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21st Century Skills and Teachers' Performance: Basis for Instructional Development Plan

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ABSTRACT

The study examines the correlation between 21st-century teaching skills and teachers' performance using the Classroom Observation Tool (COT) among public Junior High School teachers in Region X during the 2023-2024 school year. It aims to assess teachers' profiles, 21st-century skills, performance levels, and the relationship between these factors. Statistical analysis revealed that collaboration and 21st-century skills had the most significant impact, while digital literacy scored the lowest. Educational attainment moderately influenced teachers' assessment of 21st-century skills. Position, teaching experience, and educational attainment moderately affected performance. An instructional development plan was formulated to enhance teaching skills, emphasizing the importance of professional development in digital technology. Teachers are encouraged to improve digital integration skills through training on emerging technologies and methodologies for effective technology integration in teaching practices. This plan aims to enhance teaching quality and performance by ensuring a consistent and advanced use of digital tools in education.

INTRODUCTION

Over the years, the establishment of 21st-century teaching skills and the evaluation of performance management have constituted a fundamental underpinning of instructional strategy development, profoundly influencing the way educators conceive and deliver educational materials. This study investigates the approach to 21st-century skills and teachers' performance to establish a comprehensive framework for the instructional development plan.

The Philippines scored lowest of all participating countries in reading and second lowest in mathematics (Schleicher, 2019). The Programme for International Students' Assessment report also reveals a great inequality between different types of schools and students (Trinidad, 2020). Specifically, rural schools score much lower than urban schools, public schools score lower than private schools, and students of low socioeconomic status score lower than those of high socioeconomic status. These outcomes demonstrate that inequality and poverty, which are deeply rooted in Philippine society, correspond to an inequality of opportunity in education (McDoom *et al.*, 2019).

Despite the growing body of research on 21st-century teaching skills and teachers' performance for instructional development plans, there is a notable gap in the literature concerning the effective integration of emerging technologies and digital resources to enhance this plan (Carag, 2020). Kapur (2020) stated that 21st-century teaching skills on collaboration, communication, creativity, and critical thinking refer to teaching methods that consider how learning is influenced by various factors such as social, cultural, economic, and political elements. When formulating and implementing pedagogical approaches, instructors must consider factors like students' academic goals, age, grade level, subject matter,

learning and interactive abilities, personality traits, educational standards, institutional rules, and student needs. These approaches are essential for conveying knowledge and skills within the educational context.

In the Philippines, the RPMS process is implemented across the entire organization to ensure that employees are directed toward achieving the vision, mission, values, and strategic priorities of the DepEd. Educators utilize the Individual Performance Commitment and Review Form (IPCRF) throughout the planning, review, and evaluation cycles as a means of accomplishing the project's objectives. In accordance with this, the Department of Education (DepEd)'s observation of classrooms for the School Year 2023-2024 employs a tool called the Classroom Observation Tool, which consists of nine indicators.

DepEd Bukidnon (2020) reported that teachers' performance in San Fernando District, Bukidnon, has been satisfactory according to the Results-based Performance Management System during the School Year 2019-2020, and it is largely determined by their qualifications. The San Fernando I and II district offices have provided information indicating that most of these teachers are recent graduates who have successfully completed the Licensure Examination for Teachers and possess no relevant teaching experience. Additionally, there is a scarcity of training opportunities and scholarly output amongst these educators.

Attaining an outstanding result in the Classroom Observation Tool helps teachers particularly in the promotion and to improve its performance. According to Catolos (2018), teachers' performance in the Department of Education must be regularly monitored and improved to achieve outstanding results. This can be done through

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emerging teachers with different teaching skills and keeping up with new trends and practices, especially with the emergence of K to 12 programs. The primary objective of teachers' professional development was to refine teaching skills and cultivate a positive outlook on classroom methodologies, which ultimately impacted the caliber of instruction students received (Ajani, 2019). Studying 21st-century teaching skills and teachers' performance as the basis for an instructional development plan was imperative as it not only enhances student learning outcomes but also equips educators to meet diverse learning needs and adapt to evolving educational advancements. It empowers teachers to improve their competence and fosters innovation in the classroom, ultimately boosting student engagement, supporting inclusive education, and helping achieve curriculum goals. Furthermore, continuous study and refinement of teaching approaches contribute to a culture of educational improvement and equity, ensuring all students have access to effective, high-quality learning experiences.

LITERATURE REVIEW

Availability of Digital Literacy

According to Hero (2019), the performance of social studies teachers was significantly impacted by the combined use of digital technology in the classroom. Additionally, professional practice and productivity were the key indicators of technological integration. Teachers felt that there was a significant level of technological integration in the Social Studies curriculum. Teachers of social studies demonstrate competence in integrating technology into their lesson plans. As a result, implementing technology in the classroom was seen as pedagogical innovation in the context of education, not merely compliance with DepEd rules.

21st Century Skills

21st-century education necessitates forward-thinking and adaptable educators who possess lifelong abilities to foster 21st-century skills in students. Educators who possess strong inclinations towards collaboration, critical thinking, creativity, communication, digital literacy, social skills and leadership are better equipped to impart 21st-century skills to students (Anagün, 2018). Consequently, education alone cannot cultivate a responsible, goal-oriented, and thriving society. Thus, the advancement of 21st-century skills among students, who represent the future members and leaders of society, holds greater promise, and this can be achieved by equipping teachers with the essential 21st-century skills.

Collaboration

Collaborative teaching offers numerous advantages (Novicevic, Buckley, Harvey, & Keaton, 2019). Firstly, this pedagogical approach enhances learners' ability to critically evaluate problems, engage in substantive arguments, and effectively apply learned concepts in different situations or contexts. Secondly, this process elevates the quality

of teaching scholarships by transforming it into a participatory endeavor that undergoes critical review and quality assurance. Thirdly, collaborative teaching can be seen to attain improved teaching outcomes due to its peer-reviewed and monitored nature. It is designed to encompass various disciplinary perspectives. Fourthly, collaborative teaching challenges conventional instructional delivery methods by leveraging combined efforts to address common goals or issues. However, if faculty goals differ in type and nature, the collaboration outcome might be negative. Specifically, if the goals and expected performance levels are not clearly established at the outset, team effectiveness could be compromised.

Critical Thinking Skills

The study by Brown and Davis (2020) sheds light on the transformative power of constructivist pedagogy. By exploring how it enhances teacher-student interactions, cultivates critical thinking, and promotes knowledge construction, the research contributes to a deeper understanding of how pedagogical approaches impact both teachers and students. It underscores the importance of student-centered learning, and the role teachers play in facilitating it, providing valuable insights for educators and policymakers seeking to improve the quality of education.

Critical thinking is not merely a skill; it is a mindset that empowers individuals and societies to adapt, innovate, and thrive in an increasingly intricate world (Jones, 2019).

Creativity

Creativity is a crucial 21st-century competency that students must possess as they confront the advancements in technology and prepare for their future occupations. According to a teacher interview, numerous educators still assess the cognitive aspects of their students. This situation implies that students are lacking in skills, particularly in the realm of creativity. Teachers have failed to equip students with the necessary training to enhance their creative abilities, notwithstanding the curriculum that has been devised, which places greater emphasis on cultivating creativity. Thus, creativity stands as an essential skill that students should cultivate (Dawes & Wegerif, 2023). The yearning to bring forth novelty and undertake distinct endeavors that cannot be achieved solely through adherence to regulations or fulfillment of universal criteria characterizes creativity. The labor force can be affected by economic and geopolitical advancements, potentially leading to the disturbance of traditional employment patterns and the emergence of fresh requisites (Shafie *et al.*, 2019).

Communication

Griffiths (2018) provided two definitions of communication strategy. Firstly, communication strategy refers to the systematic endeavor of a student to articulate their intentions in the target language in situations where they are unable to accurately formulate or select

the appropriate rules of the target language. Secondly, communication strategy denotes the conscious exertion made by students to convey their thoughts when inter-language grammar proves insufficient in expressing their intended meaning.

Communication encompasses the aptitude to clearly and persuasively express thoughts both verbally and in written form, articulate viewpoints, convey coherent instructions, and inspire others through speech. Moreover, communication skills are intertwined with information, media, and ICT competencies. It is asserted that communication skills hold great significance in professional settings and public life and are also influenced by present and emerging technologies, considering the substantial number of messages that are mediated by one or more digital devices. Within this framework, proficient communication skills can serve to prevent misunderstandings and miscommunications (Joynes, 2019).

Digital Literacy

Rogers (2018) emphasized the transformative impact of technology integration on teachers' pedagogical competence. By examining the role of digital tools in enhancing teaching strategies and fostering 21st-century skills, the research contributes to a deeper understanding of how technology can be harnessed to enhance both teaching and learning. This understanding is invaluable for educators, administrators, and policymakers as they seek to prepare students for success in a technologically-driven world.

The utilization of digital technologies stimulates novel ideas and cultivates imaginative thinking. Educators and students acquire fresh insights, abilities, and encounters by employing digital technologies within the educational setting (Demir & Akpınar, 2018).

The potential of digital technologies to foster the development of 21st century skills and competencies in the classroom varies in scope. According to Cheung *et al.* (2021), personalized learning is facilitated by digital technologies. The utilization of diverse applications, which enhance the quality of instruction in the classroom, plays a crucial role in enhancing personalized learning. Cheung *et al.* (2021) assert that digital technologies enable teaching and learning that is tailored to the characteristics of both the teacher and the learner while also being enhanced and improved by the preferences and features offered by ICT tools.

Digital technologies are deemed intelligent as they enable individual growth. For example, artificial intelligence, image recognition, and the internet provide insights into one's learning, performance, and behavior, thereby fostering a deeper understanding and reflection of one's learning and teaching journey. Integrating technologies in a manner that aligns with digital literacy is essential for creating intelligent learning environments.

Social Skill

Smith and Johnson's study (2019) emphasized that social skills can improve pedagogical competence in novice

teachers, which is a multifaceted process that involves mentoring, ongoing professional development, and reflective practice. By recognizing the challenges novice teachers face and providing them with the necessary support and resources, the educational system can nurture a new generation of educators who are well-prepared and continually evolving in their pedagogical expertise. This, in turn, contributes to the overall quality of education and positively impacts student learning outcomes.

Leadership

In 2021, Garcia and Kim's literature review underscored the transformative power of leadership in developing teachers' competence. By exploring the significance of leadership and its connection to effective teaching strategies, the research provides valuable insights into how educators can create more inclusive and equitable learning environments. This understanding is crucial for addressing the diverse needs of students and promoting educational equity in a multicultural society.

The pivotal role of professional development programs in enhancing teachers' pedagogical competence. By examining the effectiveness of various training models and their influence on teaching strategies and student outcomes, the research provides educators, administrators, and policymakers with valuable insights to refine professional development initiatives and, ultimately, improve the quality of education in classrooms (Johnson & Anderson, 2018).

In 2019, Turner and Harris's literature review underscored the fundamental role of formative assessment and feedback in teaching and learning. By exploring the strategies employed by educators in implementing these practices and their profound impact on student achievement and engagement, this research contributes significantly to the understanding of effective teaching strategies. It underscores the importance of creating an environment where feedback is a constructive, ongoing dialogue, thus empowering students to take charge of their learning and teachers to refine their instruction.

Teaching Performance

Pongton and Suntrayuth (2019) emphasized the significance of teaching performance assessment in evaluating employee capabilities, which is defined as the actions and behaviors aligned with organizational objectives. Traditionally, teachers are expected to exhibit professionalism and strive for exceptional performance for the benefit of stakeholders, particularly students. However, it is essential for today's educational system to acknowledge that teachers themselves are stakeholders in education, and their needs, including communication satisfaction, should be recognized as they greatly impact the learning process. While teachers may often be positioned at the lower end of the school hierarchy, it is crucial to allocate attention to their effective communication needs, addressing their inquiries and concerns, to prevent the manifestation of negative behaviors that may hinder their job performance.

Classroom Observation Tool (COT)

Classroom observation has been made a requirement in the Philippine Professional Standards for Teachers-Results-Based Performance Management System (PPST-RPMS). Furthermore, it has been enhanced to become more objective and standardized. This alteration is due to its utilization in mentoring, coaching, performance review, and evaluation processes. Consequently, it effectively contributes to the continuous professional development of teachers. In relation to this matter, Suparto (2020) asserted that the implementation of academic supervision through classroom observation techniques can greatly enhance the quality of teacher learning.

The classroom observation exercise is characterized by predetermined indicators mutually agreed upon by the teachers and the observers, ensuring that the teachers are adequately prepared. In a related research endeavor, an effective supervision process entails several stages: pre-observation planning, observation implementation, and post-observation monitoring (Ghavifekr, Husain, Rosden & Hamat, 2019). Those responsible for conducting classroom observations include the head teacher, master teacher, and principal. It is important to note that observations conducted at the Schools Division Office level do not carry direct weight in a teacher's performance review. By and large, instructors express contentment with the classroom observation practices of their supervisors. In conclusion, the literature review has provided a comprehensive understanding of the dynamic landscape of 21st-century teaching skills and the evolving methodologies for assessing teaching performance. Contemporary teaching approaches emphasize student-centered learning, technology integration, and the development of critical 21st-century skills. Simultaneously, the performance of teachers has shifted from traditional, summative evaluations to formative and authentic methods that better capture the multifaceted nature of student achievement. This synthesis of research underscores the need for educators to adapt, innovate, and embrace the principles of 21st-century skills while implementing progressive teaching performance assessment strategies to ensure students' holistic development and success in the modern educational era. As the 21st-century continues to unfold, educators must remain agile in their pedagogical approaches and assessment methodologies to equip students with the skills and competencies necessary to thrive in an ever-changing world. The study's main objective is to determine the 21st-century skills and teachers' performance in selected Divisions of Region X for School Year 2023 – 2024.

Statement of the Problem

This study aimed to determine the level of 21st-century teaching skills and teacher's performance in the First and Second Period in selected divisions of Region X, School Year 2023-2024 as the basis for the Instructional Development Plan. It specifically answered the following questions:

1. How are the respondents distributed in terms age, sex, position, teaching experience, highest educational attainment, and availability of digital technology?
2. How do the respondents assess their level of 21st century teaching skills considering collaboration, critical thinking skill, creativity, communication, digital literacy, social skill, and leadership?
3. What is the teachers' performance level based on the Classroom Observation during the first and second period?
4. Is there a significant relationship between the respondents' assessment of the 21st-century teaching skills and their performance in the first and second period of School Year 2023-2024?
5. Is there a significant difference in the respondents' assessment of 21st century teaching skills and their performance when grouped according to their profile?
6. Based on the result of the study, what Instructional Development Plan on 21st-century teaching skills can be formulated?

Theoretical Framework

This study indicates that teaching skills are essential in meeting the demands of the 21st-century academic world. When these skills are intact among teachers, they competently provide quality instruction that is globally competitive and contribute to the learners' preparation for life ahead that can improve their performance.

Moreover, the 2019 framework created by Battelle for Kids, known as the Partnership for 21st Century Learning, was developed with the purpose of assisting educators in integrating 21st-century skills into their teaching practices (Battelle for Kids, 2019). This framework emphasizes three essential 21st-century skills that learners should acquire, namely life and career skills, learning and innovation, and information, media, and technology skills. To facilitate the development of life and career skills, certain qualities such as flexibility and adaptability, initiative, social and cross-cultural skills, productivity, and leadership are deemed necessary. In order to foster learning and innovation skills, learners must cultivate creativity and innovation, critical thinking abilities, and effective communication skills. Additionally, information, media, & technology skills encompass competencies such as information literacy, media literacy, and ICT information (Battelle for Kids, 2019).

Based on DepEd Memorandum No. 008, series of 2023, issued by the Department of Education entitled the Multiyear Guidelines on the Implementation of Results-based Performance Management and Philippine Professional Standards for Teachers (PPST) for School Year 2022 - 2025. The PPST supports efforts to improve teacher quality at all stages of preparation, from pre-service instruction to in-service training. Through clearly defined areas, strands, and indicators that offer measures of professional development, competent practice, and productive engagement, it explains what teacher quality in the K to 12 reform entails.

The professional standards serve as a visible declaration of professional accountability that motivates educators to consider and evaluate their own actions in pursuit of personal and professional development. The development of the Classroom Observation Tool based on the developmental framework of PPST supports DepEd's move to develop a single tool to measure teachers' classroom performance. DepEd Order No. 42 s. 2017 aims to apply a uniform measure to assess teacher performance, identify needs, and provide support for professional development.

It is important for teachers to observe the interaction between teachers and learners within the classroom because it can determine students' learning opportunities. Not only that, but classroom observation also encourages colleagues to collaborate to improve teacher practice and student learning. Feedback from classroom observations effectively provides teachers with the information they need about their classroom behavior (Halim, Wahid, & Halim, 2020).

Scope and Limitations

The study focused on 21st-century skills and teachers' performance in selected divisions, province of Bukidnon, during the School Year 2023-2024. The respondents of the study were the 311 Junior High School teachers in the Division of Bukidnon, Malaybalay, and Valencia City. The independent variables were limited to teachers' 21st-century skills such as collaboration, critical thinking, creativity, communication, digital literacy, social skills and leadership. Moreover, the dependent variables involved the teacher performance based on their Classroom Observation Tool in the first and second period. Indeed, the moderating variables encompassed the respondents' profile in terms of age, sex, position, teaching experience, highest educational attainment, and availability of technology.

METHODOLOGY

Research Design

This study utilized the descriptive - correlational method of research to investigate and gather essential quantitative data and information about teachers' 21st-century teaching skills and their level of performance based on the Classroom Observation Tool for the first and second period of School Year 2023-2024. Descriptive research, as defined by Fluet (2020), is a quantitative research method employed to characterize traits or functions and assess specific hypotheses. Fluet further emphasized the need for precision and clarity when defining the research problem for this type of study.

This approach aligns with the conclusive quantitative research technique, which aims to test specific hypotheses and elucidate properties or functions, as outlined by Vieira *et al.* (2020). This approach is expected to yield

an accurate and precise representation of the situation. The study involves collecting, organizing, and analyzing data to derive meaningful insights from the findings. Key variables examined include teacher respondents' attributes, their research competence, and their level of research engagement. In addition to survey data, in-depth interviews complemented and enriched the information obtained.

Study Setting

The study was conducted in the province of Bukidnon, located in the northern part of the island of Mindanao in the Philippines. Bukidnon is renowned for its lush landscapes, rolling hills, fertile agricultural fields, and status as the Food Basket of Mindanao. Its capital city, Malaybalay, is nestled amidst the province's natural beauty, while Valencia City, another prominent urban center, adds to the province's charm. The area is known for its rich cultural heritage, as it is home to several indigenous communities, including the Bukidnon, Higaonon, and Talaandig tribes.

The study took place in the province of Bukidnon, where the focus is on three key school division offices (SDOs): SDO Bukidnon, the primary SDO for the province, overseeing education across various municipalities and cities; SDO Valencia City, which manages educational affairs within the City of Valencia and caters to its specific needs; and SDO Malaybalay City, situated in the provincial capital, responsible for the educational development and administration of schools within the city. These SDOs serve as essential administrative and educational support hubs within the region.

The selected institutions with Teacher I, Teacher II and Teacher III Junior High School teachers as target respondents are expected to represent diverse perspectives and experiences regarding 21st-century teaching skills and their teaching performance assessment.

Study Population and Sampling Technique

The participants of this study consisted of three hundred eleven (311) Junior High School teachers with teaching positions in the Division of Bukidnon, Malaybalay and Valencia City. They have the same characteristics as those other teachers in the divisions mentioned above. They were chosen as the actual respondents of the study.

The researcher utilized Slovin's formula in determining the desired number of respondents, which is three hundred eleven Junior High School teachers with a population of 1,083 teachers and a margin of error of 5%. Further stratified random sampling was employed to get the appropriate number of teachers in every school. This was done by dividing the computed sample size by its population. Moreover, to get the number of respondents by grade level, simple random sampling was used through lottery method.

Table 1: Distribution of Respondents

School	Population	Respondents				Total Respondents
		Grade 7	Grade 8	Grade 9	Grade 10	
Alae National High School	58	7	6	8	7	28
Bansay National High School	121	11	10	10	9	40
Bukidnon National High School	280	8	7	7	8	30
Dangcagan National High School	56	6	5	6	6	23
Impasug-ong National High School	54	8	8	8	7	31
Kitaotao National High School	60	8	9	9	9	35
Libona National High School	79	6	6	8	7	27
Manolo Fortich National High School	112	6	6	7	6	25
Quezon National High School	53	9	8	7	6	30
Valencia National High School	208	10	11	11	10	42
Total	1083	79	76	81	75	311

Research Instruments

The questionnaire is divided into four parts. The first part deals with the moderating variables on the respondents’ age, sex, position, teaching experience, highest educational attainment, and availability of digital technology.

The second part of the survey questionnaire is adopted from the study of Diquito (2022) entitled A Survey of 21st Century Skills Acquisition among the Preservice Teachers of Teacher Education Programs. This part entails the following variables: collaboration skill, critical thinking skill, creativity, communication, digital literacy, social skill, and leadership. Each item will be responded by choosing the answer as At All Times, Most of the Time, Seldom, and Never.

The third part of the survey questionnaire is also adopted from Department of Education Memorandum Order No. 008, series of 2023, entitled the Multiyear Guidelines on Implementation of the Results-Based Performance Management System-Philippine Professional Standards for Teachers for School Year 2022-2025. This part entails the Classroom Observation Tool (COT) rating sheet for Teacher I, Teacher II and Teacher III. The rating sheet is a checklist that will be rated according to how well the teacher performed during the classroom observation. It has nine indicators with 3, 4, 5, 6, 7 and NO or Not Observed scale with an automatic rate of 3. Each indicator is assessed on an individual basis and with appropriate ratings based on the performance indicator, which is (5) Outstanding, (4) Very Satisfactory, (3) Satisfactory, (2) Unsatisfactory and (1) Poor.

For the last part of the questionnaire, a set of interview guide questions for junior high school teachers who utilize 21st teaching skills. These open-ended questions helped gather qualitative data on the nature, scope on the teaching and learning process.

Statistical Treatment of Data

Descriptive statistics played a fundamental role in this study by providing concise summaries of key data characteristics. These included a straightforward

description of the sample and the measurements, serving as the cornerstone for most quantitative data analyses, in addition to basic graphical representations. To distribute responders among various factors, mean and standard deviations were utilized. Additionally, the Spearman Rank Correlation, Kruskal Wallis Test and Coefficient (r) was used in evaluating the respondents’ profile, 21st-century skills significant and teachers’ performance.

Ethical Consideration

It is crucial to ensure the privacy and anonymity of the teachers who participate in this research. Teachers may be more inclined to participate honestly and openly if they are assured that their identities and personal information are kept confidential. The following ethical concerns are addressed:

First, it obtained informed consent from all participating teachers and clearly explained the purpose of the study, the data collection process, and how their information was used. This is to ensure that they have the option to withdraw from the study at any time without facing consequences.

Second, teachers were asked to remove or replace any personally identifiable information such as names, school names, or contact details from the data during analysis and reporting. Pseudonym assignments may be done to participants to protect their identities.

Third, the collected data were safeguarded by storing it securely, using encryption where necessary, and limiting access to authorized personnel only. This is to ensure that data is not accidentally disclosed to unauthorized parties. Lastly, the ethical approval was sought from an Institutional Review Board (IRB) or ethics committee to ensure that the research design and data handling procedures meet ethical standards and guidelines.

RESULTS AND DISCUSSIONS

Problem 1. How are the Respondents Distributed in Terms of Age, Sex, Position, Teaching Experience, Highest Educational Attainment, and Availability of Digital Technology

Table 2: Distribution of Respondents' Profile in terms of Age

Category	Frequency	Percent
51 to 65 years old	6	1.93
41 to 50 years old	33	10.61
31 to 40 years old	199	63.99
20 to 30 years old	73	23.47
Total	311	100.00

Table 2 presents a breakdown of the respondents based on age categories, shedding light on the distribution of teachers across different stages of their professional journey. Among the 311 respondents, 199 (63.99%) belonged to the 31 to 40 years old bracket as the highest frequency. As observed, a large portion of the respondents are in middle age wherein individuals in this stage are more active and exhibit a heightened level of curiosity towards their job as a teacher. It implies that educators within this specific age group, owing to their enthusiastic involvement and inquisitiveness, might exhibit a heightened openness to instructional techniques and pedagogical strategies that are in line with the demands of the 21st century and current educational patterns.

Conversely, 6 (1.93%) were in the 51 to 65 years old bracket got the lowest frequency. Age brackets below 51 to 65 years old showed lesser engagement in the study. This implies that, older teachers may encounter challenges in adapting modern ways that involve online surveys, Google Forms, and other digital tools. The age factor also influence the interactions of the teachers. In comparison to their senior counterparts, junior teachers typically possess a lesser number of experiences. Additionally, senior teachers are regarded as more mature and stable and possess a higher level of qualification and a well-rounded perspective. As a result, they are not susceptible to experiencing mental pressure in their work environment. In the context of political and public discussions, there is a tendency to assume a direct linear correlation between the number of years a teacher has been in the profession and the quality of their teaching (Graham *et al.*, 2020).

Table 3: Distribution of Respondents' Profile in terms of Sex

Category	Frequency	Percent
Male	242	77.81
Female	69	22.19
Total	311	100.00

Table 3 provides a data result on the composition of the surveyed teachers, presenting a clear overview of the distribution between female and male respondents. It illustrates 242 (77.81%) were female with the highest frequency. As seen, female teachers are recognized for

their capacity to comprehend students' cognitive and emotional needs and the idea that patience is a virtue primarily demonstrated by female educators. Learners, as well as their superior abilities in communication and counseling. It suggests that it is widely perceived that students can form more positive relationships with female teachers due to their perceived support of their academic performance.

On the other hand, 69 (22.19%) of male respondents received the lowest frequency. As noticed, fewer male teachers were present during the distribution of survey questionnaires. With a lower percentage of male educators in the sample, there may be fewer role models and mentors for male teachers within the educational institutions. It indicates that, for the students who favored male teachers, it was observed that they believed males were better able to maintain control over the classroom.

Table 4: Distribution of Respondents' Profile in terms of Teaching Position

Category	Frequency	Percent
Teacher III	31	9.97
Teacher II	59	18.97
Teacher I	221	71.06
Total	311	100.00

Table 4 shows the distribution of 311 respondents based on their respective teaching positions, categorizing them as Teacher III, Teacher II, and Teacher I. It is evident that 221 (71.06%) held the position of Teacher I who got the highest frequency. As seen, the most portion of the workforce in the Department of Education remains in entry-level positions. This denotes that there is a limited allocation of resources for junior high schools, possibly due to the slow progression of promotions. While teachers are entitled to professional advancement according to the 1987 Constitution, it has been observed that there is a lack of certainty regarding promotion or career progression within DepEd. Comon and Corpuz (2024) emphasized the predominant role of entry-level teaching positions within the surveyed population. This insight sheds light on the composition of the teaching workforce, suggesting a significant presence of educators at the initial stage of their teaching careers. This finding suggests that a substantial portion of the respondents are in the initial stages of their teaching careers, potentially influencing the overall perspectives and experiences captured in the research. Educational policies, professional development initiatives, or interventions derived from the research may have a more direct impact on Teacher I professionals.

While 31 (18.97%) of the respondents were in the Teacher III position, which has the lowest frequency, it is noticeable that Teacher III teachers frequently possess administrative obligations and leadership duties that may demand more time and focus. It explains that the lower frequency might be indicative of time constraints faced

by senior educators, making it challenging for them to engage fully in additional research activities.

Table 5: Distribution of Respondents' Profile in terms of Teaching Experience

Category	Frequency	Percent
30 years and above	9	2.89
21 to 30 years in service	25	8.04
11 to 20 years in service	69	22.19
1 to 10 years in service	208	66.88
Total	311	100.00

Table 5 provides an overview of the teaching experience with a total of 311 teacher respondents, grouping them according to the number of years they have been in the workforce. It was observed that 208 (66.88%) are within 1 to 10 years of service, which has the highest frequency. As seen, most teachers are within the early to mid-career stage, wherein they have lots of opportunities for professional development initiatives. It indicates that early-career educators may be more open to adopting and integrating 21st-century skills into their teaching practices. However, 9 (2.89%) of the respondents with 30 years in service and above have the lowest frequency. As noticed, teachers with extensive teaching experience may encounter less interest in participating in research studies, but their expertise as educators is valuable. It indicates that the length of a teacher's experience served as a meaningful indicator of varying levels of professional experience.

Table 6: Distribution of Respondents' Profile in terms of Highest Educational Attainment

Category	Frequency	Percent
PhD/EdD/DM Degree Holder	2	0.64
With Units in PhD/EdD/DM Degree	20	6.43
Master's Degree Holder	101	32.48
With Units in Master's Degree	148	47.59
Baccalaureate Degree	40	12.87
Total	311	100.00

Table 6 presents a result of the educational qualifications of the surveyed 311 respondents, categorizing them based on their highest educational attainment. It shows that 148 (47.59%) had with units in Master's Degree got the highest frequency. As perceived, most of the respondents had completed coursework toward a Master's degree but may not have completed the full program. This implies that other factors, such as workload and financial limitations, might be barriers. Understanding the reasons behind incomplete Master's degrees can provide valuable insights into the support structures and resources needed

to facilitate educators continued professional growth and academic attainment.

While 2 (0.64 %) of the respondents had a PhD/EdD/DM Degree, which has the lowest frequency. As seen, the study's teachers with a completed doctoral degree are less represented. Despite this, encouraging educators to pursue doctoral degrees can contribute to a culture of continuous learning within the teaching community. It denotes that factors like restricted admission to doctoral programs, financial limitations, and conflicting professional responsibilities could hinder teachers from acquiring doctoral degree.

Table 7: Distribution of Respondents' Profile in terms of Availability of Digital Technology

Category	Frequency	Percent
Internet Connectivity	82	9.12
Laptop	206	22.91
Printer/Scanner	188	20.91
Smartphones	203	22.58
Speaker	53	5.89
TV	167	18.57

Table 7 provides details on the availability of digital technology of the respondents. The result revealed that the highest frequency of 206 (22.91%), had access to laptop. This means that most of the teachers are using laptops as their digital tool in the classroom and find it effective. Laptops also enable educators to tailor instruction and diversify educational experiences for students. In accordance, they have the capacity to modify teaching strategies, deliver personalized feedback, and furnish supplementary materials in alignment with students' interests, capabilities, and educational requirements. It implies that laptops are important for teachers not only in their daily work but also a tool in enhancing instructional delivery, student engagement and learning outcomes.

Also, 53 (5.89%) had the speaker with the lowest frequency. This implies that only a few teachers use speakers as their digital tools inside the classroom. Some teachers also prefer not to use speakers anymore since laptops connected to flatscreen TVs have enough volume for the learners to hear video lessons. In addition, schools may consider providing educators with the necessary audio equipment to help achieve a rich multimedia learning experience for the learners. Akkara, Anumula and Mallampalli (2020) stated that using speakers as technology in teaching speaking improves students' speaking fluency and coherence, lexical resource, grammatical range and accuracy and pronunciation. More so, technology in teaching speaking improves students' speaking skills and employing such has a positive impact on learners speaking skills, fluency, and pronunciation.

Problem 2. How Do the Respondents Assess Their Level of 21st-Century Teaching Skills Considering Collaboration Skills, Critical Thinking Skills, Creativity, Communication, Digital Literacy, Social Skills, and Leadership?

Table 7 presents the Overall mean value of 3.22 (SD=0.43) with the description of Most of the Time. This shows that respondents have a High Level of collaborative skills. The result means that teachers are effective in engaging in cooperative efforts within the school. Collaboration allows teachers to share ideas, strategies, and best practices, and engaging in interaction with peers enables them to acquire knowledge from one another's experiences and cultivate ongoing professional advancement.

The indicator that gains the highest mean value is 3.58 (SD=0.50) As a teacher, I can provide useful feedback and involve others in the task described as At All Times. As viewed, educators excel in providing useful feedback and involving others in tasks that contribute to the creation of a collaborative learning environment. It explains that this has a positive impact to students' engagement, as students are more likely to thrive in an atmosphere where constructive feedback is valued, and collaborative efforts are encouraged. Collaborative teaching, as highlighted by Novicevic *et al.* (2019), offers several benefits. Firstly, it enhances learners' critical thinking abilities, encouraging them to evaluate problems, engage in meaningful discussions, and apply learned concepts in diverse contexts. Secondly, it elevates the quality of teaching by transforming it into a participatory process

subject to critical review and quality assurance. Thirdly, collaborative teaching improves teaching outcomes through peer-reviewed and monitored practices, encompassing various disciplinary perspectives. Fourthly, it challenges traditional instructional methods by pooling efforts to address common goals, but success hinges on clearly established goals and performance expectations from the outset.

On the other hand, the lowest mean is the indicator, as a teacher, I have the ability to use time wisely, especially in conducting group projects with 2.41 (SD=0.31) described as Most of the Time. As observed, when giving group projects to learners, it is necessary to manage the time since this activity is time-consuming. It suggests that teachers need to enhance their efficiency in managing time during these collaborative endeavors. Training or workshops specifically tailored to optimize time use in group projects may be beneficial. Collaboration embodies the fundamental principles for enhancing instructional practice. Particularly, the provision of teacher support is recognized as a crucial aspect of instructional practice. Also, collaborative teaching is perceived as a strategy to attain improved teaching results due to its peer-reviewed and supervised characteristics. It requires additional planning time, and navigating power imbalances can be difficult (Novicevic *et al.*, 2019). However, working through any imbalances or other difficulties in real-time offers special learning opportunities for the students. Yet this strategy helps instructors to embrace the emerging the new objectives of initiatives that aim to combine pedagogy and technology.

Table 8: Distribution of Respondents' Assessment on 21st Century Teaching Skills considering Collaboration Skills

Indicators	Mean	SD	Description
As a teacher, I have the ability to...			
Create a task list.	3.47	0.50	At All Times
Help the team solve problems.	3.33	0.47	At All Times
Provide useful feedback.	3.58	0.50	At All Times
Help in resolving issues.	2.61	0.26	Most of the Time
Respect other's perspectives.	3.33	0.47	At All Times
Involve others in the task.	3.58	0.50	At All Times
Complete tasks with the help of others.	3.50	0.50	At All Times
Use time wisely especially in conducting group projects.	2.41	0.31	Most of the Time
Overall	3.22	0.43	Most of the Time

Legend:

3.26-4.00 At All Times (Very High)

2.51-3.25 Most of the Time (High)

1.76-2.50 Seldom (Low)

1.00-1.75 Never (Very Low)

Table 8 presents the Overall mean value of 3.22 (SD=0.43) with the description of Most of the Time. This shows that respondents have a High Level of collaborative skills. The result means that teachers are effective in engaging in cooperative efforts within the school. Collaboration allows teachers to share ideas,

strategies, and best practices, and engaging in interaction with peers enables them to acquire knowledge from one another's experiences and cultivate ongoing professional advancement.

The indicator that gains the highest mean value is 3.58 (SD=0.50) As a teacher, I can provide useful feedback and involve others in the task described as At All Times. As viewed, educators excel in providing useful feedback and involving others in tasks that contribute to the creation of a collaborative learning environment. It explains

that this has a positive impact to students' engagement, as students are more likely to thrive in an atmosphere where constructive feedback is valued, and collaborative efforts are encouraged. Collaborative teaching, as highlighted by Novicevic *et al.* (2019), offers several benefits. Firstly, it enhances learners' critical thinking abilities, encouraging them to evaluate problems, engage in meaningful discussions, and apply learned concepts in diverse contexts. Secondly, it elevates the quality of teaching by transforming it into a participatory process subject to critical review and quality assurance. Thirdly, collaborative teaching improves teaching outcomes through peer-reviewed and monitored practices, encompassing various disciplinary perspectives. Fourthly, it challenges traditional instructional methods by pooling efforts to address common goals, but success hinges on clearly established goals and performance expectations from the outset.

On the other hand, the lowest mean is the indicator, as a teacher, I have the ability to use time wisely, especially in conducting group projects with 2.41 (SD=0.31)

described as Most of the Time. As observed, when giving group projects to learners, it is necessary to manage the time since this activity is time-consuming. It suggests that teachers need to enhance their efficiency in managing time during these collaborative endeavors. Training or workshops specifically tailored to optimize time use in group projects may be beneficial. Collaboration embodies the fundamental principles for enhancing instructional practice. Particularly, the provision of teacher support is recognized as a crucial aspect of instructional practice. Also, collaborative teaching is perceived as a strategy to attain improved teaching results due to its peer-reviewed and supervised characteristics. It requires additional planning time, and navigating power imbalances can be difficult (Novicevic *et al.*, 2019). However, working through any imbalances or other difficulties in real-time offers special learning opportunities for the students. Yet this strategy helps instructors to embrace the emerging the new objectives of initiatives that aim to combine pedagogy and technology.

Table 9: Distribution of Respondents' Assessment on 21st Century Teaching Skills considering Critical Thinking Skills

Indicators	Mean	SD	Description
As a teacher, I have the ability to...			
Understand how knowledge might transfer to other situations.	3.60	0.50	At All Times
Recognize my limitations and to create new alternative ways.	2.63	0.31	Most of the Time
Evaluate my own reasoning.	2.41	0.27	Most of the Time
Identify needed detail through the use of scientific inquiry.	2.56	0.29	Most of the Time
Broaden my own inquiry.	3.47	0.50	At All Times
Change ideas and justify it.	3.33	0.47	At All Times
Understand difficult questions.	3.47	0.50	At All Times
Assess the quality of data.	3.33	0.47	At All Times
Overall	3.10	0.41	Most of the Time

Legend:

3.26-4.00 *At All Times (Very High)*

2.51-3.25 *Most of the Time (High)*

1.76-2.50 *Seldom (Low)*

1.00-1.75 *Never (Very Low)*

Table 9 offers a detailed examination of respondents' assessment regarding 21st-century teaching skills, with a specific emphasis on critical thinking skills. It gathers an overall mean value of 3.10 (SD=0.41) described as Most of the Time. This denotes that respondents have high level of critical thinking skills. As seen, most of the teacher respondents have adequate critical thinking skills but have not reached the highest level, they need to make efforts to improve this. It indicates that teachers used critical thinking skills better in recognizing issues and providing solutions despite the different challenges inside the classroom.

The indicator As a teacher, I have the ability to understand how knowledge might transfer to other situations got the highest mean rating of 3.60 (SD=0.50), described as At All Times. This means that teachers

are adept at helping learners understand not only the content knowledge but also how to deal in real world situations. In addition, teachers incorporate activities and techniques that encourage learners to analyze ideas, make connections, and apply their learning to diverse situations. This approach helps learners recognize the practical utility of their learning and reinforces the notion that knowledge is transferable across various situations. Through this, teachers are preparing students for the demands of a rapidly changing world. It suggests that understanding knowledge transfer indicates a perceived strength in facilitating transferable skills among educators, contributing to a more holistic view of their critical thinking capabilities. According to Jones (2019), critical thinking is a mindset that enables people and communities to adapt, innovate, and prosper in a world that is becoming more complex. It is not only a skill. A critical thinking attitude advocates for a comprehensive way of seeing the world. It entails having the capacity to make connections between seemingly unrelated facts, see

patterns, and recognize how different components are related to one another within a certain context.

As a teacher, I have the ability to evaluate my own reasoning garnered the lowest mean value of 2.41 and SD=0.27 described as Most of the Time. As perceived, teachers have low skill in evaluating their own reasoning. It indicates that teachers must involve themselves in a reflective practice where they can analyze their teaching skills and outcomes. Whether through self-reflection journals, peer observations, or mentorship programs, teachers who regularly assess their own reasoning are likely to gain from the integration of feedback systems. Teachers can design tests that evaluate higher-order thinking in addition to rote memorization, pushing students to apply their information in relevant contexts.

Higher-order thinking abilities like analysis, synthesis, and assessment are linked with critical thinking. Students are encouraged to go beyond rote memorization and participate in deeper, more meaningful learning experiences by teachers who support critical thinking. Educators can cultivate a more profound comprehension of the subject by formulating assessments that extend beyond mere memorization and emphasize advanced cognitive abilities. Critical thinking draws on other skills such as communication, information literacy and the ability to examine, analyze, interpret, and evaluate evidence. It is presented as relevant within the field of formal education, and within business and responsible social citizenship (Jones, 2019).

Table 10: Distribution of Respondents' Assessment on 21st Century Teaching Skills considering Creativity

Indicators	Mean	SD	Description
As a teacher, I have the ability to...			
Elaborate and improve my ideas.	3.49	0.50	At All Times
Use brainstorming to generate original and unique ideas.	3.33	0.47	At All Times
Find relevant sources of information.	3.47	0.50	At All Times
Use my imagination to create new things.	3.33	0.47	At All Times
Create unique and different outputs.	2.42	0.24	Most of the Time
Combine different ideas to generate new outputs.	3.33	0.47	Most of the Time
Promote a variety of creative ideas.	2.22	0.20	Most of the Time
Create ideas needed for the development of new ideas.	3.33	0.47	At All Times
Overall	3.10	0.41	Most of the Time

Legend:

3.26-4.00 *At All Times (Very High)*

2.51-3.25 *Most of the Time (High)*

1.76-2.50 *Seldom (Low)*

1.00-1.75 *Never (Very Low)*

Table 10 displays an overall mean value of 3.1 (SD=0.41) Most of the Time and indicates that teacher respondents have a high level of creativity. It shows that teachers are creative, but to achieve the highest level, they need to elevate their teaching, that is, going beyond traditional methods, embracing the latest ideas, and adapting strategies to engage students in meaningful ways. It suggests that teachers with creative skills tend to develop flexible and creative teaching strategies. By adapting creativity to different learning styles, needs, and challenges, teachers may create a welcoming and stimulating learning atmosphere in the classroom.

The indicator, As a teacher, I have the ability to elaborate and improve ideas, has the highest mean of 3.49 (SD=0.50) described as At All Times. As observed, educators feel confident in their ability to not only generate ideas but also elaborate on them and actively engage in the improvement process. This aligns with the goal of fostering a culture of continuous improvement and refinement of creative concepts in the learning environment. This implies that creativity is a crucial 21st-century competency that students must possess as they

confront technological advancements and prepare for their future occupations. According to a teacher interview, numerous educators still assess the cognitive aspects of their students. This situation implies that students are lacking in skills, particularly in the realm of creativity. Thus, creativity stands as an essential skill that students should cultivate (Dawes & Wegerif, 2023).

As a teacher, I have the ability to promote a variety of creative ideas got the lowest mean of 2.22 (SD=0.20), described as Most of the Time. As seen, teachers have different innovative strategies for dealing with diverse learners and to have an interactive classroom experience. This indicates that teachers lack strategies that encourage learners to express their opinions without fear of judgment, offer students choices in how they demonstrate their understanding of a topic and integrate creativity into various subjects. There may be perceived space for growth in terms of educators actively encouraging and fostering a diverse range of creative ideas in the learning environment. It might indicate a potential focus area for professional development initiatives to enhance strategies for promoting creativity among students. The concept of creativity encompasses the capacity to generate fresh ideas and solutions, break through existing barriers, promote original thinking, pose unfamiliar inquiries, and arrive at unexpected conclusions (Dawes & Wegerif, 2023). In

the context of global competition and task automation, increasingly seen as requirements for professional and individual capacity for innovativeness and creativity are personal success.

Table 11: Distribution of Respondents’ Assessment on 21st Century Teaching Skills considering Communication

Indicators	Mean	SD	Description
As a teacher, I have the ability to...			
Use appropriate platforms in communication.	3.47	0.50	At All Times
Adapt a communication style appropriate to different situations.	2.43	0.26	Most of the Time
Speak fluently, clearly and professionally.	2.56	0.29	Most of the Time
Create a clear and interesting discussion.	2.22	0.20	Most of the Time
Present all information clearly.	3.33	0.47	At All Times
Clearly communicate various perspectives.	3.47	0.50	At All Times
Organize information.	3.33	0.47	At All Times
Answer questions logically.	3.58	0.50	At All Times
Overall	3.04	0.40	Most of the Time

Legend:

3.26-4.00 *At All Times (Very High)*

2.51-3.25 *Most of the Time (High)*

1.76-2.50 *Seldom (Low)*

1.00-1.75 *Never (Very Low)*

Table 11 shows an overall mean value is 3.04 with SD=0.40 with a description of Most of the Times implies that respondents have high level on communication skills. As noticed, teachers have knowledge on this skill but to attain the highest level, there is a need to improve one’s practices and make consistent reflection. To add with, teachers possess a commendable level of communication skills. It implies that teachers are effective in sharing information, facilitating discussions, and engaging with students, coworkers, and stakeholders. Clear and effective communication is important when providing feedback on student’s activities, assessments, and overall performance. It helps students understand areas for improvement and encourages continuous growth.

Additionally, the indicator As a teacher, I have the ability to answer questions logically has the highest mean value of 3.58 (SD=0.50) among all eight indicators described as At All Times. As observed, educators are generally effective in providing learners with logical answers to queries. It indicates that this skill is crucial for fostering understanding and engagement in the learning process. Communication encompasses the aptitude to clearly and persuasively express thoughts both verbally and in written form, articulate viewpoints, convey coherent instructions, and inspire others through speech. It is asserted that communication skills hold great significance in professional settings and public life and are also influenced by present and emerging technologies, considering the substantial number of messages that are mediated by one or more digital devices. Within this

framework, proficient communication skills can serve to prevent misunderstandings and miscommunications (Joynes, 2019).

Then, the indicator with the lowest mean value is As a teacher, I have the ability to create a clear and interesting discussion with 2.22 (SD=0.20) described as Most of the Time. It denotes that educators may have perceived difficulties producing discussions that are both engaging and clear. In the delivery of lessons, to create an interesting discussion, teachers must clearly state the objectives and expected outcomes. This gives a clear direction for both the teacher and students and helps maintain focus throughout the discussion. It suggests that teachers must select topics that are relevant to the curriculum, students’ interests, and current issues. In choosing meaningful and relatable topics increases learner’ engagement and encourages thoughtful participation. Lastly, teachers must emphasize the importance of active listening, constructive contributions, and a safe space for expressing opinions. Clear expectations help create a positive discussion environment. Given that a significant number of messages are mediated by one or more digital devices, it is said that communication skills are highly appreciated in both the public and professional spheres. They are also affected by existing and forthcoming technology. Effective communication techniques can aid in preventing misinterpretations and misunderstandings in this situation. Professional development in this area could be aimed at improving educators’ facilitation abilities and encouraging lively and engaging classroom conversations. Communication includes the ability to express thoughts clearly and persuasively both orally and in writing, articulate opinions, communicate coherent instructions and motivate others through speech (Griffiths, 2018).

Table 12: Distribution of Respondents’ Assessment on 21st Century Teaching Skills in terms of Digital Literacy

Indicators	Mean	SD	Description
As a teacher, I have the ability to...			
Use the internet resources wisely.	3.24	0.36	Most of the Time

Use digital media to create my own texts.	2.58	0.29	Most of the Time
Save, store, and reuse information using ICT.	3.11	0.32	Most of the Time
Create outputs that suit to the different audience and situations.	2.42	0.24	Most of the Time
Use ICT appropriately.	2.63	0.32	Most of the Time
Create slides, spreadsheet, documents, and other important ICT tools.	2.51	0.29	Most of the Time
Use different types and formats of ICT.	2.56	0.29	Most of the Time
Efficiently and effectively use the various forms of educational technology.	2.51	0.29	Most of the Time
Overall	2.67	0.29	Most of the Time

Legend:

3.26-4.00 At All Times (Very High)

2.51-3.25 Most of the Time (High)

1.76-2.50 Seldom (Low)

1.00-1.75 Never (Very Low)

Table 12 presents data with an overall mean of 2.67 (SD=0.29), described as Most of the Time, which means that respondents have a high level of digital literacy skills. As perceived, teachers have moderate skills in digital literacy due to the fact that some teachers in the field face limitations in accessing digital resources, and internet connections matter most. Not all schools have internet access especially those in remote areas. This indicates that, as technology becomes increasingly integrated into educational practices, the implementation of asynchronous learning platforms is necessary, that allow students to download educational content and resources during times of internet availability. This enables them to access materials offline when needed for teaching.

The indicator As a teacher, I have the ability to use the internet resources wisely got the highest mean rating of 3.24 (SD=0.36), described as Most of the Time. As viewed, educators are effective in utilizing Internet resources in an informed manner. Teachers are knowledgeable about the latest online learning platforms, resources, and technologies. It explains that teachers freely incorporate open educational resources, adding multimedia and interactive elements to improve their lessons. Furthermore, teachers accommodate different learning styles and provide more dynamic lectures, including video showing, simulations, and

other interesting content. Rogers (2018) emphasizes the transformative impact of technology integration on teachers' pedagogical competence. By examining the role of digital tools in enhancing teaching strategies and fostering 21st-century skills, the research contributes to a deeper understanding of how technology can be harnessed to enhance both teaching and learning. This understanding is invaluable for educators, administrators, and policymakers as they seek to prepare students for success in a technologically driven world.

Yet, the indicator As a teacher, I have the ability to create outputs that suit the different audience and situations has the lowest mean of 2.42 (SD=0.24), described as Most of the Time. As has been noticed, teachers are having difficulty effectively utilizing educational technology and adapting their digital outputs to various audiences and situations. It implies that teachers must focus possible topics in different department learning action cell to improve teachers' flexibility in using digital technologies and producing content that meets a diverse of students' learning needs. According to Cheung (2021), digital technologies facilitate personalized learning. The utilization of various applications that enhance the quality of instruction in the classroom plays a crucial role in augmenting personalized learning. Cheung *et al.* (2021) argue that digital technologies enable teaching and learning that is customized to the characteristics of both the educator and the learner while also being improved and enhanced by the preferences and features provided by information and communication technology tools. Table

Table 13: Distribution of Respondents' Assessment on 21st Century Teaching Skills considering Social Skills

Indicators	Mean	SD	Description
As a teacher, I have the ability to...			
Respond appropriately to peer-pressure.	2.56	0.29	Most of the Time
Control temper in conflict situations.	3.58	0.50	Most of the Time
Receive criticism.	3.47	0.50	At All Times
Initiate conversations with others.	3.33	0.47	At All Times
Accept other ideas.	3.58	0.50	At All Times
Make friends easily.	3.47	0.50	At All Times
Get along with other people.	3.33	0.47	At All Times
Cooperate with others.	2.42	0.24	Most of the Time
Overall	3.21	0.43	Most of the Time

Legend:

3.26-4.00 *At All Times (Very High)*

2.51-3.25 *Most of the Time (High)*

1.76-2.50 *Seldom (Low)*

1.00-1.75 *Never (Very Low)*

13 reveals respondents' assessment of the 21st-century teaching skills in terms of social skills that have an overall mean rating of 3.21 (SD=0.43), described as Most of the Time, and this shows that respondents have high level in Social Skills. As seen, teachers regularly use positive interpersonal techniques. This consistency suggests that teachers are probably establishing a welcoming and socially interesting environment for their students, encouraging good relationships within the learning community. This indicates that teachers are generally demonstrating knowledge in social skills, but to attain the highest level, they need to cultivate interpersonal practices for every individual. Encouraging peer coaching and mentorship within the teaching community can be beneficial. Master teachers, department heads, and school heads or those experienced teachers with strong social skills can serve as mentors to provide guidance and share best practices with their colleagues, fostering a culture of continuous improvement.

Among the eight indicators, As a teacher, I have the ability to control temper in conflict situations and accept other ideas got the highest mean rating of 3.58 (SD=0.50), described as Most of the Time. As observed, teachers in times of conflict showed an acceptable ability to control their temper. This suggests that they possess the ability to remain composed and positively manage conflicts or difficult circumstances. It implies that teachers serve as a role models for students, and the ability to manage conflicts and embrace diverse ideas sets a positive example. By exhibiting these skills, students are more likely to learn and adopt similar approaches, which contributes to the development of positive social and emotional skills. Social skills have a big contribution to education, encompassing a variety of abilities. Smith and Johnson's study (2019)

emphasizes that social skills can improve pedagogical competence in novice teachers, which is a multifaceted process that involves mentoring, ongoing professional development, and reflective practice. By recognizing the challenges faced by novice teachers and providing them with the necessary support and resources, the educational system can nurture a new generation of educators who are not only well-prepared but also continually evolving in their pedagogical expertise.

While the indicator, As a teacher, I have the ability to cooperate with others has gained the lowest mean of 2.42 (SD=0.24), described as Most of the Time. It is noticeable that teachers showed moderate level of cooperation with others inside the educational context. This indicates that factors such as limited time, insufficient communication channels, or varying teaching styles might contribute to difficulties in cooperative efforts. Improve school-wide communication channels to promote collaboration. Creating digital and face-to-face communication channels that are easy to understand and use can facilitate teacher collaboration, idea sharing, and information sharing. By addressing this aspect, institutions can contribute to a more cohesive and efficient educational environment, benefiting both educators and their students. Consequently, social skills make a big contribution to education; they encompass a variety of abilities. Smith (2019) emphasizes that social skills can improve pedagogical competence in novice teachers, a multifaceted process involving mentoring, ongoing professional development, and reflective practice. Through guidance from mentors, continuous professional growth, and introspective exercises, novice educators can cultivate the social abilities required to cultivate favorable connections, establish a conducive educational atmosphere, and actively involve students in the educational process. By dedicating resources to the enhancement of social skills, novice educators can enhance their efficacy in the classroom and positively influence student academic achievements.

Table 14: Distribution of Respondents' Assessment on 21st Century Teaching Skills considering Leadership

Indicators	Mean	SD	Description
As a teacher I...			
I usually know ahead of time how others will respond to a new idea.	2.56	0.29	Most of the Time
I understand how important social fabric in the organization.	3.33	0.50	At All Times
I know how to manage people and resources.	3.58	0.50	At All Times
I can easily sense the emotional pressure when working in groups.	3.47	0.50	At All Times
I enjoy discussing organizational philosophy.	3.33	0.50	At All Times
I can easily resolve conflicts when working as a group.	2.63	0.32	Most of the Time
I am flexible enough when there are changes in the group.	3.33	0.47	At All Times
I love making strategic plans.	3.49	0.50	At All Times
Overall	3.20	0.44	Most of the Time

Legend:

3.26-4.00 *At All Times (Very High)*

2.51-3.25 *Most of the Time (High)*

1.76-2.50 *Seldom (Low)*

1.00-1.75 *Never (Very Low)*

Table 14 shows the distribution of respondents' assessment of 21st-century teaching skills considering leadership with an overall rating of 3.20 (SD=0.44), described as Most of the Times. This means that respondents have a high level of leadership skills. This shows that teachers are perceived to possess the qualities and abilities associated with effective leadership in the school. Teachers integrate leadership in the teaching and learning process but to achieve the highest level, it is necessary to establish the guidance, and foster a supportive environment for both teachers and students. The indicator As a teacher, I know how to manage people and resources obtained the highest mean rating of 3.58 (SD=0.50) described as At All Times. As noticed, teachers possess exceptional leadership and managerial abilities with the different learners nowadays. It indicates that teachers are consistently practicing their ability to organize, allocate, and improve resources, as well as effectively work with colleagues and students. It had an impact of the quality of student learning experiences and the cooperative atmosphere within the academic community. Moreover, it emphasizes how efficient resource management directly affects the learning objectives of students. Acknowledge and explain how better resource management makes the classroom more interesting, well-equipped, and encouraging for the students. In 2021, Garcia and Kim underscores the transformative power of leadership in developing teachers' competence. By exploring the significance of leadership and its connection to effective teaching strategies, the research provides valuable insights into how educators can create more inclusive and equitable learning environments.

While indicator As a teacher, I usually know ahead of time how others will respond to a new idea has the lowest mean value of 2.56 (SD=0.29) described as Most of the Time. As seen, teachers had low ability in advance thinking skills as far as responding to new ideas are concerned. It indicates that teachers need activities that can help improve their communication and comprehension within the educational community. Addressing these challenges can foster a more inclusive environment wherein educators can effectively anticipate and respond to new ideas, ultimately nurturing a culture of innovation and beneficial change. In addition, teachers can also engage in the process of self-reflection, along with encouraging them to examine their own assumptions, biases, and past experiences, which has the potential to improve their capacity to anticipate responses to innovative concepts. By actively participating in self-reflection and actively seeking input from colleagues and students, educators can cultivate a more profound comprehension of how their ideas might be perceived and take proactive steps to address any potential obstacles or apprehensions. In 2019, the literature review conducted by Turner and Harris emphasized the essential role of formative assessment and feedback in the domain of teaching and learning. Through an examination of the methodologies educators employ in implementing these practices and their considerable impact on student achievement and engagement, this research makes a substantial contribution to the comprehension of effective teaching methodologies. It emphasizes the significance of establishing an environment wherein feedback serves as a constructive and continuous dialogue, enabling students to actively participate in their learning process and allowing teachers to refine their instructional techniques. The review provided a resounding summons for incorporating evidence-based approaches to enhance teaching and learning encounters, with the goal of working towards achieving fair, comprehensive, and learner-focused educational systems in the 21st century.

Table 15: Summary of the Respondents' Level of Assessment of the 21st Century Teaching Skills

Indicators	Mean	SD	Description
Collaboration Skills	3.22	0.43	High Level
Critical Thinking Skills	3.10	0.41	High Level
Creativity	3.10	0.41	High Level
Communication	3.04	0.40	High Level
Digital Literacy	2.67	0.29	High Level
Social Skills	3.21	0.43	High Level
Leadership	3.20	0.44	High Level
Overall	3.07	0.40	High Level

Legend:

3.26-4.00 *At All Times (Very High)*

2.51-3.25 *Most of the Time (High)*

1.76-2.50 *Seldom (Low)*

1.00-1.75 *Never (Very Low)*

Table 15 summarizes respondents' assessment of the 21st-century teaching skills. It shows that the overall mean rating of 3.07 (SD=0.40) described as Most of the Times. This reflects positively on the education system. Although

this strength is recognized, there is still an opportunity for ongoing development to strengthen certain aspects of these skills and guarantee that education is still useful and effective in educating students for the future. Moreover, collaboration skills got the highest mean of 3.22 (SD=0.43). In collaboration skills, respondents feel more confident in their ability to collaborate effectively in teaching scenarios. Collaborative teaching challenges conventional instructional delivery methods by leveraging combined efforts to address common goals or issues. The improvement of instructional practice is guided by collaboration, which is considered to be a fundamental principle. Within this context, teacher support is recognized as a crucial aspect of instructional practice. Novicevic, Buckley, Harvey, and Keaton (2019) assert that efforts to support teachers have a significant impact and emphasize the importance of providing teachers with regular feedback and involving them in curricular decision-making processes to enhance teaching. Successful implementation necessitates continuous and active support, which is deeply rooted in strong collaboration. Furthermore, collaboration plays a pivotal role in providing teachers with feedback to enhance their

reflective teaching practice.

On the other matter, Digital Literacy has the lowest mean of 2.67 (SD=0.29). This means that teachers had low mastery in using digital literacy skills. One of the reasons is the lack of reliable internet connectivity in the school. Most of the teachers use only mobile data and because of this they had struggle in exploring and downloading digital resources. Poor internet connectivity restricts the effective communication between educators and learners, causing interruptions to the exchange of knowledge, feedback and assistance that are essential for the growth of digital literacy skills since nowadays, technology is inevitable specially for the new generation. Specifically, this indicates as technology evolves rapidly, educators need to continually adapt. Improving digital literacy can have a direct impact on students' learning experiences. The transforming effect of technology integration on teachers' pedagogical skills is emphasized by Rogers (2018).

Problem 3. What is the Teachers' Performance Level Based on the Classroom Observation Tool (COT) During the First and Second Period?

Table 16: Distribution of the Respondents' Performance based on the Classroom Observation Tool (COT)- 1st Period

Indicators	Mean	SD	Description
Applied knowledge of content within and across curriculum areas.	4.43	0.35	Very Satisfactory
Used a range of teaching strategies that enhance learner achievement in literacy and numeracy skills.	4.50	0.50	Outstanding
Applied a range of teaching strategies to develop critical and creative thinking, as well as higher-order thinking skills.	4.43	0.35	Very Satisfactory
Displayed proficient in Mother Tongue, Filipino, and English to facilitate teaching and learning.	4.37	0.35	Very Satisfactory
Established safe and secure learning environments to enhance learning through the consistent implementation of policies, guidelines and procedures.	4.43	0.35	Very Satisfactory
Maintained learning environments that promote fairness, respect, and care to encourage learning.	4.47	0.35	Very Satisfactory
Established a learner-centered culture by using teaching strategies that respond to their linguistic, cultural, socio-economic and religious backgrounds.	4.43	0.35	Very Satisfactory
Adapted and used culturally appropriate teaching strategies to address the needs of learners from indigenous group.	3.50	0.35	Very Satisfactory
Used strategies for providing timely, accurate and constructive feedback to improve learner performance.	4.66	0.50	Outstanding
Overall	4.35	0.38	Very Satisfactory

Legend:

4.500-5.000 Outstanding

3.500-4.4999 Very Satisfactory;

2.500-3.499 Satisfactory

1.500-2.499 Unsatisfactory

1.000-1.499 Poor

It can be shown that Table 16, the distribution of the respondents' performance based on the classroom observation tool with an overall mean mean of 4.53 (SD=0.38) described as Very Satisfactory. As observed, teachers had demonstrated a high level of competence across the evaluated indicators for the first period. It

implies that the result emphasizes specific areas where teachers excelled and others where there is room for refinement. For example, teaching strategies related to literacy and numeracy skills, as well as providing feedback, received an "Outstanding" rating, indicating strong performance. On the other hand, culturally appropriate teaching strategies for indigenous groups scored lower but still within the "Very Satisfactory" range. The performance of teachers has a significant relationship with their schools' performance.

Indicator Used strategies for providing timely,

accurate, and constructive feedback to improve learner performance has the highest mean of 4.5 (SD=0.5) described as Outstanding. As viewed, providing timely, precise, and beneficial feedback is a fundamental facet of instruction and acquisition. Timely feedback holds utmost importance as it offers students immediate insights into their performance, enabling them to make necessary adjustments while the information is still fresh in their memory. It suggests that constructive feedback concentrates on specific behaviors and furnishes guidance on how to enhance this skill. It accentuates strengths, commends efforts, and proposes actionable measures for improvement. Educators must provide feedback on final outcomes and the process and progress, which aids students in comprehending their learning expedition. The department's objective is to offer evaluations on the progress and achievements of employees and to monitor their advancement toward goals to determine if any corrective measures need to be taken. A study by Dizon (2018) noted that DepEd enhances its culture of performance and responsibility by following its overarching organizational directive, vision, and mission through the implementation of the RPMS as its Strategic Performance Management System. The Department of Education emphasizes the importance of aligning

corporate objectives and performance evaluations. Indicators play a crucial role in monitoring individual performance and its impact on company goals. Meanwhile, the indicator Adapted and used culturally appropriate teaching strategies to address the needs of learners from indigenous group got the lowest mean of 3.5 (SD=0.35), described as Very Satisfactory. This means that the utilization of strategies for indigenous learners needs to be revisited to ensure inclusivity in the field of education. It indicates that teachers who are teaching in an Indigenous people IP school have a need for deeper and specialized training and in certain cases, an excessive concentration on incorporating culturally appropriate teaching strategies may result in a comprehensive subject or learners' understanding. Moreover, active involvement in the performance of teaching promotes educators' comprehension, skills, principles, and attitudes, as well as the most recent advancements in the field (Zhao, Yang, Long, & Zhao, 2019). When educators actively engage in the process of teaching, they acquire a sophisticated understanding of pedagogical concepts and theories. This direct involvement enables them to connect the divide between theoretical knowledge and practical implementation, resulting in a deeper comprehension of the complexities inherent in successful instruction.

Table 17: Distribution of the Respondents' Performance based on the Classroom Observation Tool (COT)- 2nd Period

Indicators	Mean	SD	Description
Applied knowledge of content within and across curriculum areas.	4.43	0.35	Very Satisfactory
Used a range of teaching strategies that enhance learner achievement in literacy and numeracy skills.	4.63	0.50	Outstanding
Applied a range of teaching strategies to develop critical and creative thinking, as well as higher-order thinking skills.	4.37	0.35	Very Satisfactory
Displayed proficient in Mother Tongue, Filipino, and English to facilitate teaching and learning.	4.47	0.35	Very Satisfactory
Established safe and secure learning environments to enhance learning through the consistent implementation of policies, guidelines and procedures.	4.43	0.35	Very Satisfactory
Maintained learning environments that promote fairness, respect, and care to encourage learning.	4.66	0.50	Outstanding
Established a learner-centered culture by using teaching strategies that respond to their linguistic, cultural, socio-economic and religious backgrounds.	4.47	0.35	Very Satisfactory
Adapted and used culturally appropriate teaching strategies to address the needs of learners from indigenous group.	4.43	0.35	Very Satisfactory
Used strategies for providing timely, accurate and constructive feedback to improve learner performance.	4.43	0.35	Very Satisfactory
Overall	4.48	0.38	Very Satisfactory

Legend:

4.500-5.000 Outstanding

3.500-4.4999 Very Satisfactory;

2.500-3.499 Satisfactory

1.500-2.499 Unsatisfactory

1.000-1.499 Poor

Table 17 presents the distribution of respondents' performance based on the Classroom Observation Tool for the second period. It has an overall mean rating of 4.48 (SD=0.4), described as Very Satisfactory. This means

that teachers performed well during the second period but did not achieve the Outstanding rating. Further, several factors might influence teachers during the Classroom Observation, such as students' participation and external pressures. Teachers may encounter difficulties in sustaining a high degree of student engagement, particularly when students lack interest, motivation, or are dealing with personal obstacles. Additionally, they frequently face external pressures associated with

meeting administrative demands, adhering to curriculum guidelines, and implementing standardized assessments. Striking a balance between these requirements and maintaining an interactive and captivating teaching approach can prove to be challenging. To do this, teachers need to enhance their teaching skills and practices within the educational institution.

The indicator Maintained learning environments that promote fairness, respect, and care to encourage learning got the highest mean rating of 4.66 (SD=0.5) described as Outstanding. It shows that, teachers had the ability to ensure that learners understand the instruction, recognizes the diversity of each learner, actively listen to students' questions and concerns, treat students fairly, use positive reinforcement and practice inclusivity inside the classroom. This suggests that the outstanding rating for this indicator is indicative of a classroom environment that goes beyond the mere transmission of knowledge. It focused the importance of a positive, respectful, and caring culture in shaping students' overall educational experience and sets the foundation for a supportive learning community. The insight gained from this observation can serve as a model for other educators and contribute to discussions on the importance of holistic approaches to teaching and learning. Evidently, it is true that successful acquisition of knowledge depends on various factors that are not all teachers related but it also includes the methods that a teacher uses that continue to play. All factors play an important role in student learning and in their academic achievements (Luntungan, 2023). Teachers must possess proficiency and fluency

in the language of classroom instruction, skills in the use of pedagogy appropriate for the class and activity, mastery of the subject matter or discipline taught, skills in maintaining order and discipline in class, and skills in evaluating pupil's achievement.

On the other hand, the indicator Applied a range of teaching strategies to develop critical and creative thinking, as well as higher-order thinking skills got the lowest mean rating of 4.37 (SD=0.35) described as Very Satisfactory. This means that teachers lack activities that develop critical thinking, creative thinking and higher order thinking skills during the lesson proper.

It indicates that teachers are good in applying a range of teaching strategies, but there is a specific area focused on critical thinking and integrating higher-order skills in the discussion, where enhancement is needed. Teachers must prioritize activities that foster analysis, synthesis, and evaluation, as these can enhance students' cognitive engagement and provide a more comprehensive education. The Philippine Professional Standards for Teachers-Results-Based Performance Management System requires classroom observation. Notably, improvements have been made to guarantee greater neutrality and uniformity. This change is a result of its crucial position in the procedures of performance reviews, coaching, mentoring, and evaluation, which greatly aid in teachers' continuous professional growth. Suparto (2020), in accordance with his viewpoint, asserts that the implementation of academic supervision using classroom observation techniques possesses significant potential to improve the quality of teacher education.

Table 18: Summary Distribution of the Respondents' Performance based on the Classroom Observation Tool (COT)-1st and 2nd Period

Period	Mean	SD	Interpretation
1 st Period	4.35	0.38	Very Satisfactory
2 nd Period	4.48	0.38	Very Satisfactory
Overall	4.41	0.38	Very Satisfactory

Legend:

4.500-5.000 Outstanding

3.500-4.4999 Very Satisfactory;

2.500-3.499 Satisfactory

1.500-2.499 Unsatisfactory

1.000-1.499 Poor

Table 18 presents the summary distribution of teachers' performance based on the Classroom Observation Tool (COT) for the 1st and 2nd period with an overall mean of 4.41 (SD=0.38), described as Very Satisfactory. As observed, teachers had a consistent level of teaching performance throughout the observation on the 1st and 2nd periods. It indicates that educators demonstrated stable teaching practices and instructional effectiveness over time. The fact that the mean scores were consistently high in both periods implies that there was a positive and conducive learning environment in the observed classrooms. It is likely that the educators employed effective classroom management techniques and provided

engaging and meaningful learning experiences for their students.

The 2nd Period got the highest mean of 4.48 (SD=0.38) interpreted as Very Satisfactory. It means that, educators often adjust and refine their instructional techniques over time based on their experience and feedback received. By the second period, the teacher may have had more time to improve their teaching skills, leading to more impactful classroom practices. It implies that teachers may have received feedback on their teaching performance after the first period and used it to make improvements for the second period.

On the contrary, the 1st Period got the lowest mean of 4.35 (SD=0.38) interpreted as Very Satisfactory. It shows that during the first period, teachers may have limited familiarity with their students' learning styles, abilities, and behavioral tendencies. This lack of awareness can make it challenging to effectively tailor instruction to

meet the varied needs of students, potentially resulting in lower mean scores. It indicates that at the beginning of a new academic period, teachers and learners might still be in the process of adjusting to one another and to the educational setting. This transitional phase could have an impact on the efficacy of pedagogical approaches and student involvement, ultimately leading to initially decreased average scores.

Kintz (2023) placed emphasis on the six essential aspects of professional development that are linked to the enhancement of teachers' self-reported knowledge and skills, as well as changes in their teaching practices. These aspects encompass three structural features and three

core features. The core features pertain to the inherent qualities of the professional development activity, namely the provision of opportunities for active learning, such as engaging in the analysis of teaching and learning; the coherence of the professional development itself; and the degree to which the activity focuses on content and aims to deepen and enhance teachers' content knowledge.

Problem 4. Is There a Significant Relationship between the Respondents' Assessment of the 21st-Century Teaching Skills and Their Performance (COT) in the First and Second Period of School Year 2023-2024?

Table 19: Result of the Test on Relationship between the Teachers' 21st Century Teaching Skills and Their Performance based on the Classroom Observation Tool (COT) in the 1st and 2nd Period

Teachers 21 st Teaching Skills	First Period			Second Period		
	Rho	p-value	Interpretation	Rho	p-value	Interpretation
Collaboration Skills	-0.0073	0.897	NS	-0.0073	0.897	NS
Critical Thinking Skill	-0.0073	0.897	NS	-0.0073	0.897	NS
Creativity	-0.029	0.61	NS	-0.0073	0.897	NS
Communication	-0.0073	0.897	NS	-0.0073	0.897	NS
Digital Literacy	-0.15	0.795	NS	-0.15	0.795	NS
Social Skills	0.024	0.67	NS	0.024	0.67	NS
Leadership	-0.019	0.73	NS	-0.019	0.73	NS
Overall	-0.027	0.78	NS	-0.024	0.82	NS

Legend: Significant if p-value < 0.05*alpha level, S-Significant, NS-Not Significant

Table 19 shows an overall p-value of 0.78 for the first period and p-value of 0.82 for the second period with an interpretation of Not Significant. It means that respondents' assessment of their 21st century teaching skills in terms of collaboration, critical thinking, creativity, communication, social skills, leadership, and digital literacy, had no significant effect towards first and second period of School Year 2023-2024. This also indicates that, the implementation of 21st-century teaching skills by teachers is hindered by the complex nature of their tasks and responsibilities. Teachers are expected to adhere to various administrative requirements, such as paperwork and documentation, participate in numerous extracurricular activities, adapt to the demands of technology integration, and develop instructional materials and plans. Given these responsibilities' complexity, many teachers rely on traditional teaching methods. Additionally, the ongoing pandemic has further affected the instructional approach, resulting in changes

to the teaching modality. Consequently, integrating these 21st-century teaching skills into their instruction has become challenging for many educators, ultimately impacting their professional satisfaction.

Traditional teacher approach learning must be transformed with student-centered learning that emphasizes 21st century skills. The level of difficulty experienced by teachers and students in implementing 21st century competency-based learning needs to be analyzed in depth to improve teachers' performance. (Fahrud, 2021). According to the study conducted by Catolos (2023), it is imperative to have a consistent and continuous assessment of teachers' performance within the Department of Education to attain outstanding outcomes.

Problem 5. Is There a Significant Difference in the Respondents' Assessment of 21st Century Teaching Skills and Their Performance (COT) When Grouped According to Their Profile?

Table 20: Comparison in the Teachers' Assessment of 21st Century Teaching Skills when Grouped According to Their Profile

Profile	21 st Century Teaching Skills		Interpretation
	t-value	p-value	
Age	0.67	0.07	NS
Sex	0.91	0.08	NS

Position	0.91	0.08	NS
Teaching Experience	0.85	0.06	NS
Highest Educational Attainment	0.35	0.04	S
Availability of Digital Technology	0.85	0.06	NS
Overall	0.75	0.06	NS

Legend: Significant if $p\text{-value} < 0.05 * \alpha \text{ level}$, S-Significant, NS-Not Significant

Results of Table 20 shows an overall interpretation of 0.06 p-value interpreted as Not Significant. This implies that the null hypothesis is accepted. It was observed that respondents' highest educational attainment was moderately related to their assessment of 21st-century teaching skills based on the Classroom Observation Tool in the first and second periods. This means that teachers with the highest educational attainment are more optimistic and open in leadership roles within schools. Teachers with advanced degrees are more likely to be familiar with various digital tools and how they improve to enhance student learning and develop 21st-century skills. In these capacities, teachers bear the responsibility of shaping educational policies, curricula, and teaching practices.

However, age, sex, position, teaching experience and availability of technology do not affect teachers 21st century skills in the classroom observation tool for the first and second periods when grouped according to their profile. This implies that most teachers lack access, opportunities, and resources to develop 21st-century skills. If technology is readily available to all teachers, regardless of their positions or experience, it lessens the impact of technology access on the development of 21st-century skills. Additionally, educational institutions may promote inclusive educational practices that ensure all teachers have access to similar opportunities and resources for developing 21st-century skills regardless of their profile.

On the other hand, respondents' age, sex, position, teaching experience and availability of digital technology have a weak effect on their 21st-century teaching skills. Traditionally, it is possible to presume that some educators possess a higher level of proficiency in utilizing

technology and possess superior teaching skills aligned with the demands of the 21st century. The professional development of educators is predicated upon the possession of a bachelor's degree, complete state certification and/or licensure, as well as the exhibition of sufficient content knowledge about the subjects they instruct. The overall efficacy of this development is significantly influenced by factors such as gender, age, experience, qualifications, and specific professional titles held by the educators.

According to Catolos (2018), it is imperative to continually assess and enhance the performance of educators within the Department of Education to attain exceptional outcomes. This can be achieved by educators enrolling in postgraduate education initiatives to foster professional growth, which entails participation in supplementary workshops and training to remain abreast of contemporary trends and methodologies, particularly considering the advent of K to 12 programs.

As a result of the continuous process of transformation within the field, teachers must engage in a constant cycle of learning, development, and adjustment, enabling them to effectively employ novel techniques, adhere to new content standards, and implement updated curricula. By embracing a growth mindset, remaining open to new ideas and strategies, and prioritizing professional growth, educators can empower themselves to thrive as facilitators of knowledge, skill development, and lifelong learning. Through engaging in ongoing professional development, seizing opportunities for advancement, and engaging in self-reflection, educators have the ability to foster an environment of perpetual enhancement and deliver top-notch instruction that equips students for achievement in an ever-evolving society (Reambonanza, 2022).

Table 21: Comparison in the Teachers Assessment of Their Performance (COT) when Grouped According to Their Profile

Profile	21 st Century Teaching Skills		Interpretation
	t-value	p-value	
Age	0.70	0.18	NS
Sex	0.98	0.06	NS
Position	0.34	0.02	S
Teaching Experience	0.33	0.01	S
Highest Educational Attainment	0.33	0.01	S
Availability of Digital Technology	0.81	0.08	NS
Overall	0.58	0.06	NS

Legend: Significant if $p\text{-value} < 0.05 * \alpha \text{ level}$, S-Significant, NS-Not Significant

Table 21 shows an overall p-value of 0.06 with an interpretation of Not Significant. It shows that teacher's age, sex, and availability of technology had no effect on their performance for the first and second period of School Year 2023-2024. The Classroom Observation Tool may prioritize pedagogical competence and instructional strategies over teacher's profile factors. If the COT emphasizes teaching effectiveness and student engagement rather than demographic profile, age and gender may not emerge as significant variables affecting performance. Internet connectivity may also be the factor why availability of technology does not affect teachers' performance for the first and second periods. Schools with limited MOOE budgets per year might not give emphasis on purchasing Wi-Fi on the school premises. While position, teaching experience, and highest educational attainment had moderate effects on teachers' performance. This implies that teaching positions may have more direct influence in school policies, practices, and decision making. Next, experienced teachers may demonstrate a better skill in effectively addressing the needs of their students. Lastly, teachers with higher educational attainment often respond to a deeper understanding of a specific subject area and bring a

higher level of expertise to their teaching, positively impacting student learning outcomes and overall school performance in that subject.

Moreover, teacher's professional development is based on teachers who have a bachelor's degree, full state certification and licensure and demonstrate adequate content knowledge for each subject area they teach. Its overall performance is different in terms of teachers' gender, age, experience, qualification, and different title of professional position. Thus, due to continuous process of change, teachers must continuously learn, grow, and adapt to updated techniques, new content standards, and new curricula (Reambonanza, 2022). Moreso, teachers' effectiveness improves as years go by in their career at a faster rate when they have supportive and collegial working environment, and when they accumulate experience in the same grade level and school. Henceforth, they support greater student learning for their colleagues, as well as for their own students.

Problem 6. Based on the Findings of the Study, What Instructional Development Plan on 21st- Century Teaching Skills Can be Designed? Professional Development Plan for 21st Century Skills

Table 22: Matrix for 3-Year Professional Development Plan for 21st-Century Skills

Key Results Areas (KRAs)	Specific Objectives	Strategies/ Activities	Time Frame	Person/s Involved	Source of Fund	Estimated Budget	Expected Outcome
1st Year							
21st Century Skills Seminars/Workshops	Design and implement tailored workshops and seminars focusing on each 21st-century skill.	Conduct of 21st century skills seminar both online and in person	April – November 2024	Department Head, Teacher I, Teacher II and Teacher III	School MOOE	Php8,000	Attendance, Participation and Post-session feedback
2nd Year							
Technology Integration	Equip educators with the skills and knowledge to properly integrate technology into their teaching practices.	Actual training session on technology tools Workshops on effective use of digital resources Training modules on the implement innovative technology solutions in their lessons.	January to September, 2025	School Head, Department Head, Teacher I, Teacher II and Teacher II Speaker/Guest on ICT	MOOE	Php8,000	1. Pre and post training surveys 2. Collaborative output by grade level on lesson plan with an integration of technology
3rd Year							

Advanced Educational Support	Provide support for teachers pursuing advanced education related to 21st-century teaching methodologies.	Offer support for teachers pursuing advanced education.	Quarter 3 and Quarter 4 for the School Year 2025-2026	Teacher I, Teacher II and Teacher II	MOOE/Department Fund	Php3,000	Number of teachers enrolled in advanced programs
Peer Observation and Collaboration	Facilitate a peer observation program where teachers can observe and learn from each other's instructional practices.	Facilitate peer observation and collaborative planning sessions.	Quarter 1 and Quarter 2 for the School Year 2025-2026	1. School Head, Department Head, Teacher I, Teacher II and Teacher II 2. Resource Speaker	MOOE/Department Fund	Php3,000	Number of observed sessions, Collaborative projects initiated

CONCLUSIONS

Based on the results and discussions that have been presented, the following conclusions were made:

Given the active involvement of educators within the age range of 31 to 40, the majority of whom hold the position of Teacher I, it is possible to develop targeted professional development programs that cater specifically to the needs and preferences of the teachers. Despite the widespread use of digital technology, the lower average value of digital literacy underscores the necessity of implementing training programs tailored to enhance educators' proficiency in effectively utilizing digital tools for instructional purposes. The primary impact ascribed to collaboration in the teaching skills of the 21st century underscores the importance of prioritizing initiatives for collaborative training.

Furthermore, affirming the null hypothesis concerning the lack of a substantial correlation between the assessment of teaching skills in the 21st-century and performance necessitates caution in making direct connections. The absence of a significant disparity between the assessment of teaching skills in the 21st century and teaching performance emphasizes the necessity of continually monitoring and adapting instructional strategies to ensure their alignment with evolving educational objectives.

The insights gained from this study contribute to a more informed and targeted approach to supporting educators as they navigate the complexities of teaching in the 21st century.

RECOMMENDATIONS

In accordance with the findings and conclusion of the study, the following recommendations are hereby presented:

1. Teachers must actively seek and participate in professional development on digital technology and strive to enhance digital integration skills to create a

more uniform experience among respondents. This may entail receiving instruction on emerging technological advancements, digital resources, and methodologies for seamlessly incorporating technology into pedagogical approaches.

2. Teachers may consider utilizing the Professional Development Plan for 21st Century Skills. It aimed to enhance the overall quality of teaching and learning within the academic institution. It also augments one's teaching skills and can attain an outstanding rating in the Classroom Observation Tool. Lastly, teachers can consider implementing professional development initiatives in every department learning action cell like sharing best practices, collaborating with colleagues and strategies related to 21st-century teaching skills.

3. For teachers, gender should not be a decisive factor in their ability to cultivate 21st-century teaching skills. They should actively engage in professional development activities focused on enhancing their 21st-century skills. Then, educators occupying various roles within an academic institution, whether as classroom teachers, department heads, or principals, should engage in collaborative efforts and exchange best practices for embedding contemporary teaching skills in the educational program. Endorsement from leadership quarters and an environment that fosters innovation can facilitate a conducive setting for skill enrichment across all hierarchical levels. Lastly, irrespective of teaching experience, educators should embrace a mindset of lifelong learning and continuously seek avenues for self-improvement. Experienced teachers can mentor and support less experienced colleagues in developing their 21st-century teaching skills.

4. Teachers may be given a considerable proportion of the respondents who have either completed or are currently pursuing postgraduate degrees, so it may be beneficial to explore opportunities for ongoing education

at the doctoral level. Encouraging teachers with postgraduate degrees to contemplate enrolling in PhD/EdD/DM programs could significantly contribute to the cultivation of advanced expertise within the respective field.

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