Innovativeness as Predictor of Instructional Competence Among Teachers in the Last Mile Schools of Sarangani: Outputs for Intervention

Randy Y. Alcaya [1], Alan A. Maglantay, MMPM [2]
1 − Edsa Integrated School
2 – Sultan Kudarat State University

Abstract

This study explored the relationship between innovativeness and instructional competence among teachers in last-mile schools in Sarangani Province. Using a descriptive-correlational design, data were collected from teachers through adapted and validated survey questionnaires. Descriptive statistics revealed that teachers demonstrated very high levels of creativity, openness, and proactiveness, and high levels of future orientation and risk-taking. Similarly, they exhibited very high instructional competence, particularly in transmitting content, preparing lesson plans, managing classrooms, and providing a conducive learning environment. Inferential analysis showed a strong, positive, and significant relationship between teachers' innovativeness and instructional competence, with future orientation, proactiveness, and openness emerging as the strongest predictors. These findings highlight the importance of cultivating innovative mindsets among teachers to strengthen their instructional practices, especially in resource-challenged environments. The study recommends targeted professional development programs to enhance teachers' creative and proactive capacities, ensuring more dynamic and effective learning experiences for students in last-mile schools.

Keywords: innovativeness, instructional competence, creativity, last-mile schools, Sarangani

INTRODUCTION

The quality of teaching is the cornerstone of an effective educational system, particularly in remote and marginalized communities. Teaching effectiveness, often reflected in instructional competence, heavily depends on a teacher's ability to adapt and innovate in challenging environments (Darling-Hammond, 2020). In the context of "last-mile schools"—institutions characterized by limited resources, geographic

isolation, and infrastructural challenges—teachers' innovativeness becomes even more crucial to ensuring quality education (Rodriguez-Segura & Kim, 2021).

Innovativeness in education is closely linked with creativity, proactiveness, risk-taking, openness, and future orientation, which are necessary for navigating the complexities of modern classrooms (Zhou, 2021). Several theories, including Dewey's Theory of Experiential Learning, Vygotsky's Social Development Theory, Bandura's Social Cognitive Theory, and Gardner's Theory of Multiple Intelligences, emphasize creativity, social collaboration, and adaptability as key factors in effective teaching (Schunk, 2012; Gardner, 2011).

Empirical studies show that teacher innovativeness is positively correlated with instructional practices that foster student engagement, critical thinking, and learning outcomes (Anderson et al., 2022; Avsar, Inandi, & Arslantas, 2021). However, there remains a scarcity of focused studies investigating how innovativeness specifically predicts instructional competence among teachers in marginalized settings like the last-mile schools of Sarangani Province.

Thus, this study sought to determine the level of teachers' innovativeness and instructional competence and investigate the significant relationship between these variables in the last-mile schools of Glan 3 District, Sarangani Province.

Objectives of the Study

Specifically, this study aimed to:

1. Assess the level of teachers' innovativeness in terms of creativity, openness, future orientation, risk-taking, and proactiveness.

2. Determine the level of teachers' instructional competence in curriculum content, transmitting content, lesson planning, classroom management, and creating a conducive learning environment.

3. Examine the significant relationship between teachers' innovativeness and their instructional competence.

4. Propose intervention strategies based on the study's findings.

Hypothesis

Ha: There is a significant relationship between teachers' innovativeness and their

instructional competence in last-mile schools.

METHODOLOGY

This study employed a quantitative, non-experimental, correlational research design to determine the relationship between teachers' innovativeness and instructional competence.

Respondents and Locale

The respondents were all teachers in the last-mile schools of Glan 3 District, Sarangani Province, namely: Lanao Kapanglao Integrated School, Banlas Integrated School, Tangan Integrated School, Flaviano Bartulaba Integrated School, EDSA Integrated School, E. Alegado Integrated School, and Segafu Esgafu Integrated School. Total enumeration was used as the sampling technique.

Research Instruments

The study utilized adapted and validated survey questionnaires as research instruments. Teachers' innovativeness was measured using an instrument adapted from Ruvio, Shoham, Vigoda-Gadot, and Schwabsky (2013), which assessed dimensions such as creativity, openness, future orientation, risk-taking, and proactiveness. Meanwhile, instructional competence was assessed using a tool adapted from Sanchez (2020), focusing on key areas such as curriculum content, transmitting content to learners, lesson planning, classroom management, and providing a conducive learning environment. Both instruments underwent a validation process to ensure their reliability and appropriateness for the target respondents.

Data Gathering Procedure

The data gathering procedure began by securing the necessary permits and approvals from the Schools Division Superintendent and the school heads of the participating institutions. Ethical considerations were strictly observed throughout the process: participation in the study was voluntary, informed consent was obtained from all respondents, and confidentiality of their responses was assured. Data collection was conducted through the in-person administration of the survey questionnaires, during which respondents were properly oriented regarding the purpose of the study, the procedures for answering the questionnaires, and their rights as participants.

Data Analysis

For data analysis, descriptive statistics, specifically the mean and standard deviation, were utilized to assess the levels of teachers' innovativeness and instructional competence. To examine the relationship between the two variables, the Pearson Product-Moment Correlation Coefficient was employed, allowing

for the determination of the strength and direction of the association between innovativeness and instructional competence.

RESULTS

This section presents the findings of the study on the level of teachers' innovativeness and instructional competence in last-mile schools, as well as the relationship between these two variables. Data were analyzed using descriptive and inferential statistics, with results summarized in tables and interpreted accordingly to address the research objectives.

Teachers' Innovativeness in Terms of Creativity

Table 1. Level of Teachers' Innovativeness in Terms of Creativity

Indicators	Mean Ratings	SD	Verbal Description
1. Encourage creativity.	4.68	0.52	Very High
2. I am expected to be a resourceful problem solver.	4.45	0.59	High
3. We are constantly looking to develop and offer new or improved services.	4.59	0.55	Very High
4. I am functioning creatively and respected by the leadership.	4.57	0.53	Very High
5. I am encouraged to use original approaches when dealing with problems in the workplace.	4.50	0.56	Very High
Mean	**4.56**	**0.55**	**Very High**

Table 1 presents the level of teachers' innovativeness in terms of creativity. The overall mean score was 4.56 (SD = 0.55), interpreted as very high. Among the specific indicators, encouraging creativity obtained the highest mean (M = 4.68, SD = 0.52), followed by offering new or improved services (M = 4.59, SD = 0.55) and functioning creatively with respect from leadership (M = 4.57, SD = 0.53). Teachers also strongly agreed that they are encouraged to use original approaches to workplace challenges (M = 4.50, SD = 0.56). Meanwhile, being expected to be resourceful problem-solvers received a high rating (M = 4.45, SD = 0.59).

Teachers' Innovativeness in Terms of Openness

Table 2. Level of Teachers' Innovativeness in Terms of Openness

Indicators	Mean Ratings	SD	Verbal Description
1. I am always moving toward the development of new answers.	4.63	0.51	Very High
2. I am given assistance in developing new ideas.	4.50	0.56	Very high
3. I am open and responsive to changes.	4.70	0.50	Very High
4. I am always searching for fresh, new ways of looking at problems.	4.50	0.56	Very High
Mean	**4.58**	**0.53**	**Very High**

Table 2 presents the teachers' level of innovativeness in terms of openness. The overall mean was 4.58 (SD = 0.53), interpreted as very high. Among the indicators, being "open and responsive to changes" recorded the highest mean (M = 4.70, SD = 0.50), suggesting that teachers are highly receptive to new ideas and practices. The indicators "moving toward the development of new answers" (M = 4.63, SD = 0.51), "being given assistance in developing new ideas" (M = 4.50, SD = 0.56), and "searching for fresh, new ways of looking at problems" (M = 4.50, SD = 0.56) also received very high ratings.

Table 3. Level of Teachers' Innovativeness in terms of Future Orientation

Indicators	Mean Ratings	SD	Verbal Description
1. I establish a realistic set of future goals for itself.	4.47	0.59	High
2. I ensure that all share the same vision of the future.	4.44	0.57	High
3. I am conveyed by a clear sense of future direction by my leaders.	4.36	0.60	High
4. I have a realistic vision of the future.	4.56	0.54	Very High
Mean	**4.46**	**0.57**	**High**

Table 3 presents teachers' innovativeness in terms of future orientation. With the overall mean of 4.46, the teachers have high levels of future orientation. This also means that the teachers agreed that they have future orientation. On the other hand, the teachers strongly agreed that they have a realistic vision of the future. Also, they establish 4.56(0.54) a realistic set of future goals for themselves, and 4.44 (0.57)

ensure that all share the same vision of the future, and 4.36 (0.60) are conveyed by a clear sense of future direction by my leaders.

Table 4. Level of Teachers' Innovativeness in terms of Proactiveness

Indicators	Mean Ratings	SD	Verbal Description
1. I am constantly seeking new opportunities for myself.	4.58	0.53	Very High
2. I take the initiative in an effort to shape the environment to the organization's advantage.	4.42	0.57	High
3. I am often the first to introduce new services.	4.31	0.69	High
4. I usually take the initiative by introducing new administrative techniques.	4.27	0.69	High
Mean	**4.39**	**0.62**	**High**

Table 4 presents the teachers' level of innovativeness in terms of proactiveness. The results show that teachers exhibited a high level of proactiveness, with an overall mean of 4.39 (SD = 0.62). Specifically, teachers "constantly seek new opportunities for themselves," obtaining a very high mean score of 4.58 (SD = 0.53). Meanwhile, taking initiative to shape the environment (M = 4.42, SD = 0.57), being the first to introduce new services (M = 4.31, SD = 0.69), and introducing new administrative techniques (M = 4.27, SD = 0.69) were all rated at a high level.

Teachers' Instructional Competence in Terms of Curriculum Content

Table 5. Level of Teachers' Instructional Competence in Curriculum Content

Indicators	Mean Ratings	SD	Verbal Description
1. I can deliver accurate and updated content using appropriate approaches and strategies.	4.40	0.60	High
2. I can use the integration of language, literacy skills, and values in teaching.	4.56	0.59	Very High
3. I can explain learning goals, instructional procedures, and content clearly and accurately to students.	4.50	0.59	Very High

4. I can link current content with past and future lessons.	4.43	0.62	High
5. I can integrate scholarly works and ideas to enrich the lessons.	4.41	0.61	High
Mean	**4.46**	**0.60**	**High**

Table 5 presents the teachers' level of instructional competence in curriculum content. The overall mean was 4.46 (SD = 0.60), interpreted as high. Among the indicators, the ability to "integrate language, literacy skills, and values in teaching" obtained the highest mean (M = 4.56, SD = 0.59), followed by the ability to "explain learning goals, instructional procedures, and content clearly and accurately to students" (M = 4.50, SD = 0.59), both rated as very high. Meanwhile, delivering accurate and updated content (M = 4.40, SD = 0.60), linking current content with past and future lessons (M = 4.43, SD = 0.62), and integrating scholarly works and ideas (M = 4.41, SD = 0.61) were rated at a high level.

Teachers' Instructional Competence in Terms of Curriculum Content

Table 6. Level of Teachers' Instructional Competence in Transmitting Content

Indicators	Mean Ratings	SD	Verbal Description
1. I present to the class the objectives of the lesson.	4.54	0.60	Very High
2. I activate learner's prior knowledge and motivate them for the lesson.	4.60	0.55	Very High
3. I deliver localized, contextualized, indigenized, culture-based inputs for a proper and correct understanding of concepts.	4.55	0.59	Very High
4. I utilize varied activities to enhance higher order thinking skills (HOTS).	4.44	0.55	High
5. I deliver interactive and cooperative learning activities.	4.56	0.54	Very High
6. I provide clear instruction and arrange activities logically from simple to complex vice – versa.	4.50	0.52	Very High
7. I ask different levels of questions to develop students' HOTS.	4.41	0.57	High
8. I integrate ICT in the lesson.	4.50	0.72	Very High

9. I deliver meaningful connection between the concept learned and their experiences.	4.43	0.57	High
10. I acknowledge and respond to students' diverse learning needs.	4.46	0.57	High
11. I give authentic and meaningful assessment activities.	4.46	0.55	High
Mean	**4.50**	**0.60**	**Very High**

Table 6 shows the level of teachers' instructional competence in terms of curriculum content. The results reveal an overall mean of 4.46 (SD = 0.60), described as high. Among the indicators, the highest rating was on the ability to "integrate language, literacy skills, and values in teaching" (M = 4.56, SD = 0.59), followed by the ability to "explain learning goals, instructional procedures, and content clearly and accurately" (M = 4.50, SD = 0.59), both of which received a very high description. Meanwhile, delivering accurate and updated content using appropriate strategies (M = 4.40, SD = 0.60), linking current content with past and future lessons (M = 4.43, SD = 0.62), and integrating scholarly works to enrich lessons (M = 4.41, SD = 0.61) were all rated at a high level.

Teachers' Instructional Competence in Terms of Preparation of Lesson Plan

Table 7. Level of Teachers' Instructional Competence in Preparation of Lesson Plan

Indicators	Mean Ratings	SD	Verbal Description
1. I can prepare/ adopt the objective of the lesson based on the competencies.	4.55	0.60	Very High
2. I can establish the concept within the objectives.	4.56	0.55	Very High
3. I can include behavioral and SMART objectives.	4.50	0.62	Very High
4. I can prepare learning activities congruent to the objectives.	4.60	0.53	Very High
Mean	**4.55**	**0.58**	**Very High**

Table 7 shows the level of teachers' instructional competence in preparing lesson plans. The overall mean was 4.55 (SD = 0.58), interpreted as very high. All indicators in this area were rated very highly. Specifically, teachers reported strong competence in "preparing learning activities congruent to the objectives" (M = 4.60, SD = 0.53), "establishing the concept within the objectives" (M = 4.56, SD = 0.55), "adopting lesson objectives based on the required competencies" (M = 4.55, SD = 0.60), and "including behavioral and SMART objectives" (M = 4.50, SD = 0.62).

Teachers' Instructional Competence in Terms of Preparation of Students' Engagement

Table 8. Level of Teachers' Instructional Competence in Preparation of Students' Engagement

Indicators	Mean Ratings	SD	Verbal Description
1. I can make students understand and follow given instructions and directions.	4.50	0.56	Very High
2. I can motivate students to perform the task independently with self-confidence.	4.63	0.54	Very High
3. I can let students share ideas and knowledge with teachers and peers.	4.66	0.51	Very High
4. I can prepare learners in asking questions with an emphasis on thoughtful exploration.	4.45	0.54	High
5. I can encourage students to be eagerly engaged and participate in group discussions.	4.53	0.54	Very High
6. I can persuade students to cooperate and collaborate with each other while on task.	4.55	0.52	Very High
7. I can inspire students to show respect for teachers and peers.	4.70	0.54	Very High
8. I can stimulate the student's ability to apply the concept and skills learned.	4.54	0.57	Very High
Mean	**4.57**	**0.54**	**Very High**

Table 8 presents the teachers' level of instructional competence in preparing student engagement. The overall mean was 4.57 (SD = 0.54), interpreted as very high. Among the indicators, the highest rating was given to "inspiring students to show respect for teachers and peers" (M = 4.70, SD = 0.54), followed closely by "allowing students to share ideas and knowledge with teachers and peers" (M = 4.66, SD = 0.51) and "motivating students to perform tasks independently with self-confidence" (M = 4.63, SD = 0.54).

Teachers also rated very high their ability to "encourage participation in group discussions" (M = 4.53, SD = 0.54), "persuade cooperation and collaboration among students" (M = 4.55, SD = 0.52), and "stimulate the application of learned concepts and skills" (M = 4.54, SD = 0.57). Meanwhile, "preparing learners to ask thoughtful questions" received a slightly lower but still high rating (M = 4.45, SD = 0.54).

Teachers' Instructional Competence in Terms of Classroom Management

Table 9. Level of Teachers' Instructional Competence in Classroom Management

Indicators	Mean Ratings	SD	Verbal Description
1. I can manage routine activities such as checking attendance, assignment, etc.	4.68	0.52	Very High
2. I can budget time appropriately according to different stages of learning.	4.41	0.58	High
3. I can facilitate instructions in an orderly and pleasant learning atmosphere.	4.55	0.55	Very High
4. I can sustain learners' interest through effective and relevant motivation.	4.54	0.55	Very High
Mean	**4.55**	**0.55**	**Very High**

Table 9 presents the teachers' level of instructional competence in classroom management. The overall mean was 4.55 (SD = 0.55), interpreted as very high. Among the indicators, the highest-rated competency was "managing routine activities such as checking attendance and assignments" (M = 4.68, SD = 0.52), followed by "facilitating instructions in an orderly and pleasant learning atmosphere" (M = 4.55, SD = 0.55) and "sustaining learners' interest through effective and relevant motivation" (M = 4.54, SD = 0.55), both also rated as very high. The ability to "budget time appropriately according to different stages of learning" received a high rating (M = 4.41, SD = 0.58).

Teachers' Instructional Competence in Terms of Providing a Conducive Learning Environment

Table 10. Level of Teachers' Instructional Competence in Providing a Conducive Learning Environment

Indicators	Mean Ratings	SD	Verbal Description
1. I can deliver equal opportunities for all students regardless of gender.	4.67	0.49	Very High
2. I can maintain a safe and orderly classroom free from distraction.	4.63	0.52	Very High

3. I can manage cleanliness and orderliness inside and outside the classroom.	4.64	0.54	Very High
4. I can handle behavior problems quickly and with due respect to the child's rights.	4.64	0.52	Very High
5. I can create a situation that develops positive students toward their subject teacher.	4.64	0.50	Very High
Mean	**4.64**	**0.51**	**Very High**

Table 10 presents the teachers' level of instructional competence in providing a conducive learning environment. The overall mean was 4.64 (SD = 0.51), interpreted as very high. All indicators in this area received very high ratings. The highest was on "delivering equal opportunities for all students regardless of gender" (M = 4.67, SD = 0.49), followed closely by maintaining a "safe and orderly classroom free from distraction" (M = 4.63, SD = 0.52), and managing "cleanliness and orderliness inside and outside the classroom" (M = 4.64, SD = 0.54).

Teachers also rated highly their competence in "handling behavior problems respectfully" (M = 4.64, SD = 0.52) and "creating situations that develop positive attitudes among students" (M = 4.64, SD = 0.50).

Relationship Between Teachers' Innovativeness and Instructional Competence

Table 11. Relationship between Innovativeness and Instructional Competence

Variables	Creativity	Openness	Future orientation	Risk-taking	Pro-activeness	Overall innovativeness
Curriculum content	0.362*	0.451*	0.537*	0.248*	0.501*	**0.545***
Transmitting content to the learners	0.261*	0.342*	0.422*	0.325*	0.518*	**0.498***
Preparation of lesson plan/log	0.289*	0.179	0.417*	0.121	0.430*	**0.373***
Preparation of students' engagement	0.288*	0.331*	0.527*	0.377*	0.495*	**0.541***

Classroom management	0.292*	0.290*	0.353*	0.294*	0.356*	**0.421***
Providing a conducive learning environment	0.283*	0.349*	0.391*	0.410*	0.497*	**0.519***
Overall instructional competence	**0.366***	**0.394***	**0.540***	**0.352***	**0.567***	**0.587***
Notes: r-critical (df=105, .05)=.191					

Table 11 presents the relationship between teachers' innovativeness and their instructional competence. Results show that there was a significant positive relationship between overall innovativeness and overall instructional competence, with a correlation coefficient of r = 0.587, which exceeds the critical r-value of 0.191 at p < .05 significance level.

DISCUSSIONS

This section interprets and explains the results of the study in relation to existing literature and theories. It highlights the implications of the findings on teachers' innovativeness and instructional competence in last-mile schools and discusses how these results contribute to the broader understanding of instructional effectiveness in resource-challenged educational settings.

Innovativeness of Teachers in Last-Mile Schools

The findings reveal that teachers in last-mile schools possess strong creative capacities, an essential trait for innovating instruction within resource-constrained environments. As Zhou (2021) emphasized, creativity in teaching is a vital factor for developing dynamic, responsive educational settings that cater to diverse learner needs. Similarly, fostering teachers' creative problem-solving abilities is critical, as innovation has been found to enhance classroom engagement and student achievement (Anderson et al., 2022).

In addition to creativity, teachers demonstrated a very high level of openness to change and new ideas. This high degree of openness suggests that teachers are highly adaptive and eager to innovate in addressing educational challenges. High openness among teachers promotes continuous improvement and supports a culture of innovation within schools (Bakker & Van Woerkom, 2017). Moreover, openness

positively influences the successful implementation of new teaching strategies and educational reforms (Oreg & Berson, 2019).

While teachers consistently sought new opportunities, the results indicate that there is room for further strengthening proactive behaviors, particularly in pioneering new services and administrative innovations. Developing proactiveness is crucial, as proactive teachers are instrumental in fostering dynamic, flexible, and responsive learning environments that quickly adapt to the evolving needs of students (Crant, 2000).

Instructional Competence of Teachers

In terms of curriculum content competence, teachers demonstrated a high level of ability in delivering accurate, updated, and contextually relevant lessons. However, the findings suggest that there is still a need to enhance the integration of scholarly enrichment and the linking of lessons across broader contexts. Mastery of curriculum content ensures not only the delivery of accurate information but also the fostering of critical thinking and continuity in learning, as emphasized by Guerriero (2017). Additionally, relating lessons to real-world applications and future learning goals is crucial for promoting higher-order thinking skills among students (Darling-Hammond et al., 2020).

Moreover, teachers demonstrated strong competency in ensuring the relevance and clarity of their instructional delivery, although opportunities remain to deepen lesson integration across subjects and encourage interdisciplinary thinking.

The results also show that teachers were highly adept at systematic lesson planning, with activities clearly aligned with measurable goals. Effective lesson planning is fundamental to organized, meaningful classroom instruction and is a hallmark of high-quality teaching (Richards & Bohlke, 2011). According to Enama (2021), a well-prepared lesson plan enables teachers to anticipate student needs, foster engagement, and ensure a logical progression of learning experiences, especially important in under-resourced settings.

Preparation of Students' Engagement and Classroom Management

The study found that teachers excelled in preparing students for active engagement during lessons. Teachers effectively motivated students to perform tasks independently, facilitated peer learning, and fostered respect among learners. As Gan (2021) observed, student engagement not only predicts academic achievement but also reflects the teacher's capacity to create a dynamic, inclusive, and supportive learning environment.

Similarly, teachers demonstrated very high competence in classroom management, crucial for maintaining a structured, organized, and motivating atmosphere conducive to learning. Effective classroom management minimizes disruptions, maximizes instructional time, and fosters positive learning outcomes (Seufert et al., 2022). Particularly in last-mile schools, where external distractions and resource shortages are common, the ability to maintain a well-managed classroom is pivotal.

Furthermore, teachers showed strong commitment to providing a safe, respectful, and inclusive learning environment. A positive and structured classroom environment enhances students' motivation, emotional security, sense of belonging, and engagement, as emphasized by Yahya and Nur (2023).

Relationship Between Teachers' Innovativeness and Instructional Competence

The results also revealed a strong and significant positive relationship between teachers' innovativeness and their instructional competence. Particularly, future orientation and proactiveness showed the strongest correlations with various aspects of instructional competence. Future orientation was notably related to curriculum content ($r = 0.537$), preparation of students' engagement ($r = 0.527$), and overall instructional competence ($r = 0.540$). Similarly, proactiveness exhibited strong correlations with overall instructional competence ($r = 0.567$) and transmitting content to learners ($r = 0.518$).

While creativity and openness were also significantly correlated with instructional competence indicators, their correlation strengths were slightly lower compared to future orientation and proactiveness. Risk-taking demonstrated weaker but still significant relationships, particularly with preparation of student engagement ($r = 0.377$) and creating a conducive learning environment ($r = 0.410$), but was not significantly related to lesson plan preparation ($r = 0.121$).

Overall, these findings suggest that higher levels of innovativeness — particularly in future orientation, proactiveness, and openness — are associated with greater instructional competence. This supports previous studies indicating that innovation-related attributes positively influence teachers' planning, delivery, and classroom management effectiveness (Veluz, 2023; Nikola, 2021).

CONCLUSION

This study aimed to determine the level of innovativeness and instructional competence among teachers in last-mile schools in Sarangani Province, and to examine the relationship between these two variables. The findings revealed that teachers demonstrated very high levels of creativity, openness, and proactiveness, alongside high levels of future orientation and risk-taking. Similarly, they exhibited very

high levels of instructional competence, particularly in areas such as transmitting content, lesson planning, classroom management, and providing a conducive learning environment.

The results also confirmed a significant positive relationship between teachers' innovativeness and instructional competence. Notably, future orientation, proactiveness, and openness showed strong correlations with instructional effectiveness across various teaching domains. These findings highlight the critical role of innovative capacities in enhancing teachers' instructional practices, especially in resource-challenged educational environments.

Overall, the study underscores that cultivating innovativeness among teachers — through creativity, adaptability, forward-thinking, and initiative — is essential in strengthening instructional competence and ensuring effective learning outcomes in last-mile schools. This emphasizes the importance of continuous professional development programs that nurture these qualities among educators to sustain quality education even in the most underserved contexts.

RECOMMENDATIONS

Based on the findings and conclusions of this study, the following recommendations are proposed:

1. The Department of Education, through school divisions and district offices, should design and implement training programs and workshops focused on enhancing teachers' future orientation, risk-taking abilities, and proactiveness. These programs should emphasize innovation in lesson planning, classroom management, and instructional delivery.

2. Schools should embed innovation-focused activities into their regular In-Service Training (INSET) and Learning Action Cell (LAC) sessions. Encouraging teachers to experiment with creative teaching strategies, technology integration, and contextualized learning approaches will sustain and elevate their instructional competence.

3. School heads should promote peer mentoring and collaboration among teachers, allowing highly innovative teachers to share practices with their colleagues. Structured professional learning communities can serve as platforms for fostering a culture of creativity, openness, and proactive teaching.

4. Additional instructional resources, technology, and support services should be provided to last-mile schools to minimize barriers that limit teachers' ability to innovate. Investments in school facilities,

learning materials, and internet connectivity will further empower teachers to exercise creativity and effective instructional delivery.

5.

Teachers should be encouraged to engage in action research projects focusing on innovative teaching and classroom management strategies. Reflective practice and research will enable teachers to continuously assess and refine their instructional approaches, ensuring sustained competence and responsiveness to learner needs.

6. Future studies may explore other factors influencing instructional competence, such as leadership support, organizational climate, or teachers' emotional intelligence, to provide a more holistic understanding of teaching effectiveness in last-mile and marginalized educational settings.

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