and examine the level of engagement in action research and the prevailing research culture among elementary teachers. It also sought to identify the challenges they faced in conducting

action research, as well as their attitudes, practices, and support systems that influenced research participation in the teaching profession. The findings served as the basis for developing a work action plan to strengthen and sustain the research culture in elementary schools.

METHODOLOGY

Type of Research

This study utilized a mixed-methods design, combining quantitative surveys with qualitative interviews and document analysis to capture a comprehensive view of teachers' engagement in action research.

Participants and Sampling

A total of 312 participants were included in the study, consisting of 300 elementary teachers and 12 school research coordinators**.** The teachers were evenly distributed across Balanga City, Bataan Iba Zambales, and Olongapo City Division (75 each), while (3) coordinators from each area completed the qualitative phase. Respondents were purposively selected based on inclusion criteria: teachers had to be currently employed in public elementary schools under DepEd with at least one year of experience and involvement in classroom instruction or action research, while coordinators were officially designated to oversee research initiatives and provide mentoring support.

Sources of Data

The study drew data primarily from a researcher-made survey questionnaire administered to elementary teachers, which measured their engagement in action research and perceptions of research culture. Complementary data were gathered through interviews with school research coordinators and document analysis of institutional records to capture qualitative insights. Secondary sources, including relevant literature and policy documents, were also consulted to provide context and strengthen the interpretation of findings.

Instrument

The study used a survey questionnaire and a semi-structured interview guide as primary instruments. Both were validated by experts and pilot-tested in schools outside the sample to ensure reliability. The questionnaire covered demographics, action research engagement, and perceptions of research culture across teacher, school, and contextual factors, totaling 69 items. The interview guide, administered to 12 school research coordinators, focused on their role in fostering research culture and perspectives on the proposed work action plan. Together, these tools provided comprehensive data on teacher engagement and research culture.

Data Collection Procedure

The researcher secured approvals from the Regional Office, Schools Division Superintendent, District Supervisor, and School Heads before conducting the study. Data were collected through survey questionnaires for quantitative analysis and face-to-face interviews for qualitative insights, with informed consent obtained from all participants. Interviews were recorded for transcription, and data were stored securely with strict privacy measures. Hard copies were shredded and digital files destroyed after use to ensure confidentiality. Collection was carried out respectfully and with minimal disruption to participants' work.

Ethical Consideration

The study followed strict ethical standards of confidentiality, anonymity, and voluntary participation**.** Teachers were informed that participation was non-evaluative and unrelated to RPMS–PPST ratings. Data were collected anonymously, without involvement of principals or supervisors, and withdrawal carried no consequences. Risks such as discomfort or anxiety were minimized through neutral wording, optional responses, and assurance that results were for development, not evaluation. Written informed consent was obtained in English and Filipino, with permissions secured from DepEd authorities and ethics clearance

granted by the Peninsulares Research Ethics Committee**.** Data collection was scheduled outside teaching hours to protect privacy, and all sources and contributors were properly acknowledged.

Data Analysis

The quantitative data were analyzed using descriptive statistics (means, frequencies, percentages) to describe demographics, engagement, and perceptions, and inferential tests **(**ANOVA, t-tests, Chi-Square, Spearman Rho) to examine differences and relationships among variables. Qualitative data from open-ended responses were examined through thematic analysis following Braun and Clarke (2006), supported by content analysis to identify recurring patterns. Rigor was ensured through Lincoln and Guba's (1985) criteria of credibility, dependability, confirmability, and transferability, using member checking, peer debriefing, audit trails, and triangulation. Integration of both strands through triangulation enhanced validity and reliability. SPSS was used for quantitative analysis, while MAXQDA supported qualitative coding and theme development. Together, these methods provided a comprehensive understanding of teacher engagement, research culture, and challenges, forming the basis for the proposed work action plan.

RESULTS

Demographic Profile of Elementary Teacher-Respondents

The demographic profile shows that most respondents were mid-career teachers aged 31–40, predominantly female, and largely bachelor's degree holders, with fewer having advanced studies. This distribution reflects the typical composition of public elementary schools, where mid-career teachers balance classroom duties with professional development, and advanced education often correlates with stronger research participation.

Manalo, Molina, Aspuria, & Carreon (2025) emphasizes on their study on demographic influences on teacher engagement in educational research found that educational attainment and length of service significantly shaped research capability, while gender had little effect. They concluded that graduate-level training and longer teaching experience foster stronger competencies in research practice. Gutierrez (2024) reported that most engaged teacher-researchers were female, aged 31–35, and master's degree holders with 6–10 years of service.

The study highlighted that attitudes and competencies were positively correlated with research engagement, reinforcing the role of academic preparation and professional maturity. Recent studies support these findings. Engane and Gonzales (2025) found that teachers are motivated by professional growth and promotion opportunities but remain challenged by time constraints and limited institutional support.

Research Institute for Teacher Quality (RITQ, 2024) A national profiling study of Teacher Education Institutions emphasized that teacher educators with advanced degrees and longer service years were more research-active, underscoring the importance of continuous professional development and institutional support in sustaining engagement. Together, these results and literature affirm that while teachers recognize the value of research, systemic barriers and demographic factors shape their level of engagement, underscoring the need for mentoring, workload management, and stronger institutional backing to sustain a research culture.

Level of Action Research Engagement (Past 5 Years)

The results show that teachers' action research engagement over the past five years was generally low**,** with only moderate participation in advanced training and very limited publication outputs. The composite means of 1.84 indicates that while some teachers attended trainings or conducted research, sustained involvement and dissemination remain weak. This reflects a pattern where research is often initiated but rarely advanced to publication, limiting its impact on professional practice and institutional culture. Recent studies support these findings. Tarrayo et al. (2021) reported that while English language teachers recognized the benefits of research, barriers such as workload, limited confidence, and lack of mentoring restricted deeper engagement**.** Similarly, Urbina Hinacay (2025) found that teachers in Bukidnon demonstrated high research capability but only moderate engagement, with weak correlations between capability and actual participation. Both studies

highlight that systemic barriers—time, support, and confidence—continue to hinder teachers from moving beyond training into sustained research and publication. These results emphasize the need for structured mentoring, workload management, and institutional support to strengthen teachers' research culture and ensure that training translates into meaningful outputs.

Perceptions of Research Culture

The results indicate that teachers' perceptions of research culture were moderate overall (M = 3.27)**.** Among the dimensions, school-related factors scored highest (M = 3.45), suggesting that institutional support and leadership encouragement are relatively stronger compared to other areas. **T**eacher-related factors (M = 3.25) and contextual variables **(**M = 3.10) were rated lower, reflecting moderate confidence, motivation, and challenges tied to policy, community, and resources. This shows that while teachers acknowledge the presence of a research culture, it is not yet fully embedded or strongly sustained. Recent studies affirm these findings. Polinar et al. (2025) emphasized that while teachers recognize the importance of research, systemic barriers such as limited training, workload, and weak mentoring prevent deeper engagement.

Similarly, Engane and Gonzales (2025) found that teachers' perceptions of research culture are shaped by institutional support and collaboration, but frustrations with time constraints and compliance-driven practices weaken confidence. Together, these results and literature suggest that strengthening mentoring, institutional backing, and collaborative practices is essential to elevate perceptions.

Test of Significant Differences in Engagement by Profile

The test of significant differences shows that **t**eacher engagement in action research varied across most demogr aphic variables**.** Age, years of experience, educational attainment, and position/rank all yielded significant diff erences, indicating that these factors strongly influence participation. In contrast, sex was not significant, sugge sting that engagement is gender-neutral when institutional support is present. These findings align with recent literature. Urbina and Hinacay (2025) reported that research engagement is closely tied to professional growth and promotion, with mid-career teachers and those holding advanced degrees more likely to conduct and publish research. Similarly, Salavacion (2025) found that while innovative strategies and engagement were consistent across teachers, higher scores were observed among those with more experience, reinforcing the role of maturity and academic preparation in shaping research involvement. Overall, the results highlight that professional maturity, advanced studies, and rank drive research engagement**,** while gender does not, underscoring the need for mentoring and institutional support to broaden participation across all teacher groups.

Correlation Between Factors and Engagement

The correlation results reveal that teacher-related factors ($\rho = 0.42$, $p = 0.005$) and contextual variables ($\rho = 0.38$, $p = 0.010$) both showed weak but significant relationships with engagement, while school- related factors ($\rho = 0.55$, $p < 0.001$) demonstrated a moderate and significant correlation. This suggests that institutional support and leadership exert stronger influence on teachers' action research participation compared to individual or contextual conditions.

Aquino (2025) found that institutional support, professional development, and external collaborations significa ntly enhance teacher research productivity, while funding constraints and mentorship gaps remain barriers. His study emphasized that institutional and external factors are interdependent, and both must be strengthened to s ustain long term research culture. Overall, these findings emphasize that school-related support systems are the most critical drivers of research engagement**,** while teacher confidence and contextual challenges, though significant, play weaker roles. This underscores the need for mentoring, leadership encouragement, and collaborative structures to sustain a strong research culture in elementary schools.

DISCUSSION

Demographic Profile

The demographic profile of the teacher-respondents revealed diversity in age, years of experience, and educational attainment. Younger teachers tended to show lower levels of engagement in action research, while mid-career teachers demonstrated higher participation, particularly those with 11–15 years of service who were more active in conducting and presenting research. Teachers holding advanced degrees such as master's or doctoral units also exhibited stronger involvement, often pursuing higher-level training and producing research outputs. These findings suggest that professional maturity, academic preparation, and rank significantly influence research engagement, whereas demographic factors such as sex did not yield notable differences. Overall, the profile highlights that teachers with greater experience and higher qualifications are more likely to contribute meaningfully to the development of a sustainable research culture in elementary schools.

Level of Engagement

The findings revealed that overall engagement in action research among elementary teachers was generally low. Only a small number of teachers had conducted research projects, and even fewer had successfully published their outputs. This limited participation indicates that research activities were not yet embedded into teachers' professional identity but rather pursued sporadically. Moreover, engagement was often compliance-driven**,** with teachers conducting research primarily to meet requirements under the Result-Based Performance Management System (RPMS) and the Philippine Professional Standards for Teachers (PPST)**.** Such compliance-oriented motivations suggest that while research is recognized as part of professional accountability, it is not consistently embraced as a meaningful. tool for instructional improvement and innovation.

Perceptions of Research Culture

Teachers identified both enabling and hindering factors that shaped their engagement in action research. On the teacher-related level**,** many reported limited research skills, low confidence, and persistent time constraints, which restricted their ability to conduct and complete projects. At the school-related level**,** weak mentoring structures and inconsistent leadership support were highlighted as barriers, leaving teachers without sustained guidance or encouragement to pursue inquiry. Meanwhile, contextual variables such as policy gaps, socio-economic conditions, and limited access to ICT facilities further compounded these challenges, creating disparities in opportunities for research participation. Collectively, these findings underscore that teacher engagement in action research is influenced not only by individual capacity but also by institutional and contextual environments, pointing to the need for systemic interventions that address skills, support, and resources simultaneously.

Significant Differences and Correlations

The analysis revealed that engagement in action research differed significantly when teachers were grouped according to age, years of experience, educational attainment, and position, indicating that professional maturity and academic preparation strongly influenced participation. In contrast, no significant difference was observed when respondents were grouped by sex, suggesting that gender was not a determining factor in research involvement. Furthermore, correlation analysis showed weak but statistically significant relationships between contextual factors—such as policy environment, socio-economic conditions, and technological access—and research activities. These findings highlight that while demographic and professional variables play a substantial role in shaping engagement, contextual influences also exert measurable, though limited, effects on teachers' ability to participate in and sustain action research.

The qualitative strand of the study revealed five recurring themes that reinforced the quantitative findings and highlighted systemic barriers to building a sustainable research culture. Teachers consistently pointed to structural time constraints, noting that heavy workloads and administrative responsibilities left little room for meaningful inquiry. A compliance-driven mindset also emerged, with many teachers viewing research

primarily as a requirement for RPMS–PPST indicators rather than as a tool for authentic classroom improvement. In addition**,** limited skills and training were evident, as teachers expressed low confidence in methodology, analysis, and documentation. The absence of consistent mentoring and leadership support underscored the theme of insufficient institutional support, which weakened the sustainability of research Finally, low collaboration and negative attitudes were reported, with teachers often working in isolation and perceiving research as additional paperwork rather than a collective practice. Taken together, these themes illustrate how individual, institutional, and cultural factors converge to hinder teacher engagement, underscoring the need for systemic interventions that address time, skills, support, and collaboration simultaneously.

Integration Summary

The integration of quantitative and qualitative strands offered a holistic view of teachers' engagement in action research. Convergence was evident as both strands highlighted systemic barriers such as workload, compliance-driven practices, limited skills, weak institutional support, and poor collaboration. At the same time, divergence appeared, with quantitative data showing generally positive perceptions of research culture, while qualitative narratives revealed frustration, low confidence, and negative attitudes. These insights directly inform the proposed Work Action Plan, aligning with RPMS–PPST strategies through mentoring, workload management, stronger institutional support, and the promotion of collaborative research practices.

CONCLUSION

The study concludes that the teaching force is largely composed of female, mid-career teachers with MA units, reflecting academic progression but limited advancement in rank. Engagement in action research remains minimal, with most teachers not attending training, conducting, or publishing research, and participation concentrated at the school level. Despite this, perceptions of research culture were highly positive, particularly in school-related support and teacher performance, though confidence and self-efficacy were weaker. Significant differences in engagement were observed across age, experience, educational attainment, and position, but not sex, indicating that professional maturity and qualifications drive participation. Weak but significant correlations between teacher-related, school-related, and contextual factors suggest systemic barriers—heavy workloads, limited mentoring, and compliance-driven practices continue to hinder stronger engagement. Qualitative findings reinforced these challenges, highlighting time constraints, insufficient support, and low collaboration. To address these gaps, a structured Work Action Plan was developed to enhance competence, strengthen institutional support, and foster a sustainable research culture in elementary schools.

RECOMMENDATIONS

To strengthen the research culture and engagement in action research among elementary teachers, the study recommends sustained training and mentoring programs that equip teachers with skills in research design, analysis, and publication, supported by mentoring systems led by Master Teachers. Institutional support must be enhanced through dedicated time, resources, and recognition of research outputs, including de-loading teaching hours to allow teachers to balance instruction and inquiry. Dissemination and collaboration should be promoted via school and district platforms, partnerships with universities, and peer support during LAC sessions. Addressing contextual barriers requires improved ICT facilities, stable internet, and community involvement, alongside continuous mentoring and protected time for novice teachers. A shift from compliance to professional growth is essential, reframing RPMS-PPST requirements to highlight research as a tool for innovation and classroom improvement. Finally, schools should encourage professional advancement through graduate and doctoral studies, embedding research in CPD frameworks and IDPs. These measures form the basis of a comprehensive Work Action Plan to cultivate a sustainable, inclusive, and collaborative research culture in elementary schools.

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