

Teachers' Preparedness on Educational Innovation

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Abstract:

Teachers' preparedness for educational innovation is essential for effective teaching and successful implementation of new strategies. This study examined teachers' readiness for educational innovation as a basis for a professional development plan in a large school division in Central Philippines for the School Year 2024-2025. Using a validated 40-item questionnaire, data were gathered from 133 teacher-respondents and analyzed through descriptive and comparative statistical methods, including frequency count, percentage score, mean score, and the Mann-Whitney U test. Results revealed that respondents were generally older, held lower plantilla positions, and had lower educational attainment. Overall, teachers exhibited a high level of preparedness across reasons, importance, support, and barriers, with those having higher educational attainment and plantilla positions showing very high preparedness in specific areas. Tenured teachers demonstrated very high preparedness in support, while those with longer service years consistently showed high preparedness across all categories. Significant differences in preparedness were found based on plantilla position and educational attainment. These findings highlight the need for a comprehensive professional development program to enhance teachers' capacity for educational innovation, aligning with the Department of Education's mandate to equip learners for global competence.

Keywords: Educational innovation, teachers' preparedness

Introduction:

Nature of the Problem

The Philippine education system continues to evolve with global advancements, fostering innovative teaching practices that enhance learner participation and improve curricular approaches for greater equity and quality. Republic Act No. 11293, or the Philippine Innovation Act, underscores innovation as essential for national development, a principle reinforced by educational programs like Sulong EduKalidad, which prioritizes curriculum review, teacher upskilling, and stakeholder engagement. In Region VI - Western Visayas, Regional Memorandum No. 753, s. 2022 institutionalized the Educational Innovation Showdown to encourage creativity among educators. However, despite these initiatives, many teachers struggled to participate due to heavy workloads and inadequate preparation for educational innovation.

Recognizing the vital role of teachers in shaping education quality, there is a growing need for professional development programs to strengthen their competencies. Effective training equips teachers with the necessary skills to navigate evolving educational demands, ensuring they can implement innovative strategies and fulfill the expectations set by the Department of Education. Without sufficient professional support, educators may struggle to adapt, highlighting the importance of continuous learning opportunities to enhance teaching effectiveness and overall educational outcomes.

Administrators may support public elementary teachers by providing professional development opportunities as they deal with this problem. Therefore, the researcher looked into public elementary teachers' preparedness for educational innovation to address this issue. The insightful information acquired from this study is expected to provide a foundation for creating a targeted, all-inclusive, and thorough professional development plan.

Current State of Knowledge

The rapid societal changes, evolving communication complexity, and the rise of new information demand continuous innovation in educational programs, teaching techniques, and learning approaches. Schools, as dynamic social institutions, are shaped by technology, which plays a crucial role in democratizing information and fostering inclusive educational environments (Norman-Acevedo, 2019). Educational innovation, as defined by UNESCO (2016), is a deliberate, problem-solving process aimed at enhancing student learning beyond traditional methods, promoting interactive rather than passive learning. Rivas et al. (2017) emphasize that innovation in education involves a break from conventional rote and ritualistic learning, fostering understanding, creativity, and metacognition through

dialogue and participation. Additionally, educational innovation emerges within institutions, engaging multiple stakeholders—teachers, researchers, and students—who apply scientific evidence, practical knowledge, and lived experiences to develop adaptable, effective, and sustainable educational practices.

Herodotou et al. (2019) proposed a framework for selecting educational innovations based on their alignment with effective learning theories, research-backed effectiveness, relevance to 21st-century competencies, novelty, and identification of gaps for future research. However, many public elementary teachers struggle to implement educational innovations due to a lack of guidelines, structured trials, and institutional recognition, making the process challenging (Blanco et al., 2018). Despite these challenges, the number of innovative teachers continues to grow. Policymakers and scholars agree that professional development is crucial for improving student learning outcomes (Tajeddin & Rezanejad, 2019). As teachers face increasing pressure to enhance instruction, they are expected to participate in professional learning activities such as conferences, workshops, and classroom modeling (Margolis et al., 2017). Continuous professional development ensures educators stay updated on evolving student performance standards, adopt new pedagogical strategies, integrate modern educational technologies, and adapt to the ever-changing demands of the Philippine education system.

Republic Act No. 11293, or the Philippine Innovation Act, underscores innovation as a key driver of national progress by strengthening education, science, and technology to build a knowledge-based economy. This aligns with the Department of Education's Sulong EduKalidad initiative, which focuses on curriculum updates, improved learning environments, teacher development, and stakeholder collaboration. To institutionalize innovation, Region VI - Western Visayas issued Regional Memorandum No. 175, s. 2021, directing all governance levels to contribute to action plans that enhance education through research-based innovations. Schools and offices are encouraged to develop innovative products, services, and processes that address educational challenges, improve practices, and optimize school operations. By fostering a culture of innovation, educators and stakeholders can better prepare learners to become lifelong learners, ensuring that every student benefits from improved educational strategies and evolving teaching methodologies.

Various factors like work commitment and innovative behavior determine the process and quality of teacher learning. Work commitment has been proved to be an internal factor of teacher behavior. The better the teacher's commitment, the greater the teacher's behavioral performance. Findings show that professional development of teacher work commitment improved education quality and produced competitive human resources, enabling employees to plan their future careers and benefits from the institution. It has also been evident from this study that the effect of innovative work on work commitment may foster change in teachers' teaching practices. A teacher with a high sense of innovation is more likely to be confident in expressing ideas that improve their performance (Asiyah et al., 2021).

Teacher training is a crucial component of professional development in intelligent schools, requiring a systematic approach to enhance educators' skills and knowledge for quality education in a rapidly evolving digital landscape. Intelligent schools emphasize technological proficiency and innovative teaching methods to create personalized and meaningful learning experiences. Beyond technology, teacher training must also address diversity, inclusion, collaboration, and adaptability to ensure educators are prepared for 21st-century challenges. Aroca et al. (2023) highlight that fostering a collaborative learning culture is essential in intelligent schools, while Choi et al. (2019) emphasize the need for continuous skill development to enhance teacher competence and effectiveness in achieving educational goals.

The pandemic reshaped education permanently, driving schools to innovate and collaborate to ensure learning continuity despite challenges (De Vera, 2021). Innovation in education is not about invention but rather creativity and adaptability in addressing problems with fresh perspectives (Thompson, 2022). The Department of Education (DepEd) implemented reforms under the Basic Education Sector Reform Agenda, incorporating Total Quality Management and the Continuous Improvement (CI) model in 2012 to enhance access, quality, and governance. These initiatives improved student performance and streamlined administrative processes. By 2015, Region XII piloted CI programs across six division offices, demonstrating significant improvements in education delivery. The Philippines has been a hub for educational innovation, with UNESCO's APEID survey identifying key innovations in curriculum development, management, and technology, further cementing the nation's commitment to progressive education.

Theoretical Underpinnings

This study is grounded in the Innovation Diffusion Theory (IDT), developed by E.M. Rogers in 1962, which explains how new ideas, practices, or technologies spread within a society. IDT is widely used to analyze how individuals adopt innovations, particularly in education, where teachers play a crucial role in implementing new teaching strategies, curricula, and technologies. The theory identifies four key elements influencing adoption: the innovation itself, communication channels, the surrounding social system, and the time it takes for individuals to embrace the change. Additionally, Rogers' innovation-decision process outlines five stages—knowledge, persuasion, decision,

implementation, and confirmation—highlighting how individuals move from learning about an innovation to fully integrating it into practice.

This study focuses on the implementation stage, particularly re-invention, where teachers adapt innovations to fit their needs. Three key themes emerged: (a) the importance of teacher collaboration, (b) aligning innovation with a clear purpose, and (c) providing models and opportunities for practice. By applying IDT, this study examines how teachers learn, adopt, and sustain educational innovations within professional development programs. Understanding these processes helps identify factors that enhance or hinder innovation adoption, providing valuable insights into improving teacher preparedness for educational reforms. Thus, IDT serves as the conceptual model for this research, offering a framework to analyze how teachers implement innovations and informing the development of a professional development plan.

Objectives

This study aimed to determine the teachers' level of preparedness for educational innovation in Public Elementary Schools in a large school Division in the central Philippines for the school year 2024-2025 as a basis for a professional development plan. Specifically, this study sought to answer the following questions: 1) the teachers' level of preparedness for Educational Innovation according to the area of reason, importance, support and barriers; and 2) the significant difference in teachers' level of preparedness for Educational Innovation when grouped and compared according to the aforementioned variables.

Methodology:

This section discusses the research design, study locale, respondents, data gathering instrument, validity and reliability testing, data gathering procedure, analytical tool, statistical tool, sampling technique, and ethical consideration.

Research Design

This research utilized descriptive research design to determine the teachers' level of preparedness for educational innovation in a public elementary school in a large school division in the central Philippines. This was the basis for a professional development plan. The researcher employed descriptive research design because it is considered appropriate for the study since descriptive research aims to describe a population, situation, or phenomenon accurately and systematically. It can answer what, where, when, and how questions. A descriptive research design can use various research methods to investigate one or more variables. The researcher does not control or manipulate variables but only observes and measures them (McCombes, 2023). This research design allows the collection and analysis of gathered data. Furthermore, the study aimed to determine the preparedness of public elementary schools for educational innovation as a basis for a professional development plan.

Study Respondents

The study's respondents were the 133 public elementary schools of the said district in the central Philippines during the school year 2024-2024, from a total population of 200. Since the number of respondents was large, stratified random sampling was used. Slovin's Formula determined the sample size, given the margin of error of 0.05, and the population size of all public elementary schools in district schools in the central Philippines. The researcher multiplied the percentage for each school by sample size to distribute the number of respondents to each school proportionately. The table below displays the distribution of the study respondents.

Instruments

The study utilized a researcher-made questionnaire to assess the preparedness of public elementary teachers for educational innovation in S.Y. 2024-2025, serving as the basis for a professional development plan. The instrument underwent validity and reliability testing and comprised two main parts. Part I collected respondents' personal information, including age, plantilla position, length of service, and highest educational attainment. Part II contained 40 items divided into four categories: reasons, importance, support, and barriers. Responses were measured using a five-point scale, ranging from 1 (very low preparedness) to 5 (very high preparedness), allowing for a detailed analysis of teachers' readiness for innovation. Validation average is 4.81, interpreted as "excellent". This showed that the research instrument was "Valid". And the reliability result was 0.885 which signifies that said instrument is highly reliable.

Data Gathering Procedure

The researcher followed several procedures to gather information about the study. The initial phase involved obtaining the division superintendent's consent to conduct the study. The researcher secured a letter guaranteeing

the anonymity of the respondents and the school. This was submitted to the division superintendent's office. After securing the approval letter, the researcher presented the letter to the district supervisor's office. Then, the school heads of each school were notified in advance.

The researcher produced multiple copies of the questionnaires following the exact number of participants in the research. Then, the respondents received the surveys directly from the researcher—the study's respondents underwent stratified random sampling. Respondents were given instructions on filling out the questionnaire, and the researcher guaranteed the respondents absolute confidentiality and anonymity in their responses. Using the five-point scale, the respondents were asked to rate each item. The relevant statistical techniques were used to total and tabulate the data gathered from the respondents' responses. This calculates statistical data, tabular presentation, and computer processing possible. Computer-generated software was utilized to process the encoded data.

Data Analysis and Statistical Treatment

Objective No. 1 used the descriptive analytical scheme and mean to determine the preparedness of public elementary teachers for educational innovation according to reasons, importance, support, and barriers.

Objective No. 2 used the comparative analytical scheme and Mann-Whitney U test to determine whether or not significant differences exist in the preparedness of public elementary teachers on educational innovation when grouped and compared according to the aforementioned variables.

Ethical Consideration

The researcher carefully considers research ethics following the Data Privacy Act of 2012. The consent form was appropriately stored and archived with the authorization of the relevant authorities. The respondents' names and comments were handled with the utmost anonymity. In addition to the ideas of confidentiality, impartiality, honesty, and respect for intellectual property, the researcher considered several other moral considerations. The researcher was accountable for academics referencing pertinent data used in this research to recognize the original researcher or authors, using their best judgment and competence, exercising their right to patent, and abiding by other ethical standards.

Results and Discussion:

This section presents, analyzes, and interprets the data that were gathered to carry out the pre-determined objectives of the study. The quantitative data gathered from the respondents' responses to the data-gathering instrument were tallied, tabulated, and subjected to statistical analysis and interpretation following the objectives of the investigation.

Table 1
Teachers' Level of Preparedness on Educational Innovation in Reason

Items	Mean	Interpretation
As a teacher, I see educational innovation as a way to		
1. grow professionally.	4.52	Very High Level
2. enhance pupils' engagement and motivation.	4.52	Very High Level
3. explore new technologies and teaching methods.	4.54	Very High Level
4. address diverse learning needs.	4.41	High Level
5. foster a culture of improvement in education.	4.37	High Level
6. collaborate and promote a culture of success.	4.31	High Level
7. foster a culture of innovation and empower pupils to be life-long learners.	4.29	High Level
8. explore new strategies and witness their impact on pupils learning.	4.47	High Level
9. challenge myself to think critically.	4.50	Very High Level
10. make a positive impact on pupils' learning journey.	4.44	High Level
Overall Mean	4.44	High Level

Table 1 presents the teacher's level of preparedness for educational innovation in terms of reason. The overall mean score of 4.44 indicates a high level of preparedness among teachers regarding the reasons for embracing educational innovation.

The data further reveal that the highest mean score of 4.54 was observed in item 3, exploring new technologies and teaching methods, while the lowest mean score of 4.29, interpreted as a high level, was in item 7, fostering a culture of innovation and empowering pupils to be life-long learners. This suggests that teachers possess the necessary skills to integrate modern technologies into their instructional practices. This indicates a commitment to continuous learning and professional development, allowing them to adapt to the changing demands of education. However, despite this preparedness, challenges remain in establishing a culture of innovation within schools, which may require additional support, resources, or professional training to enhance transformative teaching practices. This supports Akram et al. (2022), who state that teachers exhibit positive perceptions toward integrating technology into their teaching methods. This aligns with the observation that teachers are prepared to incorporate modern technologies into their instructional practices. However, this contradicts Binti Mohd et al. (2024), who state that teachers face a low understanding of ICT and digital literacy when integrating technology into education. These challenges may hinder the pace of innovation in schools.

Table 2
Teachers' Level of Preparedness on Educational Innovation in Importance

Items	Mean	Interpretation
As a teacher, I see educational innovation as a way to		
1. achieve literacy, numeracy, and essential life skills.	4.55	Very High Level
2. improve my skills in educational innovation.	4.49	High Level
3. Transform the educational system	4.42	High Level
4. fulfill my obligation as a teacher.	4.48	High Level
5. help bridge the learning gaps.	4.48	High Level
6. build reflective practices and feedback mechanism	4.36	High Level
7. create an interactive learning environment.	4.49	High Level
8. prepare pupils for success.	4.41	High Level
9. make effective strategies in my classroom	4.52	Very High Level
10. collaborate with colleagues and professional learning communities.	4.42	High Level
Overall Mean	4.46	High Level

Table 2 presents the teachers' level of preparedness for educational innovation in terms of Importance. The overall mean score of 4.46 indicates a high level of preparedness, suggesting that teachers strongly recognize the significance of educational innovation in improving both their professional development and the educational experience for their pupils.

Moreover, the highest mean score of 4.55, interpreted as a very high level, was observed in item 1, achieving literacy, numeracy, and essential life skills. In contrast, the lowest mean score of 4.36, interpreted as high, is evident in item 6, building reflective practices and feedback mechanisms. This implies that teachers focus on helping their pupils develop important basic skills like reading, writing, math, and life skills because these are essential for their success. However, teachers face difficulties reflecting on improving their teaching, which can be challenging because of time limits or insufficient resources. Giving feedback also takes time and attention to each pupil, which can be difficult in large classrooms.

This supports Web et al. (2015), who state that teacher preparedness in developing pupils' literacy and numeracy skills is crucial for effective education. Research indicates that while many educators are committed to teaching these foundational skills, various challenges can impede their effectiveness.

Table 3
Teachers' Level of Preparedness on Educational Innovation in Support

Items	Mean	Interpretation
As a teacher, I see educational innovation as a way to		
1. provide sufficient support for implementing innovations.	4.34	High Level
2. gain adequate training and professional development,	4.36	High Level
3. generate support from the parents and guardians	4.41	High Level
4. solve limited access to facilities such as outdated classrooms.	4.21	High Level
5. moderate resistance from parents or guardians who give less importance to education.	4.20	High Level
6. organize teams or technical working groups	4.23	High Level

7. obtain necessary technological support.	4.25	High Level
8. secure funding for my innovative projects.	4.26	High Level
9. mobilize school and community partnership	4.19	High Level
10. build support groups for the learners.	4.29	High Level
Overall Mean	4.27	High Level

Table 3 presents the teachers' level of preparedness for educational innovation in terms of support. The data reveal that all items in the above-mentioned area registered a high level. Hence, teachers had a high level of preparedness for educational innovation in support, as evidenced by the overall mean score of 4.27.

The data further reveal that the highest mean score of 4.41 was evident in item 3 on generating support from parents and guardians. In contrast, the lowest mean score of 4.19 was evident in item 9 on mobilizing school and community partnerships. The findings show teachers are prepared to collaborate with families to promote educational innovation. Teachers understand the importance of involving families in the learning process. However, challenges arise in actively getting other external stakeholders to support these innovative efforts.

This supports Cchiari (2021), who highlights that innovation in education is not just limited to students or teachers. This is collaborative work with parents, guardians, and other stakeholders. It is also inevitable that innovation programs must allow parents and guardians to be more plugged into their child's school, which can lead to greater involvement and engagement between students, parents, and school faculty.

Table 4
Teachers' Level of Preparedness on Educational Innovation in Barriers

Items	Mean	Interpretation
As a teacher, I see educational innovation as a way to		
1. secure enough resources to engage in innovative practices.	4.25	High Level
2. implement innovative teaching styles.	4.29	High Level
3. solve administrative hurdles that slow down innovative practices.	4.12	High Level
4. collaborate and engage with colleagues,	4.22	High Level
5. ease tight teaching loads and ancillary works.	4.17	High Level
6. lessen pushbacks from parents/guardians who opt for traditional teaching methods.	4.20	High Level
7. motivate students more through learning engagements.	4.47	High Level
8. cope with new technological advancement.	4.46	High Level
9. shift from traditional to modern way of teaching.	4.47	High Level
10. be consistent in implementing educational change.	4.41	High Level
Overall Mean	4.30	High Level

Table 4 presents the teachers' level of preparedness for educational innovation regarding barriers. The overall mean score of 4.30 indicates a high level of preparedness, suggesting that teachers feel well-equipped to overcome common barriers to implementing educational innovations. This reflects their readiness to address resources, teaching methods, and administrative support challenges.

Moreover, the data revealed that the highest mean scores of 4.47 were observed in items 7 and 9 on motivating students through learning engagements and shifting from traditional to modern ways of teaching. In contrast, the lowest mean score of 4.12 was observed in item 3 on solving administrative hurdles that slow down innovative practices. These findings show that teachers are ready to improve how they engage students and use modern teaching methods, which reflects their dedication to improving their teaching. However, teachers might face obstacles related to school policies or administrative procedures that slow down the process of making changes and trying new ideas in the classroom. These administrative challenges can make it harder for teachers to adopt new practices and innovate quickly.

This supports Abedi et al. (2024) that teachers are enthusiastic about using technology; most teachers espouse teacher-centered ICT beliefs, implying the need for transformative professional development that enables change in teachers' beliefs to embrace the view of technology as a pedagogical tool that can facilitate constructive pedagogy and deep student learning.

Moreover, according to Oran et al. (2021), teachers who participated in educational innovation supported using information technologies in the classroom. It was seen that the tools in the classroom environment, such as technology and material, were expressed by the majority of the participants.

Furkan's (2021) study revealed that teachers had a favorable view towards technology integration in language education. They included it in some of their teaching applications.

Table 5

Teachers' Level of Preparedness on Educational Innovation in Reason when grouped and compared according to Variables

Variable	Category	N	Mean Rank	Mann Whitney U	p-value	Sig. level	Interpretation
Age	Younger	66	66.92	2206.000	0.982	0.05	Not Significant
	Older	67	67.07				
Plantilla Position	Lower	92	62.59	1480.500	0.047	0.05	Significant
	Higher	41	76.89				
Length of Service	Lower	61	63.39	1975.500	0.316	0.05	Not Significant
	Higher	72	70.06				
Highest Educational Attainment	Lower	96	59.60	1066.000	0.000	0.05	Significant
	Higher	37	86.19				

Table 5 shows no significant differences existed in the level of teachers' preparedness for educational innovation in the area of reasons when grouped and compared according to age, as evidenced by the p-value of 0.982, and length of service, as evidenced by the p-value of 0.316. The null hypotheses are accepted since the p-values for age and length of service are more significant than 0.05. This implies that age and length of service do not affect the teachers' level of preparedness in terms of educational innovation in reason.

On the other hand, when teachers were grouped and compared according to plantilla position, a significant difference existed in the level of teachers' preparedness for educational innovation in the area of reasons, as evidenced by the p-value of 0.047, and highest educational attainment as evidence by the p-value of 0.000. The null hypotheses are rejected since the p-value for plantilla position and highest educational attainment are less than 0.05. It can be inferred from the table that teachers with plantilla positions and highest educational attainment affect the teachers' level of preparedness in terms of educational innovation in the area of reason.

These results support the claims of the study conducted by Karsantik, İ. (2021) that revealed teachers are practitioners of innovation in education institutions. To enhance their readiness for innovation, teachers may be encouraged to continue their professional development through receiving graduate education. Also, their awareness of innovation may be increased by providing opportunities such as workshops, in-service programs, and scientific conferences.

Table 6

Teachers' Level of Preparedness on Educational Innovation in Importance when grouped and compared according to Variables

Variable	Category	N	Mean Rank	Mann Whitney U	p-value	Sig. level	Interpretation
Age	Younger	66	64.70	2059.500	0.493	0.05	Not Significant
	Older	67	69.26				
Plantilla Position	Lower	92	62.48	1470.500	0.042	0.05	Significant
	Higher	41	77.13				
Length of Service	Lower	61	67.94	2138.500	0.794	0.05	Not Significant
	Higher	72	66.20				
Highest Educational Attainment	Lower	96	60.17	1120.000	0.001	0.05	Significant
	Higher	37	84.73				

Table 6 shows no significant differences existed in the level of teachers' preparedness on educational innovation in the area of importance when grouped and compared according to age, as evidenced by the p-value of 0.493, and

length of service, as evidenced by the p-value of 0.794. The null hypotheses are accepted since the p-values for age and length of service are more significant than 0.05. This implies that age and length of service do not affect the teachers' level of preparedness in terms of educational innovation, which is an area of importance.

The results support the study by Başaran and Keleş (2015) that revealed that according to teachers' perceptions of innovation management in schools, there is no significant difference in age, type of institution, and years of experience in the profession.

On the other hand, when teachers were grouped and compared according to plantilla position and highest educational attainment, a significant difference existed in the level of teachers' preparedness for educational innovation in the area of importance, as evidenced by the p-value of 0.042 and the highest educational attainment as evidence by the p-value of 0.001. The null hypotheses are rejected since the p-value for plantilla position and highest educational attainment are less than 0.05. It can be inferred from the table that teachers' plantilla position and highest educational attainment affect the teachers' level of preparedness in educational innovation in the area of importance.

The study results show that teachers' perceptions of innovation management in schools differ in education degree. Fullan (2016) states that teachers who continue their professional development in managing innovation in schools can manage innovation more effectively.

Table 7

Teachers' Level of Preparedness on Educational Innovation in Support when grouped and compared according to Variables

Variables							
Variable	Category	N	Mean Rank	Mann Whitney U	p-value	Sig. level	Interpretation
Age	Younger	66	65.55	2115.000	0.664	0.05	Not Significant
	Older	67	68.43				
Plantilla Position	Lower	92	62.70	1490.500	0.053		Not Significant
	Higher	41	76.65				
Length of Service	Lower	61	66.49	2165.000	0.888		Not Significant
	Higher	72	67.43				
Highest Educational Attainment	Lower	96	62.52	1364.000	0.030		Significant
	Higher	37	78.62				

Table 7 shows that no significant differences existed in the teachers' level of preparedness for educational innovation in the area of support when grouped and compared according to age, plantilla position, and length of service, as evidenced by the p-values of 0.664, 0.053, and 0.888, respectively. Since the p-values for age, plantilla position, and length of service are more significant than 0.05, the null hypotheses are accepted. This implies that regardless of their age, plantilla position, and length of service, teachers' level of preparedness for educational innovation in support is almost the same.

On the other hand, when teachers were grouped and compared according to the highest educational attainment, a significant difference existed in the level of teachers' preparedness for educational innovation in support, as evidenced by the p-value of 0.030, which is less than 0.05. Hence, the null hypothesis is rejected. It implies that teachers with higher educational attainment are more likely to be prepared to support academic innovation, suggesting the importance of advanced education in fostering preparedness for innovation-related roles.

Goff, Goldring, Guthrie, and Bickman (2014) also imply that school managers who care and provide professional development for teachers are more successful in adaptation to innovation. Moreover, Ersöz (2019) highlights the degree of education in the study, focusing on the European Innovation Indicators (UII) report in which the degree of education is taken as an indicator for investigating the innovation process.

Table 8

Teachers' Level of Preparedness on Educational Innovation in Barriers when grouped and compared according to Variables

Variable	Category	N	Mean Rank	Mann Whitney U	p-value	Sig. level	Interpretation
Age	Younger	66	72.33	1865.500	0.119	0.05	Not Significant
	Older	67	61.84				
	Lower	92	63.62	1575.000	0.128		Not Significant

Plantilla Position	Higher	41	74.59			
Length of Service	Lower	61	74.06	1765.500	0.051	Not Significant
	Higher	72	61.02			
Highest Educational Attainment	Lower	96	64.72	1557.000	0.270	Not Significant
	Higher	37	72.92			

Table 8 shows that no significant differences existed in the level of teachers' preparedness for educational innovation in the area of barrier when grouped and compared according to age, plantilla position, length of service, and highest educational attainment, as evidenced by the p-values of 0.119, 0.128, 0.051, and 0.270, respectively. The null hypotheses are accepted since the p-values for age, plantilla position, length of service, and highest educational attainment are more significant than 0.05.

This implies that regardless of their age, plantilla position, length of service, and highest educational attainment, the level of teachers' preparedness for educational innovation in the area of barrier is almost the same.

This supports Levent's (2016) study that revealed that teachers' preparedness for educational innovation does not differ significantly in terms of type of institution, age, duration of employment in the current institution, years of experience in the profession, and degree of education.

Conclusions:

The study concluded that the research environment was stronger among older teachers with longer service but lower educational attainment and plantilla positions. While teachers exhibited a high level of readiness in educational innovation, they still required additional support to effectively implement it. Those with higher plantilla positions, longer service, and higher education levels demonstrated greater preparedness compared to their counterparts, yet they still lacked the necessary skills for conducting educational innovations. Significant differences in preparedness were found based on plantilla position and educational attainment, particularly in reasons, importance, and support, while other groupings showed no significant variation. To address these gaps, the study recommends expanding demographic scope, providing training and workshops, promoting coaching and mentoring, facilitating write-shop activities, and implementing a fair rewards system to encourage participation in educational innovation.

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