

UNEVEN READINESS FOR CLASSROOM INQUIRY: A COMPETENCE PROFILE OF RESEARCH ENTHUSIASTS IN INFANTA DISTRICT

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ABSTRACT

This article examines the self-reported action research competence of 39 research coordinators and research enthusiasts in Infanta District, Quezon, during School Year 2022-2023. It presents a bounded secondary analysis of the competence component of a locally developed survey. Ten research tasks were rated on a four-point scale and summarized through weighted means. The overall competence mean was 2.14, interpreted as Slightly Competent. Writing a review of related literature was the only task rated Competent ($M = 3.11$). The lowest ratings concerned writing an introduction through the Creating a Research Space model ($M = 1.62$), generating conclusions ($M = 1.81$), interpreting data with literature ($M = 1.88$), and sampling ($M = 1.92$). The profile shows that participants had a relative strength in locating and discussing literature but weaker readiness in framing, methodological reasoning, and evidence-to-claim processes. A four-part professional learning sequence is proposed: research framing, design and sampling, analysis and claim construction, and ethical dissemination. The findings support needs-based training rather than a single general seminar on action research.

Keywords: action research, research competence, teacher-researchers, professional development, Infanta District

INTRODUCTION

Action research positions teachers as systematic investigators of problems that arise in their own classrooms and schools. Its value lies in linking evidence, reflection, and practical improvement rather than treating research as an activity detached from daily teaching. Hine (2013) describes action research as a structured and reflective approach that equips educators to address local needs, while Manfra (2019) emphasizes its role in intentional change in teaching practice. These characteristics make action research especially relevant to school systems seeking locally responsive solutions.

In the Philippines, the Department of Education's Research Management Guidelines call for a stronger research culture and for support mechanisms involving funding, partnerships, capacity building, dissemination, and utilization (Department of Education, 2017). Policy support, however, does not by itself ensure that teachers possess the connected skills needed to move from a classroom concern to a defensible research report. Competence must extend across problem formulation, literature use, research design, sampling, ethics, analysis, interpretation, conclusion writing, and dissemination.

Research in Philippine basic education has repeatedly shown that action research competence is uneven. Cortes, Pineda, and Geverola (2021a) found that professional learning needs vary across action research components and across groups of teachers. Their related validation work also supports treating action research competence as multidimensional rather than as a single writing skill (Cortes, Pineda, & Geverola, 2021b). In Quezon Province, Oestar and Marzo (2022) similarly identified lower competence in data analysis, interpretation, and publication. These findings suggest that a district-level mean is most useful when it is unpacked into specific tasks.

The present article therefore isolates the competence evidence from an existing Infanta District survey. Its purpose is not to claim a new population estimate, but to transform the item-level results into a clear professional learning diagnosis. It asks what participants could already do, where the largest skill gaps appeared, and how training could be sequenced around those gaps.

RELATED LITERATURE

Action research as professional learning

Professional learning through action research is strongest when teachers repeatedly plan, act, observe, analyze, and reflect. Dogan and Kirkgoz (2022) demonstrated how an extended action research program can support self-efficacy and reflective thinking, while Ferencova, Pirohova, Sutakova, and Minova (2025) synthesized evidence that action research can develop both core and transferable professional competences. The implication is that competence grows through guided practice and feedback, not through information delivery alone.

Recent Philippine evidence strengthens this point. Insorio (2026) reported improvement in public school teachers' action research competence through a training design that combined templates, coaching,

and mentoring. Oestar and Marzo (2022) likewise recommended capability building targeted at the lowest-rated skills. Together, these studies support a diagnostic model in which item-level results determine the order and intensity of professional learning.

Competence as an inquiry chain

The ten competencies in the Infanta instrument can be understood as an inquiry chain. The introduction and statement of the problem define the research space; literature provides conceptual and empirical grounding; design and sampling connect questions to evidence; analysis and interpretation turn observations into findings; conclusions and recommendations express warranted claims; and ethics, dissemination, and utilization govern responsible use. A weak link can reduce the quality of the final report even when another link is strong. This chain perspective prevents a high score in one familiar task from masking critical gaps elsewhere.

RESEARCH PURPOSE

This article describes the overall competence level of Infanta District research enthusiasts, ranks the ten measured action research tasks, identifies the strongest and weakest parts of the inquiry chain, and derives a focused professional learning sequence from the observed profile.

METHODOLOGY

Design and analytic boundary

A descriptive quantitative design was used in the source study. The present manuscript is a bounded secondary analysis of its competence subscale only. The challenges subscale and the competence-challenge correlation are reserved for a separate manuscript so that the analysis here remains centered on the structure of research competence.

Participants and sampling

The participants were 39 research coordinators and teachers identified as research enthusiasts in Infanta District, Division of Quezon, during School Year 2022-2023. Purposive sampling was used. Eligibility in the source study required involvement or interest in action research and willingness to participate in a proposed district capacity-building activity. The findings therefore describe this group and are not a probability estimate for all teachers in the district.

Instrument and analysis

The researcher-made instrument contained ten competence statements rated on a four-point scale: 3.26-4.00 Highly Competent, 2.51-3.25 Competent, 1.76-2.50 Slightly Competent, and 1.00-1.75 Not Competent. The complete two-part instrument was dry-run with 20 nonparticipant research enthusiasts and obtained a reported Cronbach's alpha of 0.81. Because no subscale alpha or respondent-level dataset was available, this article uses the reported item weighted means and ranks without additional inferential testing.

RESULTS AND DISCUSSION

Table 1

Self-reported competence in action research tasks (n = 39)

No .	Competence indicator	M	Interpretation	Rank
1	Write a research introduction using the CARS model	1.62	Not Competent	10
2	Construct the statement of the problem logically	2.33	Slightly Competent	2
3	Write the review of related literature and studies	3.11	Competent	1
4	Identify appropriate action research designs	2.18	Slightly Competent	4.5
5	Select a sample from the target population	1.92	Slightly Competent	7
6	Interpret data with support from related literature	1.88	Slightly Competent	8
7	Generate conclusions systematically from findings	1.81	Slightly Competent	9
8	Generate recommendations from findings and conclusions	2.11	Slightly Competent	6
9	Facilitate research dissemination and utilization	2.28	Slightly Competent	3
10	Apply research ethics	2.18	Slightly Competent	4.5
	Overall weighted mean	2.14	Slightly Competent	

An uneven competence profile

The overall weighted mean of 2.14 places the group in the Slightly Competent range. More important than the aggregate is the spread from 1.62 to 3.11. Only the review of related literature reached the Competent range (M = 3.11). Eight tasks were Slightly Competent, and one task was Not Competent. The distribution confirms that the participants were not uniformly unprepared; rather, they possessed a recognizable strength that

was not yet connected to an equally strong process for framing, designing, analyzing, and communicating research.

Relative strength in literature work

Writing the review of related literature ranked first. This may indicate that participants were more familiar with locating, summarizing, or organizing sources than with tasks requiring methodological decisions. Literature competence is valuable, but a review becomes useful only when it clarifies the problem, supports the design, and returns in the interpretation of findings. The low score for interpreting data with related literature ($M = 1.88$) shows that the transfer from source gathering to evidence-based discussion was not yet secure.

Framing and methodological reasoning gaps

The lowest score concerned the Creating a Research Space model for introductions ($M = 1.62$). The result points to a specific genre knowledge gap: participants may recognize relevant studies but have difficulty using them to establish a territory, identify a gap, and occupy a defensible research niche. The statement of the problem was stronger ($M = 2.33$) but remained Slightly Competent. Design ($M = 2.18$) and sampling ($M = 1.92$) also require attention because they determine whether evidence can answer the stated questions.

The evidence-to-claim bottleneck

Three of the four lowest ratings occurred late in the inquiry chain: data interpretation ($M = 1.88$), conclusion generation ($M = 1.81$), and sampling ($M = 1.92$). Recommendations scored somewhat higher ($M = 2.11$), but recommendations cannot be defensible when conclusions are weakly connected to analyzed evidence. Training should therefore use one continuous case from research question to dataset, interpretation, conclusion, and recommendation rather than teaching these sections as isolated writing exercises.

Ethics, dissemination, and utilization

Ethics ($M = 2.18$) and dissemination and utilization ($M = 2.28$) were both Slightly Competent. These tasks are often treated as end-stage requirements, but they should frame the entire project. Ethical planning affects consent, confidentiality, data handling, and reporting. Dissemination and utilization determine whether a completed study informs school improvement. The policy emphasis on evidence use is

therefore best served by embedding these concerns in every training module rather than placing them in a final lecture.

PROPOSED PROFESSIONAL LEARNING SEQUENCE

Table 2

Needs-based sequence derived from the competence profile

Module	Priority content	Performance output
1. Framing the inquiry	CARS moves, problem statements, alignment of purpose and questions	Draft introduction and aligned question set
2. Designing credible evidence	Action research designs, sampling, ethics, and data management	Method map with sampling and ethics plan
3. Building warranted claims	Analysis, literature-supported interpretation, conclusions, and recommendations	Results-to-claim matrix and revised discussion
4. Using and sharing findings	Dissemination formats, utilization planning, peer review, and revision	Complete manuscript and school utilization brief

The sequence begins with the lowest-rated competence but does not end with a workshop on introductions. Each module produces an artifact that becomes part of a complete action research manuscript. Coaching checkpoints should occur between modules, and participants should revise the same project across the sequence. This design reflects evidence that sustained, practice-based professional development is more likely to develop action research capability than a one-time overview (Dogan & Kirkgoz, 2022; Insorio, 2026).

CONCLUSION

Infanta District research enthusiasts displayed partial but uneven readiness for action research. Their relative strength in literature review provides a useful entry point, yet the weakest competencies occurred at crucial transitions: establishing a research space, choosing evidence, interpreting findings, and converting evidence into conclusions. An effective district response should therefore be diagnostic, sequenced, coached, and output-based. The goal is not merely to increase familiarity with research terms, but to help teachers complete a coherent inquiry chain from classroom problem to ethical use of findings.

RECOMMENDATIONS

District planners should use the four-part sequence as a starting framework and administer a comparable competence measure before and after training. Facilitators should prioritize authentic project work, short

demonstrations, guided practice, peer feedback, and scheduled coaching. School heads should protect time for participants to complete module outputs and should connect completed studies to school improvement decisions. Future evaluations should collect respondent-level data, report reliability by subscale, and examine whether competence gains lead to completed, disseminated, and utilized action research.

LIMITATIONS

The findings are based on self-report, purposive sampling, a small district group, and item-level summaries. The reported alpha of 0.81 applies to the complete instrument rather than specifically to the competence subscale. No performance task, manuscript rating, demographic comparison, or raw dataset was available for independent analysis. The results should therefore guide local professional learning design, not be read as a general estimate of teacher competence beyond the participating group.

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