

TRAINING GAPS, COACHING NEEDS, AND ACTION RESEARCH PARTICIPATION: A TIERED CAPACITY-BUILDING MODEL FOR INFANTA DISTRICT

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ABSTRACT

This article analyzes barriers reported by 39 research coordinators and research enthusiasts in Infanta District, Quezon, during School Year 2022-2023 and translates the results into a tiered capacity-building model. Ten challenge statements were rated on a four-point scale. Applying the scale declared in the source instrument, the overall mean of 2.53 is classified as Serious. The highest barriers were insufficient action research training ($M = 3.42$) and reluctance associated with lack of training ($M = 3.31$). Lack of process background ($M = 3.17$), need for coaching ($M = 3.14$), difficulty distinguishing action from basic research ($M = 2.85$), and limited ability to assist colleagues ($M = 2.79$) were also Serious. The reported association between competence and challenges was moderate and positive, $r = .56$; using $n = 39$, the derived two-tailed test gives $p < .001$ and $r^2 = .314$. The direction should not be interpreted causally: more engaged or more competent participants may recognize more barriers. A three-tier model is proposed, combining foundational research literacy, coached manuscript production, and peer research leadership.

Keywords: action research barriers, teacher coaching, research capacity building, professional learning community, Infanta District

INTRODUCTION

Teachers commonly recognize the value of action research while still finding it difficult to complete. Philippine evidence shows that research knowledge, teaching load, time, financial support, writing anxiety, and institutional conditions can shape participation. Ulla, Barrera, and Acompañado (2017) found that teachers viewed research positively but identified knowledge, workload, and financial support as practical obstacles. Tindownen, Guzman, and Macanang (2019) likewise reported difficulties involving literature search, data collection, presentation, publication, time, and inadequate research knowledge.

Barriers are not identical across settings. Bullo, Labastida, and Manlapas (2021) documented lack of time, writing anxiety, additional workload, and difficulty with analysis among teacher-researchers in Masbate. Bialen (2025) later identified workload, resistance to change, sustainability, negative perceptions, and limited conceptual knowledge in a Philippine public school. These patterns indicate that capacity building must begin with local diagnosis instead of assuming that all districts face the same dominant constraint.

The Infanta District dataset offers such a diagnosis. Its barrier items distinguish training and conceptual needs from time, resource, confidence, coaching, and peer-support concerns. The same source also reports a correlation between competence and challenges. Together, these results can guide a capacity-building design that matches support intensity to the barriers participants actually reported.

RELATED LITERATURE

From one-time training to supported participation

A recurring lesson in the literature is that knowledge about research is necessary but insufficient. Toquero (2020) found that realistic opportunities to apply research skills helped develop competence, even as participants struggled with conceptualization and literature review. Vaughan and Burnaford's (2016) review of action research in graduate teacher education similarly shows the importance of inquiry embedded in professional practice. Capacity building should therefore organize participation in the full research process, not simply present the parts of a manuscript.

Coaching, collaboration, and local leadership

Coaching provides a practical response when teachers can begin a project but cannot independently solve methodological or writing problems. Kraft, Blazar, and Hogan's (2018) meta-analysis found positive average effects of teacher coaching on instruction, while also warning that effectiveness can decline as programs scale. In action research settings, Johannesson (2022) showed that professional learning communities can develop a shared repertoire for inquiry, but that learning goals and local improvement work must be aligned. Vedder-Weiss, Lefstein, Segal, and Pollak (2020) further demonstrate that building district capacity requires careful attention to practitioner leadership and program integrity.

These studies support a tiered approach. Foundational sessions can address common conceptual gaps; coached production can respond to project-specific needs; and a smaller peer-leadership tier can prepare experienced participants to support colleagues. The model distributes expertise while avoiding the expectation that one district coordinator must provide all technical assistance.

RESEARCH OBJECTIVES

The article identifies and ranks the barriers reported by Infanta District research enthusiasts, checks the overall interpretation against the instrument's declared cutoffs, examines the magnitude and direction of the reported competence-challenge association, and proposes a tiered capacity-building model responsive to the local evidence.

METHODOLOGY

Design, participants, and instrument

The source study used a descriptive quantitative design and purposive sampling. Participants were 39 research coordinators and teachers identified as research enthusiasts in Infanta District during School Year 2022-2023. The researcher-made questionnaire contained ten competence items and ten challenge items. A dry run with 20 nonparticipant research enthusiasts produced a reported Cronbach's alpha of 0.81 for the complete instrument.

Scoring and analytic procedures

Challenge items used the following declared cutoffs: 3.26-4.00 Very Serious, 2.51-3.25 Serious, 1.76-2.50 Slightly Serious, and 1.00-1.75 Not a Challenge. Item means and ranks were reproduced from the source tables. The overall mean was checked against these cutoffs. The source reported Pearson $r = .56$ for competence and challenges. Because the respondent-level pairs were unavailable, the present article did not recompute r ; it derived the conventional t test from the reported coefficient and $n = 39$, yielding $t(37) = 4.11$, two-tailed $p = .00021$, and $r^2 = .314$.

Data provenance and interpretation

This manuscript is a bounded secondary analysis of the challenge subscale and reported association. The competence item profile is addressed in a separate manuscript. Since both variables are self-reported and cross-sectional, the coefficient is interpreted as association only. No

causal claim is made about whether competence produces challenges or challenges reduce competence.

RESULTS AND DISCUSSION

Table 1

Barriers to conducting action research (n = 39)

No	Barrier indicator	M	Interpretation	Rank
1	Insufficient training in action research	3.42	Very Serious	1
2	Lack of training creates reluctance to conduct action research	3.31	Very Serious	2
3	Difficulty distinguishing action research from basic research	2.85	Serious	5
4	Need for coaching or technical assistance	3.14	Serious	4
5	Limited time because of ancillary school duties	1.68	Not a Challenge	8.5
6	Action research is not perceived as a personal strength	1.72	Not a Challenge	7
7	Inability to provide technical assistance to colleagues	2.79	Serious	6
8	Lack of background in the action research process	3.17	Serious	3
9	Insufficient resources to complete a research paper	1.68	Not a Challenge	8.5
10	Hesitation caused by expectations of extensive technical assistance	1.56	Not a Challenge	10
	Overall weighted mean	2.53	Serious	

Training is the dominant barrier

The two highest-rated items were insufficient action research training (M = 3.42) and reluctance associated with lack of training (M = 3.31). Both fall in the Very Serious range. The pairing is important: the reported problem is not only absence of training opportunities, but also a participation consequence. When teachers believe they lack preparation, beginning a project becomes less likely. A district response must therefore build both procedural knowledge and early confidence through achievable outputs.

Process knowledge and coaching form a second cluster

Four barriers were Serious: lack of background in the action research process (M = 3.17), need for coaching or technical assistance (M = 3.14), difficulty distinguishing action research from basic research (M = 2.85),

and inability to assist colleagues ($M = 2.79$). These results describe a support chain problem. Participants need a clear process model, access to project-specific coaching, and enough mastery to help peers. General orientation can address the first distinction, but coaching and peer-leader preparation require repeated practice with real manuscripts.

Time and resources were not the leading local constraints

Limited time due to ancillary duties and insufficient resources both received $M = 1.68$, within Not a Challenge. This pattern differs from studies in which workload and time dominated (Bullo et al., 2021; Tindowen et al., 2019). The difference should not be used to dismiss workload or resource concerns; the items are self-reported and context-specific. It does show, however, that Infanta participants assigned greater urgency to training, process knowledge, and coaching. Local funds and schedules should reflect that ordering.

Correction of the overall verbal interpretation

The source narrative described the overall mean of 2.53 as Slightly Serious. Under the cutoff table printed in the same instrument, however, 2.53 belongs to the 2.51-3.25 Serious interval. This article follows the declared numeric scale and reports the overall challenge level as Serious. Making the rule explicit improves internal consistency and gives decision-makers an interpretation aligned with the instrument.

Table 2

Reported association between competence and challenges

Variables	r	t(37)	Two-tailed p	r ²
Competence and challenge scores	.56	4.11	< .001	.314

A moderate positive relationship requires cautious interpretation

The reported r of .56 represents a moderate positive association and corresponds to about 31.4% shared variance. The positive sign matters. If higher challenge scores indicate more serious barriers, the result does not support a simple claim that lower competence automatically creates more challenges. One plausible interpretation is that participants with greater competence or deeper research engagement recognize more technical demands. Another is that both scales partly reflect involvement in research activity. Without raw data, scale diagnostics, or temporal evidence, these explanations cannot be tested. The appropriate conclusion is association, not direction or causation.

A TIERED CAPACITY-BUILDING MODEL

Table 3

Three tiers of district support

Tier	Participants	Core support	Evidence of completion
Tier 1: Foundational literacy	All interested participants	Action versus basic research, inquiry cycle, problem framing, design overview, ethics	Concept note and aligned research questions
Tier 2: Coached production	Participants with active projects	Scheduled clinics on methods, tools, analysis, interpretation, and writing	Complete manuscript with revision log
Tier 3: Peer research leadership	Selected completers and coordinators	Coaching practice, feedback protocols, ethics escalation, dissemination and utilization	Peer-coaching portfolio and school research forum

Tier 1 directly addresses the two very serious training barriers and the serious lack of process background. Tier 2 answers the need for coaching by giving each active project scheduled, bounded technical assistance. Tier 3 responds to the limited ability to support colleagues and reduces dependence on a single expert. Movement between tiers should be based on completed artifacts rather than attendance alone.

Implementation and evaluation

A district cycle can begin with a short diagnostic and orientation, continue through manuscript clinics, and end with peer review, dissemination, and utilization planning. Evaluation should track more than satisfaction. Useful indicators include pre-post competence scores, the proportion of concept notes that become approved projects, manuscript completion and revision rates, coaching response time, ethical compliance, dissemination events, and documented use of findings in school decisions. Because large-scale coaching can lose intensity (Kraft et al., 2018), caseloads and contact frequency should be monitored.

Professional learning communities can support continuity between formal sessions. Johannesson (2022) warns, however, that action research practice and local school improvement goals must be aligned. Each school team should therefore name a concrete improvement problem, maintain a shared project calendar, and use common feedback protocols. District leaders should preserve room for local judgment while maintaining minimum standards for ethics, evidence, and reporting, a balance also highlighted by Vedder-Weiss et al. (2020).

CONCLUSION

The central obstacle reported by Infanta District research enthusiasts was not a generalized shortage of time or resources. It was a connected set of training, process knowledge, coaching, and peer-support needs. The overall challenge mean is Serious when interpreted with the instrument's stated cutoffs. The moderate positive competence-challenge association further shows that barriers should not be explained through a simple deficit model. A tiered system can respond more precisely by giving all participants a common foundation, active researchers sustained coaching, and selected completers preparation as peer research leaders.

RECOMMENDATIONS

Infanta District should pilot the three-tier model with one cohort and document participation, completion, coaching intensity, and research utilization. School heads should identify authentic improvement problems and protect agreed project milestones. District facilitators should use common templates and feedback criteria while preserving methodological choices appropriate to each problem. Future research should retain raw respondent-level data, verify subscale reliability, examine whether the positive association persists after controlling for prior research experience, and evaluate whether coached projects improve classroom or school outcomes.

LIMITATIONS

The study relies on self-report from a purposively selected group of 39 participants. The source provides a reliability coefficient for the complete questionnaire but not separately for the challenge subscale. The correlation test in this article is derived from the reported r and sample size because raw paired scores were not available. No causal ordering can be established, and the ranking of barriers should not be generalized beyond the participating context without replication.

REFERENCES

- Bialen, V. B. (2025). Teachers' motivations, challenges and difficulties in action research: A narrative study. *Journal of Interdisciplinary Perspectives*, 3(2), 382-391. <https://doi.org/10.69569/jip.2024.0693>
- Bullo, M. M., Labastida, R. T., & Manlapas, C. C. (2021). Challenges and difficulties encountered by teachers in the conduct of educational research: Basis for teachers' enhancement program. *International Journal of Research Studies in Education*, 10(13), 67-75. <https://doi.org/10.5861/ijrse.2021.a044>
- Johannesson, P. (2022). Development of professional learning communities through action research: Understanding professional learning in practice. *Educational Action Research*, 30(3), 411-426. <https://doi.org/10.1080/09650792.2020.1854100>

- Kraft, M. A., Blazar, D., & Hogan, D. (2018). The effect of teacher coaching on instruction and achievement: A meta-analysis of the causal evidence. *Review of Educational Research*, 88(4), 547-588. <https://doi.org/10.3102/0034654318759268>
- Tindowen, D. J., Guzman, J., & Macanang, D. (2019). Teachers' conception and difficulties in doing action research. *Universal Journal of Educational Research*, 7(8), 1787-1794. <https://doi.org/10.13189/ujer.2019.070817>
- Toquero, C. M. D. (2020). Real-world: Preservice teachers' research competence and research difficulties in action research. *Journal of Applied Research in Higher Education*, 13(1), 126-148. <https://doi.org/10.1108/JARHE-03-2019-0060>
- Ulla, M. B., Barrera, K. B., & Acompañado, M. M. (2017). Philippine classroom teachers as researchers: Teachers' perceptions, motivations, and challenges. *Australian Journal of Teacher Education*, 42(11), 52-64. <https://doi.org/10.14221/ajte.2017v42n11.4>
- Vaughan, M., & Burnaford, G. (2016). Action research in graduate teacher education: A review of the literature 2000-2015. *Educational Action Research*, 24(2), 280-299. <https://doi.org/10.1080/09650792.2015.1062408>
- Vedder-Weiss, D., Lefstein, A., Segal, A., & Pollak, I. (2020). Dilemmas of leadership and capacity building in a research-practice partnership. *Teachers College Record*, 122(9). <https://doi.org/10.1177/016146812012200914>