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The Impact of the Teacher Training Programs on the Educational Outcomes in the Public Elementary Schools in the Division of Albay

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ABSTRACT

The study examined teacher training implementation, perceived educational outcomes, constraints, and adopted solutions in public elementary schools in the Division of Albay during School Year 2025–2026. A descriptive-evaluative-correlational design involved 215 school heads and a researcher-made questionnaire. Analyses used weighted means, frequencies, percentages, ranks, and Kendall's coefficient of concordance with chi-square tests at the 0.05 significance level. Implementation indicators were classified as Very Much Implemented, and educational outcome indicators as Very Much Evident. Significant rank-order agreement was reported for five implementation domains; environmental education and hands-on STEM education were exceptions. Agreement in perceived outcomes was significant except for accountability. Funding, time, and facilities were rated Challenging, resistance to change Fairly Challenging, and lack of qualified trainers Not at All. Adopted solutions received mixed classifications. A training design was reported as developed from the findings, without evidence of its evaluation. The findings support attention to implementation conditions and targeted professional support. They represent school-head ratings and rank-order agreement rather than a demonstrated causal impact on learner outcomes.

1. Introduction

Teacher training is an organizational investment whose value depends on how professional learning is translated into classroom practice. Participation in a workshop and improvement in an educational outcome are distinct events. Training may supply knowledge, opportunities for rehearsal, or support for instructional decisions, but its educational contribution also depends on implementation conditions. A study of training therefore needs to examine both the practices through which programs are delivered and the conditions that may sustain or restrict their use.

Darling-Hammond et al. (2017) identify content focus, active learning, collaboration, modeling, coaching, feedback, reflection, and sustained duration as recurring features of effective professional development. This literature directs attention beyond attendance toward opportunities to apply and refine teaching practices. In the Philippine setting, the Learning Action Cell policy establishes collaborative professional learning as a school-based strategy for improving teaching and learning (Department of Education, 2016). These perspectives provide a rationale for examining implementation, perceived outcomes, constraints, and adopted responses together.

The study examined teacher training in public elementary schools in the Division of Albay. Its implementation domains covered technology integration, curriculum development, classroom management, assessment and evaluation, creative teaching, environmental education, and hands-on STEM education. Its outcome domains included assessment, autonomy, accountability, attention to teachers, early childhood development, and culture. This breadth permits consideration of how respondents viewed training across both instructional and institutional concerns. It does not make the domains interchangeable or establish that all were measured with equal validity. The study addressed the extent of implementation, the perceived educational outcomes associated with training, the constraints faced by school heads, and the solutions adopted. It also examined agreement in the rank orders of these aspects and used the findings as the basis for a training design. The distinction between level and agreement is central: a high mean describes a favorable rating, whereas concordance concerns similarity in rankings. Neither statistic, by itself, estimates the causal effect of training on learner achievement.

2. Methods

2.1 Research design and scope

The study used a descriptive-evaluative-correlational research design in public elementary schools in the Division of Albay. The stated study period was School Year 2025–2026.

The study assessed reported practices and perceived outcomes through questionnaire responses. Allocation to an intervention, a comparison condition, and repeated outcome measurement were not reported. The findings are interpreted as descriptive evaluations and rank-order analyses; the design label alone does not establish a tested relationship or a causal effect.

2.2 Participants and setting

The study involved 215 school heads in public elementary schools in the Division of Albay. The distribution of respondents across schools and the composition of groups used for the ranking analysis were not reported.

The sampling frame, selection procedure, eligibility criteria, number invited, and response rate were not specified. Consequently,

the representativeness of the respondents and the extent to which their judgments describe all schools in the setting cannot be established. No unreported school-level or respondent-group sample sizes were inferred.

2.3 Instrument and measures

The main data-gathering instrument was a researcher-made questionnaire. It assessed the domains presented in the Results, using indicator-level weighted means and verbal classifications. The response anchors, full scoring rules, interpretation cutoffs, validation procedures, pilot testing and reliability estimates were not reported. Category labels are therefore presented as the study's classifications rather than assigned from an assumed rating scale.

The unit represented in each descriptive table is the stated questionnaire indicator. Reported item means are retained without calculating new domain composites. Duplicate statements remain separate reported entries, and an unreported item value is identified as such where applicable. The ratings do not constitute independently scored learner assessments or administrative measures of school performance.

2.4 Data collection and analysis

Questionnaire administration was the stated data-collection approach. The administration mode, collection dates, instructions to respondents, procedures for incomplete responses, and evidence used by raters were not specified. Ethics review, institutional permission, consent and confidentiality procedures were not reported; no approval or consent process is asserted.

The reported analyses were weighted means, frequency counts, percentages, ranks, and Kendall's coefficient of concordance (W) with corresponding chi-square tests. The significance level was 0.05. The tables retain the reported W values, chi-square values and probability thresholds; exact probabilities were not inferred from inequalities. The group-level ranks, degrees of freedom, tie adjustments and statistical software were not specified.

Kendall's W describes concordance in rankings. The reported significance decisions address agreement in indicator orderings; they do not test causal effects, equality of mean ratings, or the relationship between strategy use and outcomes. No direct strategy–outcome correlation coefficient was reported. Nonsignificant concordance is not interpreted as evidence that an activity was unused or that a learner skill was low.

3. Results

The tables present the reported findings by domain, with interpretation immediately after each presentation. Item statements and values remain in their reported order. Uniform verbal classifications appear in table notes; mixed classifications are displayed by item. No missing numerical results or composite scores have been imputed.

Table 1. Training implementation in Technology Integration in Teaching

Indicator	Weighted mean
The program is implemented via continuous professional development using webinars, online courses, and e-learning platforms	4.95
The program is implemented through adaptation of instructional materials for ICT-assisted and blended learning environments	4.93
The program is implemented via mentoring and coaching initiatives that sustain effective technology integration practices	4.93
The program is implemented by introducing emerging technologies such as AI, AR/VR, and gamification into teaching strategies	4.91
The program is implemented through productivity tool training (e.g., spreadsheets, presentations, databases) for classroom application	4.90
The program is implemented through ICT skills training that equips teachers with practical computer literacy	4.86
The program is implemented by integrating learning management systems (LMS) into teacher professional development	4.86
The program is implemented via workshops that train teachers to use multimedia resources in lesson delivery	4.86
The program is implemented by promoting digital citizenship modules to guide teachers in responsible technology use	4.85
the program is implemented through digital assessment training that enables teachers to design and deliver online feedback	4.85

Note. All reported indicators were classified as "Very Much Implemented."

Table 1 shows reported item means from 4.85 to 4.95. The prominence of continuing digital professional learning suggests that technology integration was viewed as an ongoing process. Relatively lower ratings for digital assessment and citizenship identify areas for closer review within an otherwise favorable profile. The distinction matters because access to platforms does not demonstrate that teachers can use assessment evidence or guide responsible participation.

Table 2. Training implementation in Curriculum Development Workshops

Indicator	Weighted mean
The program is implemented by incorporating research-based practices into curriculum development workshops	4.92
The program is implemented via orientation seminars that introduce updates in national curriculum frameworks	4.92
The program is implemented through monitoring and evaluation sessions to assess the effectiveness of curriculum revisions	4.90
The program is implemented through capacity-building activities that strengthen teachers' skills in instructional planning and mapping	4.87
The program is implemented by integrating subject specialists to provide technical assistance in curriculum design	4.86
The program is implemented through workshops that train teachers to design and revise curriculum guides aligned with DepEd standards	4.86
The program is implemented by engaging teachers in collaborative sessions to contextualize curriculum for local needs	4.86
The program is implemented via hands-on training on developing lesson exemplars, modules, and instructional materials	4.85
The program is implemented by aligning workshop outputs with school improvement plans and division-level priorities	4.83
the program is implemented through mentoring and coaching that guide teachers in applying curriculum innovations	4.76

Note. All reported indicators were classified as "Very Much Implemented."

Table 2 shows reported item means from 4.76 to 4.92. Research-informed content and curriculum orientation received particularly favorable judgments. The lower position of mentoring suggests a relative gap between learning about curriculum changes and receiving support while applying them. A useful follow-up would examine whether workshop products inform actual lessons and whether coaching addresses difficulties encountered after the workshop.

Table 3. Training implementation in Classroom Management Techniques

Indicator	Weighted mean
The program is implemented through capacity-building activities that strengthen teachers' ability to manage diverse learner behaviors	4.94
The program is implemented through role-playing and simulation activities that allow teachers to practice real-life classroom scenarios	4.91
The program is implemented by providing teachers with tools for conflict resolution and peer mediation	4.90
The program is implemented through training sessions that equip teachers with effective strategies for maintaining discipline and order	4.85
The program is implemented by integrating positive discipline approaches into classroom practices	4.85
The program is implemented via workshops that develop teachers' skills in establishing clear classroom rules and routines	4.84
The program is implemented through monitoring and evaluation mechanisms that assess the effectiveness of classroom management strategies	4.83
The program is implemented through mentoring and coaching that guide teachers in handling disruptive behavior constructively	4.83
The program is implemented via seminars that emphasize learner-centered classroom management techniques	4.83
the program is implemented by incorporating classroom management modules into professional development programs	4.76

Note. All reported indicators were classified as "Very Much Implemented."

Table 3 shows reported item means from 4.76 to 4.94. The ratings emphasize managing diverse behavior and rehearsing classroom situations. This pattern points toward practical rather than purely informational support. The comparatively lower module-integration rating suggests that sustained incorporation into professional development merits attention; it does not mean that classroom management itself was weak.

Table 4. Training implementation in Assessment and Evaluation Methods

Indicator	Weighted mean
The program is carried out through training sessions that equip teachers with skills to design valid and reliable assessment tools	4.74
The program is delivered via workshops that develop teacher capacity in creating performance-based and authentic assessments	4.65
The program is monitored through evaluation mechanisms that track the effectiveness of assessment practices in improving learner outcomes	4.65
The program is advanced by providing strategies for conducting differentiated assessments to address diverse learner needs	4.64
The program is strengthened by integrating assessment modules into professional development programs for continuous teacher growth	4.64
The program is enriched through role-playing and simulation activities that allow teachers to practice administering standardized and alternative assessments	4.63
The program is operationalized by utilizing digital platforms for administering, recording, and analyzing learner assessments	4.63
The program is reinforced through mentoring and coaching that guide teachers in interpreting assessment results for instructional improvement	4.63
The program is facilitated via seminars that emphasize alignment of assessment practices with curriculum standards and learning competencies	4.62
the program is conducted through capacity-building activities that strengthen teachers' ability to use formative and summative evaluation techniques	4.61

Note. All reported indicators were classified as "Very Much Implemented."

Table 4 shows reported item means from 4.61 to 4.74. Instrument design received the strongest rating within this domain, while formative and summative evaluation techniques occupied the lower end. These tasks are complementary: producing an assessment tool is distinct from using its results to adapt instruction. The findings therefore invite examination of how assessment training is enacted, without establishing tool validity or improved achievement.

Table 5. Training implementation in Creative Teaching Approaches

Indicator	Weighted mean
The program is facilitated via seminars that highlight differentiated instruction and inclusive teaching practices	4.91
The program is monitored through evaluation mechanisms that assess the effectiveness of creative teaching approaches in enhancing learner engagement	4.89
The program is reinforced through mentoring and coaching that guide teachers in adopting creative pedagogical strategies	4.89
The program is carried out through training sessions that encourage teachers to design innovative and learner-centered lessons	4.88
The program is strengthened by integrating creative modules into professional development programs	4.88
The program is delivered via workshops that promote the use of arts, music, and drama in teaching	4.87
The program is conducted through capacity-building activities that strengthen teachers' ability to apply project-based learning	4.87
The program is operationalized by integrating storytelling and role-playing into classroom instruction	4.86
The program is advanced by providing strategies for gamification and interactive learning activities	4.86
the program is enriched through collaborative teaching approaches such as team-teaching and peer learning	4.86

Note. All reported indicators were classified as "Very Much Implemented."

Table 5 shows reported item means from 4.86 to 4.91. Differentiated and inclusive instruction was prominent within the creative-teaching profile. Storytelling, gamification and collaboration also received favorable ratings. This breadth suggests that creativity was operationalized through varied instructional approaches, rather than a single technique. Their relative ordering does not identify which approach is most effective for a particular learning objective.

Table 6. Training implementation in Environmental Education and Sustainability

Indicator	Weighted mean
The program is implemented by integrating environmental modules into professional development programs for continuous teacher growth	4.88
The program is implemented through monitoring and evaluation mechanisms that assess the effectiveness of environmental education in promoting sustainability among learners	4.88
The program is implemented through mentoring and coaching that guide teachers in implementing school-based sustainability projects	4.88
The program is implemented through training sessions that equip teachers with strategies for integrating environmental concepts into lessons	4.87
The program is implemented through capacity-building activities that strengthen teacher competence in climate change education and disaster risk reduction	4.87
The program is implemented by integrating environmental themes into curriculum guides, lesson exemplars, and instructional materials	4.87
The program is implemented via seminars that highlight biodiversity conservation, ecological balance, and sustainable development goals (SDGs)	4.86
The program is implemented by providing strategies for experiential learning activities such as gardening, tree planting, and eco-camps	4.86
The program is implemented via workshops that promote sustainable practices such as waste segregation, recycling, and energy conservation in schools	4.86
the program is implemented through partnerships with local government units, NGOs, and community stakeholders for environmental initiatives	4.85

Note. All reported indicators were classified as “Very Much Implemented.”

Table 6 shows reported item means from 4.85 to 4.88. The closely grouped ratings portray environmental education as integrated across modules, monitoring and mentoring. Partnerships occupied the lower end of this narrow profile, suggesting that external coordination may warrant review. The reported nonsignificant concordance later in the analysis should not be mistaken for low implementation of these activities.

Table 7. Training implementation in Hands-On STEM Education

Indicator	Weighted mean
The program is implemented through training sessions that equip teachers with strategies for experiential, inquiry-based STEM learning	4.87
The program is implemented by integrating STEM modules into professional development programs for continuous teacher growth	4.77
The program is implemented via workshops that provide hands-on activities in science experiments, engineering design, and technology applications	4.76
The program is implemented via seminars that highlight interdisciplinary approaches linking science, technology, engineering, and mathematics	4.76
The program is implemented through collaborative learning activities such as group experiments, peer-led projects, and STEM fairs	4.76
The program is implemented through monitoring and evaluation mechanisms that assess the effectiveness of hands-on STEM activities in enhancing learner outcomes	4.76
The program is implemented through capacity-building activities that strengthen teacher competence in project-based and problem-solving approaches	4.75
The program is implemented by integrating laboratory work and maker-space activities into classroom instruction	4.75

Indicator	Weighted mean
The program is implemented through mentoring and coaching that guide teachers in facilitating hands-on STEM projects	4.75
The program is implemented via seminars that highlight interdisciplinary approaches linking science, technology, engineering, and mathematics	4.75
the program is implemented by providing strategies for robotics, coding, and engineering design challenges	4.75

Note. All reported indicators were classified as "Very Much Implemented."

Table 7 shows reported item means from 4.75 to 4.87. Experiential and inquiry-based training led the reported STEM profile. Several other approaches shared very similar ratings, limiting differentiation among them. The repeated interdisciplinary-seminar statement is retained with both values, so the table cannot establish a clean inventory of unique training components. Actual activities and their follow-up would need documentation.

Table 8. Rank-order agreement for teacher training implementation

Domain	Kendall's W	Chi-square	Reported probability
Technology Integration in Teaching	0.86	23.22	$p<0.01$
Curriculum Development Workshops	0.88	23.76	$p<0.005$
Classroom Management Techniques	0.88	23.76	$p<0.005$
Assessment and Evaluation Methods	0.89	24.03	$p<0.005$
Creative Teaching Approaches	0.78	21.06	$p<0.025$
Environmental Education and Sustainability	0.58	15.66	$p>0.05$
Hands-On STEM Education	0.61	16.47	$p>0.05$

Note. Significance level = 0.05. Numerical strings and probability notation are retained as reported; no p-values were recalculated.

Table 8 addresses the research question on rank-order agreement. Significant agreement was reported for technology integration, curriculum workshops, classroom management, assessment and creative teaching. Environmental education and hands-on STEM were reported as nonsignificant. The distinction concerns how indicators were ordered, not whether programs were implemented. The latter two domains were still favorably rated, so their results call for examination of differing priorities rather than an assumption of inadequate provision.

Table 9. Perceived educational outcomes in Assessment

Indicator	Weighted mean
The program enhances teachers' ability to design valid and reliable assessment tools that improve learner performance measurement	4.82
The program improves alignment of classroom assessments with curriculum standards and learning competencies	4.86
The program develops teacher skills in creating performance-based and authentic assessments that foster critical thinking	4.86
The program strengthens teacher competence in applying formative and summative evaluation methods that support continuous learning	4.75
The program increases teacher confidence in using digital platforms for administering and analyzing learner assessments	4.75
The program builds teacher capacity to interpret assessment results for instructional improvement and remediation	4.73
The program integrates assessment innovations such as rubrics, portfolios, and project-based evaluations that enrich learning outcomes	4.71
The program establishes monitoring and evaluation mechanisms that ensure assessment practices contribute to overall educational quality	4.71
The program equips teachers to provide timely and constructive feedback that enhances student achievement	4.67
the program promotes differentiated assessment strategies that address diverse learner needs and abilities	4.67

Note. All reported indicators were classified as "Very Much Evident."

Table 9 shows reported item means from 4.67 to 4.86. The assessment outcomes concern teachers' practices and confidence as well as learner-related intentions. The favorable profile is therefore most directly a report of perceived assessment capacity. Lower ratings for timely feedback and differentiation identify relative priorities for follow-up, but the study does not provide scored assessment products or learner achievement data.

Table 10. Perceived educational outcomes in Autonomy

Indicator	Weighted mean
The program integrates assessment innovations such as rubrics, portfolios, and project-based evaluations that enrich learning outcomes	4.81
The program promotes differentiated assessment strategies that address diverse learner needs and abilities	4.77
The program builds teacher capacity to interpret assessment results for instructional improvement and remediation	4.77
The program establishes monitoring and evaluation mechanisms that ensure assessment practices contribute to overall educational quality	4.76
The program strengthens teacher competence in applying formative and summative evaluation methods that support continuous learning	4.73
The program enhances teachers' ability to design valid and reliable assessment tools that improve learner performance measurement	4.72
The program improves alignment of classroom assessments with curriculum standards and learning competencies	4.72
The program develops teacher skills in creating performance-based and authentic assessments that foster critical thinking	4.68
the program equips teachers to provide timely and constructive feedback that enhances learner achievement	4.68

Note. All reported indicators were classified as "Very Much Evident."

Table 10 shows reported item means from 4.68 to 4.81. Although labeled autonomy, the statements principally concern assessment design, interpretation and feedback. The ratings can be interpreted as favorable perceptions of those stated practices, but they cannot securely establish teacher autonomy without a clear construct definition. This content issue should be resolved before the domain is used to justify decisions about professional discretion.

Table 11. Perceived educational outcomes in Accountability

Indicator	Weighted mean
The program builds teacher competence in maintaining accurate records of learner achievement and classroom performance	4.76
The program strengthens teacher accountability by ensuring alignment of instructional practices with DepEd standards and policies	4.76
The program enhances transparency in reporting learner progress through standardized assessment and documentation practices	4.76
The program promotes accountability in instructional planning by requiring evidence-based lesson design and delivery	4.75
The program cultivates shared accountability through collaborative practices among teachers, school leaders, and stakeholders	4.75
The program improves teacher responsibility in monitoring student performance and addressing learning gaps	4.75
The program fosters accountability mechanisms by requiring teachers to set measurable learning objectives and outcomes	4.75
The program establishes monitoring and evaluation mechanisms that hold teachers accountable for learner outcomes and instructional effectiveness	4.74
The program develops teacher capacity to provide accurate and timely feedback to learners and parents	4.73
the program reinforces professional accountability through adherence to ethical standards and codes of conduct in teaching	4.73

Note. All reported indicators were classified as "Very Much Evident."

Table 11 shows reported item means from 4.73 to 4.76. Record keeping, standards alignment and transparent reporting received favorable ratings. Their narrow spread suggests broad endorsement of formal accountability practices. The domain does not independently verify record accuracy or the use of reports in decision-making. Its later nonsignificant concordance concerns ordering, not the absence of accountability.

Table 12. Perceived educational outcomes in Attention to Teachers

Indicator	Weighted mean
The program builds teacher resilience through mentoring and coaching that provide personalized guidance	4.81
The program increases teacher satisfaction by integrating feedback mechanisms that acknowledge their voices in decision-making	4.78
The program fosters teacher empowerment by giving them opportunities to lead initiatives and innovate in classrooms	4.77
The program ensures teacher-centered monitoring and evaluation mechanisms that highlight their contributions to learner outcomes	4.76
The program improves teacher well-being by addressing professional needs and providing supportive learning environments	4.76
The program promotes teacher retention by offering incentives, rewards, and recognition for effective performance	4.75
The program cultivates collaborative relationships by encouraging peer support and shared accountability among teachers	4.75
The program advances teacher professionalism by embedding teacher-focused modules in continuous development programs	4.75
The program strengthens teacher confidence in delivering quality instruction through sustained support and recognition	4.68
the program enhances teacher motivation by recognizing their contributions and valuing their professional growth	4.67

Note. All reported indicators were classified as “Very Much Evident.”

Table 12 shows reported item means from 4.67 to 4.81. Mentoring and coaching were prominent among perceived teacher-focused outcomes. Motivation and instructional confidence occupied the lower end, suggesting that organizational support and personal responses should be distinguished. The ratings do not establish retention, well-being changes or sustained motivation, since no longitudinal or independently measured indicators are reported.

Table 13. Perceived educational outcomes in Attention to Early Childhood Development

Indicator	Weighted mean
The program strengthens teacher capacity to integrate play-based and experiential learning strategies in early childhood classrooms	4.65
The program fosters teacher innovation in integrating health, nutrition, and wellness concepts into early childhood education	4.64
The program enhances teacher competence in designing age-appropriate learning activities that support holistic child development	4.64
The program fosters teacher innovation in integrating health, nutrition, and wellness concepts into early childhood education	4.64
The program equips teachers to identify developmental milestones and address early learning gaps effectively	4.63
The program builds teacher confidence in engaging parents and caregivers as partners in early childhood education	4.63
The program establishes monitoring and evaluation mechanisms that track the impact of early childhood interventions on learner readiness and long-term outcomes	4.63
3. The program improves teacher skills in fostering socio-emotional growth and positive behavior among young learners	4.62
The program strengthens teacher capacity to integrate play-based and experiential learning strategies in early childhood classrooms	4.61

Indicator	Weighted mean
the program improves teacher skills in fostering socio-emotional growth and positive behavior among young learners	4.61

Note. All reported indicators were classified as "Very Much Evident."

Table 13 shows reported item means from 4.61 to 4.65. The early-childhood profile includes play, developmental needs, family engagement and socio-emotional learning. Several statements recur with identical or different values. These entries are retained, but repetition limits conclusions about the range of unique practices assessed. The table supports a favorable perception of the listed behaviors rather than a validated index of developmental improvement.

Table 14. Perceived educational outcomes in Attention to Culture

Indicator	Weighted mean
The program establishes monitoring and evaluation mechanisms that assess the impact of cultural integration on learner outcomes	4.75
The program advances teacher professionalism by aligning teaching practices with DepEd's cultural education policies	4.74
The program promotes cultural appreciation by encouraging teachers to integrate arts, music, and literature from local traditions	4.71
The program builds teacher competence in facilitating discussions that highlight cultural diversity and global citizenship	4.71
The program enhances teacher competence in integrating local culture, traditions, and values into classroom instruction	4.67
The program develops teacher capacity to use culturally relevant teaching materials that enrich learner engagement	4.67
The program strengthens cultural awareness by equipping teachers to design lessons that reflect diverse learner backgrounds	4.66
The program increases teacher confidence in embedding cultural heritage into curriculum and co-curricular activities	4.66
The program increases teacher confidence in embedding cultural heritage into curriculum and co-curricular activities	4.66
the program improves inclusivity by promoting respect for indigenous knowledge and community practices in education	4.65

Note. All reported indicators were classified as "Very Much Evident."

Table 14 shows reported item means from 4.65 to 4.75. Cultural monitoring and policy alignment were rated favorably, with inclusivity at the lower end of the reported profile. This suggests attention to institutional cultural practices, while leaving open how learners experience them. Repetition of the heritage indicator is preserved and should be clarified before a domain composite is interpreted.

Table 15. Rank-order agreement for the perceived outcome domains

Domain	Kendall's W	Chi-square	Reported probability
Assessment	0.94	25.38	$p<0.005$
Autonomy	0.91	21.84	$p<0.005$
Accountability	0.52	14.04	$p>0.05$
Attention to Teachers	0.76	20.52	$p<0.025$
Attention to Early Childhood Development	0.81	21.87	$p<0.01$
Attention to Culture	0.85	22.95	$p<0.01$

Note. Significance level = 0.05. Numerical strings and probability notation are retained as reported; no p-values were recalculated.

Table 15 addresses the research question on rank-order agreement. Agreement was reported as significant for every perceived-outcome domain except accountability. This pattern distinguishes broadly favorable outcome ratings from consistency in priorities. The accountability result does not establish the absence of reporting or ethical practice; it limits a claim of shared ordering. None of these concordance tests estimates the association between training participation and learner achievement.

Table 16. Constraints in Limited Funding

Indicator	Weighted mean
Inadequate resources to hire expert facilitators, reducing the depth and quality of training content	3.45
Reduced opportunities for partnerships with external institutions and stakeholders, narrowing access to specialized training initiatives	3.44
Inadequate funding for monitoring and evaluation systems, making it difficult to measure training effectiveness and impact	3.44
Lack of investment in digital platforms and technologies, preventing integration of modern, tech-enabled training approaches	3.43
Insufficient funds for external seminars and conferences, restricting teachers' exposure to national and global best practices	3.41
Fragmented financial support, resulting in short-term interventions rather than long-term capacity-building initiatives	3.41
Absence of financial support for incentives and allowances, lowering teacher motivation and participation rates	3.35
Limited provision of instructional materials and training kits, weakening hands-on and experiential learning opportunities	3.23
Insufficient budget allocations, limiting the frequency and continuity of teacher training activities	3.10

Note. All reported indicators were classified as "Challenging."

Table 16 shows reported item means from 3.10 to 3.45. The funding profile emphasizes expertise, partnerships and evaluation support. This suggests that financial constraints extend beyond purchasing training materials to sustaining quality and follow-up. The ratings describe perceived difficulty; they do not quantify budget shortfalls or show that a particular allocation would improve training outcomes.

Table 17. Constraints in Time Constraints

Indicator	Weighted mean
Fragmented time allocation, resulting in short, rushed, or incomplete training interventions	2.63
Heavy teaching loads, reducing teachers' time for professional development activities	2.56
Limited school calendar flexibility, making it difficult to allocate sufficient time for training	2.55
Administrative responsibilities that compete with teachers' participation in training	2.54
Inadequate planning time, preventing teachers from preparing for training sessions effectively	2.54
Insufficient time for follow-up activities, reducing opportunities to apply and sustain training outcomes	2.54
Urgent academic deadlines, such as grading and reporting, which take precedence over training	2.53
Conflicts with co-curricular and extracurricular activities, which occupy teachers' schedules	2.53
Overlapping schedules of teachers, limiting their availability to attend training sessions	2.51

Note. All reported indicators were classified as "Challenging."

Table 17 shows reported item means from 2.51 to 2.63. Fragmented time, teaching loads and calendar flexibility were prominent concerns. These items suggest that the continuity of professional learning may be affected by competing work demands. Scheduling responses should therefore consider time for preparation and application, rather than treating attendance at a short session as sufficient evidence of professional learning.

Table 18. Constraints in Resistance to Change

Indicator	Weighted mean
Passive resistance, where teachers comply superficially but fail to internalize new practices	2.46
Insufficient administrative support, which discourages teachers from embracing reforms	2.43
Skepticism toward training outcomes, with some teachers doubting its relevance or effectiveness	2.43
Fear of increased workload, as teachers perceive new practices as adding extra tasks	2.43

Indicator	Weighted mean
Limited openness to technology integration, with resistance to digital tools and platforms	2.43
Reluctance to adopt new instructional strategies, preferring traditional methods over innovation	2.42
Entrenched habits and routines, making it difficult to shift toward learner-centered approaches	2.40
Lack of confidence in applying new skills, leading to minimal transfer of training into classroom practice	2.40
Generational differences among teachers, where senior staff may resist changes introduced by younger colleagues	2.39

Note. All reported indicators were classified as "Fairly Challenging."

Table 18 shows reported item means from 2.39 to 2.46. Resistance was classified less severely than funding, time or facility constraints. Passive compliance nevertheless occupied the higher end of this domain, suggesting a distinction between attendance and internal adoption. The study does not establish the reasons for reluctance or justify attributing resistance to particular age groups.

Table 19. Constraints in Lack of Qualified Trainers

Indicator	Weighted mean
Trainers' lack of familiarity with local contexts, making training less responsive to school realities	1.47
Insufficiently trained mentors and coaches, reducing personalized support for teachers	1.47
Inadequate exposure to innovative teaching practices, due to trainers' limited experience in modern methodologies	1.46
Dependence on external trainers, whose availability and consistency cannot always be guaranteed	1.46
Lack of trainers skilled in technology integration, preventing effective use of digital tools in training	1.46
Absence of a pool of qualified trainers, resulting in fragmented and inconsistent training initiatives	1.46
Reliance on generalist facilitators, who may lack expertise in specific areas of teacher development	1.45
Insufficient trainers with specialized pedagogical skills, weakening the quality of instructional delivery	1.25
Limited availability of subject-matter experts, reducing the depth and relevance of training content	1.11

Note. All reported indicators were classified as "Not at All."

Table 19 shows reported item means from 1.11 to 1.47. Trainer shortages were classified Not at All, which contrasts with the more substantial resource constraints. This pattern suggests that the availability of expertise was not perceived as the central barrier. It does not establish trainer qualifications objectively, and the lower values should not be reinterpreted as evidence of a severe shortage.

Table 20. Constraints in Inadequate Facilities and Resources

Indicator	Weighted mean
Inadequate access to ICT resources, restricting integration of technology in training delivery	3.47
Inadequate access to multimedia and audio-visual equipment, restricting interactive and engaging training methods	3.42
Outdated equipment and tools, preventing effective demonstration of modern teaching practices	3.41
Poor maintenance of existing facilities, affecting the safety and functionality of training environment	3.40
Limited training venues, reducing the capacity to host large-scale or simultaneous sessions	3.32
Lack of specialized spaces such as libraries, maker labs, or resource centers for teacher development	3.30
Insufficient classroom and laboratory facilities, limiting opportunities for hands-on and experiential learning	3.29
Insufficient teaching aids and instructional materials, reducing the quality of training activities	3.12
Resource shortages, resulting in fragmented or improvised training sessions rather than structured, high-quality programs	3.12

Note. All reported indicators were classified as "Challenging."

Table 20 shows reported item means from 3.12 to 3.47. ICT access and multimedia equipment were prominent facility concerns. The profile suggests that the delivery environment may constrain interactive or technology-supported professional learning even when training itself is highly rated. A facilities inventory would be needed to distinguish availability, maintenance and access conditions across schools.

Table 21. Solutions adopted

Indicator	Weighted mean	Classification
conduct advocacy and orientation campaigns to reduce resistance and highlight training benefits	4.56	Very Much Evident
Streamline administrative tasks and embed training into PLCs to maximize teacher availability	4.38	Much Evident
Schedule flexible training formats (modular, blended, weekend sessions) to address time constraints	4.34	Much Evident
Leverage free online platforms and open resources to reduce costs and widen access	4.27	Much Evident
Develop internal pools of trainers through "train-the-trainer" approaches and peer mentoring	4.25	Much Evident
Forge partnerships with LGUs, NGOs, and universities to co-fund and expand training	4.23	Much Evident
Provide mentoring, coaching, and recognition to build confidence and motivate adoption of new practices	4.10	Much Evident
Implement resource pooling and maintenance strategies across schools to sustain training environments	4.05	Much Evident
Utilize ICT tools and virtual platforms to overcome facility/resource limitations	3.42	Evident
Optimize existing budgets and integrate training into INSET to sustain continuity	2.99	Evident

Note. Verbal classifications are retained as reported.

Table 21 shows reported item means from 2.99 to 4.56. Advocacy was more evident than budget optimization or use of virtual tools. This contrast suggests that encouraging participation and securing the means to sustain training are separate tasks. The mixed categories should inform differentiated planning; a blanket description of all responses as highly evident would conceal the weaker-rated operational solutions.

Table 22. Rank-order agreement for constraints and solutions

Domain	Kendall's W	Chi-square	Reported probability
Limited Funding	0.93	22.32	$p<0.005$
Time Constraints	0.79	18.96	$p<0.01$
Resistance to Change	0.58	13.92	$p>0.05$
Lack of Qualified Trainers	0.61	14.64	$p<0.05$
Inadequate Facilities and Resources	0.82	19.68	$p<0.01$
Solutions Adopted	0.89	24.03	$p<0.005$

Note. Significance level = 0.05. Numerical strings and probability notation are retained as reported; no p-values were recalculated.

Table 22 addresses the research question on rank-order agreement. Agreement was reported as significant for funding, time, trainer availability, facilities and adopted solutions, with resistance to change the exception. Shared ordering of constraints can inform discussion of support priorities, but it does not show equal severity across schools. Similarly, agreement on solutions does not establish their effectiveness. Implementation evidence is needed before a response is treated as a demonstrated remedy.

4. Development output

A training design was reported as crafted from the findings. Its detailed content, implementation and evaluation were not reported. It is therefore treated as a development output rather than a tested intervention.

5. Discussion

The study presents a broadly favorable assessment of training implementation while identifying more differentiated constraints. The coexistence of very high implementation ratings with funding and facility challenges should be interpreted as a feature of respondents' judgments. Schools may report maintaining programs despite constrained resources, or the instruments may capture different aspects of provision. The study does not provide expenditure records, observations, or participation logs that could distinguish these explanations.

The implementation findings connect with professional development literature through their emphasis on coaching, collaboration, lesson design, and applied activities. Darling-Hammond et al. (2017) provide a useful account of these features, but their review does not validate the specific local ratings. A practical implication is to retain professional learning routines while checking whether workshop outputs are used, revised, and supported in classrooms. The Learning Action Cell model offers an institutional setting for collaborative follow-up (Department of Education, 2016).

The agreement tests refine the interpretation of favorable ratings. Nonsignificant concordance in environmental education and hands-on STEM education concerns the ordering of their indicators; it does not establish low implementation. Similarly, the accountability result does not show that accountability was absent. It suggests that priorities within that domain cannot be treated as a uniformly shared ordering on the evidence reported. Training decisions should therefore consider item content and school conditions alongside significance classifications.

The adopted responses also require differentiation. Advocacy received the highest classification, while budget optimization and virtual tools received lower classifications. An overall description of all solutions as Very Much Evident would obscure this variation. The training design should consequently be treated as a proposed product grounded in descriptive findings. Its content, delivery, feasibility, and effects were not evaluated in the reported results; implementation and evaluation remain subsequent tasks.

6. Implications for practice and further research

The study supports using the indicator-level pattern as a starting point for local review. Decisions should connect a stated need with a feasible response and a criterion for judging progress. Relative positions within a favorable profile are not equivalent to measured deficits, and a significant ranking result is not evidence that a proposed policy will work. Recommendations should be implemented with attention to context and evaluated rather than assumed effective.

Further research should use clearly defined outcomes and document how they are measured. Direct performance tasks, observations, or independently recorded school indicators could complement questionnaire ratings. A longitudinal or comparative evaluation could examine change over time, provided the design addresses baseline differences and alternative explanations. These are proposed directions for future work, not procedures undertaken in the study.

7. Conclusion

The study concluded that teacher training programs were Very Much Implemented and their perceived educational outcomes were Very Much Evident. Significant rank-order agreement was reported in most domains, with exceptions for environmental education and hands-on STEM implementation, accountability outcomes, and resistance-to-change constraints. Constraint and solution classifications varied across indicators and should be retained in planning. Sustained professional support, resource coordination, and evaluation of the proposed training design are warranted as recommendations. The findings do not establish a causal impact on educational outcomes.

References

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