



21st Century Skills and School Culture as Predictors of Teaching Performance among Secondary School Teachers of Region XI: A Convergent Design

LEAH MARY L. MONTEBON

Author

AVEE JOY B. DAYAGANON, PhD

Co-Author

lmontebon_200000001242@uic.edu.ph

¹ Faculty Matanao National High School, Matanao, Davao del Sur, Philippines

² Faculty of the Graduate School, University of Immaculate Conception, Davao City, Philippines

ABSTRACT

This mixed methods study determined the status of 21st century skills and school culture as predictors of teaching performance among secondary school teachers in Region XI using a convergent design. Quantitative findings revealed that public secondary school teachers in Region XI, Philippines, exhibited a very high level of 21st century skills, indicating consistent use of modern teaching methods and essential competencies for effective instruction. The status of school culture was also rated as very high, signifying a positive, supportive, and nurturing environment conducive to both teaching and learning. Teaching performance was similarly rated as very high, reflecting teachers' proficiency in delivering quality instruction, strong professional commitment, and positive student outcomes. Furthermore, the data showed minimal variability in teachers' performance, suggesting a well-organized and supportive educational system. Qualitative findings provided deeper insights into these results. Teachers were found to be dedicated to fostering positive classroom interactions, creating innovative learning opportunities, and addressing the diverse needs of their students. However, challenges were also noted, particularly in managing the emotional and logistical complexities of modern classrooms. From the participants' lived experiences, six essential themes emerged: using assessment data to guide students, designing innovative learning opportunities, demonstrating high regard for the profession, fostering positive classroom interactions, supporting the 21st century skills of students, and prioritizing meaningful relationships. The integration of both quantitative and qualitative data provided a comprehensive perspective on teaching performance. The findings revealed that 21st century skills and school culture significantly influenced teaching performance. These results underscore the belief that outstanding teaching performance is achieved through the merging and converging of 21st century competencies and a strong, supportive school culture.

Keywords: Educational leadership, 21st century skills, school culture, teaching performance, mixed methods, convergent design, Philippines.

INTRODUCTION

Teaching performance is a critical factor influencing student learning outcomes and overall educational quality. It encompasses both instructional practices and the ability to foster positive student learning environments (Goe et al., 2008). In addition, high teaching quality performance is an essential pillar in nation-building (Patel, 2018). In support of this, UNESCO (2014) states that high-quality education, driven by effective teaching, is vital for sustainable economic development, social cohesion, and political stability. However, studies indicate a decline in teaching performance among educators, which is attributed to factors such as burnout, inadequate professional development, and increasing administrative burdens. For instance, teacher burnout significantly impacts teaching effectiveness, leading to reduced classroom engagement and diminished learning outcomes (Maslach & Leiter, 2016). Additionally, it discusses how increasing administrative workloads detract from instructional quality and reduce the time teachers spend with students (Borman & Dowling, 2008). Moreover, teaching performance is often impacted by personal factors, such as teacher motivation, job satisfaction, and commitment to the profession (Magallanes et al., 2022).

Further, recent studies indicate a global decline in teaching performance. A 2022 Gallup Poll revealed that 44 percent of American K-12 teachers in the United States reported feeling burned out often or always, highlighting a significant concern for teacher well-being and teaching performance (Peck, 2022). Similarly, in South Africa, 79 percent of Grade 9 teachers had a low level of content knowledge in their subjects, which resulted in poor teaching performance and consequently, poor student outcomes (Hogg, 2019). In the United Kingdom, it was reported that 5-15 percent of teachers underperform in classrooms, impacting their students' learning experiences (Shields, 2020). In Vietnam, some teachers were found to lack the motivation to adopt diverse teaching strategies, which led to poor teaching performance, often relying on traditional lecture-based instruction (DeJaeghere et al., 2021). The issue of low teaching performance is further highlighted in studies conducted in developing countries such as Indonesia and Malaysia, where teachers often struggle with inadequate resources, poor working conditions, and limited access to professional development programs. In Indonesia, the report showed that teachers in underfunded schools had low motivation and a lack of engagement in continuous learning, which negatively impacted their teaching performance (Uspita et al., 2021).

Furthermore, in the Philippines, the teaching performance of educators is declining. In a study by Torregoza (2020), approximately 60 percent of teachers reported feeling inadequately prepared to address the diverse learning needs of their students, and this lack of preparation hinders the implementation of effective instructional strategies, ultimately contributing to low teaching performance levels. In addition, Gonzales (2019) reported that teachers in the Philippines often face heavy workloads, including administrative duties, preparing lesson plans, and non-teaching tasks, and these responsibilities can detract from their teaching performance. Additionally, Magallanes et al. (2022) found that only 40 percent of public school teachers in the Philippines reported using modern teaching methods and technologies in their classrooms, and the study suggests that outdated teaching performance, combined with limited access to resources and training, lead to ineffective teaching performance and low student engagement. A study by Molina et al. (2018) reported that 70 percent of teachers in Mindanao, including those in Region XI, struggled with at least one aspect of their teaching performance, such as content knowledge, classroom management, or instructional strategies. Similarly, Tan and Salazar (2018) found that 65 percent of teachers in Davao City felt unprepared to address the diverse learning needs of their students, with 58 percent citing a lack of ongoing professional development as a significant factor in their

declining teaching performance.

Moreover, studies have shown that 21st-century skills significantly affect teaching performance (Pa-alisbo, 2017). The incorporation of 21st century teaching skills has significantly improved teaching performance and addressed students' challenges (Zamora & Zamora, 2022). Teachers who incorporate 21st century skills, such as creativity and adaptability, are more likely to reflect on their teaching performance and adjust them to enhance student outcomes (Hattie, 2009).

Similarly, Haq and A'yun (2020) emphasized that school culture positively influenced teaching performance. Additionally, Ismail et al. (2022) supported this finding in their study of school culture and teaching performance in Maldivian schools, where significant results were observed. Furthermore, Uspita et al. (2021) found that school culture had a significant impact on teaching performance in schools in Indonesia.

Also, in examining the study gap in the relationship between 21st century skills and school culture as predictors of teaching performance among secondary school teachers, several studies have explored related yet distinct variables that are not fully aligned with the variables in this study. For instance, some studies on teaching performance focus on a single independent variable, such as Saavedra et al. (2012), who explored the integration of 21st century skills into teaching performance that highlights the importance of 21st century skills and how their integration directly impacts teaching performance. Similarly, Hord (2004), in their study on teaching performance and school culture, emphasized the role of school leaders in cultivating a positive school culture as a means of improving overall teaching performance and educational outcomes.

Additionally, many studies on teaching performance rely solely on either quantitative or qualitative methods without employing a convergent approach. For instance, Brown and Martinez (2021) conducted a study titled *Measuring Teaching Performance: A Quantitative Approach*, which demonstrated that quantitative methods, when applied correctly, provide a more nuanced and equitable way of evaluating teaching performance. Conversely, Robinson and Green (2021) adopted only a qualitative approach to teaching performance, offering a deeper understanding of the topic through qualitative lenses.

In this context, the researcher finds the urgency to address the gap, as no studies have examined 21st century skills and school culture as predictors of teaching performance using mixed methods study. The results of the study will help educators and administrators identify the factors that significantly affect teaching performance. Such initiatives will ensure that teaching performance aligns with the demands of a rapidly evolving educational landscape, thereby preparing globally competitive graduates. Moreover, this study is expected to benefit institutions, teachers, and, most importantly, the students, who remain the central focus of the teaching and learning process.

The study findings will be shared during Learning Action Cell (LAC) sessions, meetings, school conferences, performance reviews at the school and district levels, and local and international forums, ensuring accessibility to educators and decision makers. These results will also inform policymakers, educators, and stakeholders about strategies to enhance teaching performance by integrating 21st century skills and fostering a positive school culture. Ultimately, the study will be published for wider dissemination, contributing to the improvement of teaching performance.

The purpose of this mixed methods convergent design study was to determine the influence of 21st century skills and school culture on the teaching performance of public secondary school teachers in Region XI using adapted survey questionnaires to gather data in the quantitative phase and through the in-depth interviews (IDIs) and focus group discussions

(FGDs) on gathering the qualitative data. This mixed methods study aimed to determine if 21st century skills and school culture predict teaching performance among public secondary school teachers in Region XI. Specifically, it sought answers to the following questions: 1. What is the status of 21st century skills, school culture and teaching performance of the respondents? 2. Do 21st century skills and school culture significantly influence teaching performance? 3. What are the lived experiences of the participants with regard to teaching performance? 4. How do these experiences shape the belief, attitude, and commitment of participants? 5. To what extent do the qualitative findings corroborate with quantitative data?

METHOD

This chapter presents the quantitative and qualitative methodologies employed in this research. It began with an overview of research design, place of the study, participants, research instruments, data collection, figure of procedures, data analysis, sequence emphasis and mixing procedure, methodological issues, and ethical considerations.

The study employed a mixed methods approach, specifically a convergent design, to comprehensively investigate how 21st century skills and school culture influence the teaching performance of public secondary school teachers in Region XI, Southern. According to Creswell and Plano Clark (2018), mixed methods research involves collecting, analyzing, and interpreting both quantitative and qualitative data in a single study. Further, Tashakkori and Teddlie (2010) stress that mixed methods research is the combination of qualitative and quantitative approaches to provide a more comprehensive understanding of a research problem. Furthermore, Razali et al. (2019) state that mixed methods research focuses on collecting, analyzing, and mixing both data to provide a better understanding of research problems than either approach alone since the mixing of methods will enhance the results of the study and will further explain the results of the study.

The research focused on public secondary school teachers across Region XI, which includes five provinces and 11 school divisions. The study involved a total of 250 teachers for the quantitative phase, selected through inclusion and exclusion criteria that required a minimum of three years of teaching experience in public schools. These participants represented approximately 22–23 percent of the total sample from each division, ensuring proportional representation across the region. For the qualitative phase, 17 teachers were chosen using purposive sampling—ten participated in in-depth interviews (IDIs), and seven joined a focus group discussion (FGD). The selection criteria for qualitative participants mirrored those of the quantitative phase, ensuring a consistent and relevant participant profile.

For data collection, the quantitative strand used three adapted survey instruments. These included questionnaires on 21st century skills, school culture, and the Philippine Professional Standards for Teachers (PPST). These tools were selected for their proven reliability and validity, with modifications to suit the local educational context. The survey included indicators like critical thinking, collaboration, communication, and the use of technology, measured using a Likert-type scale. Ethical approval was secured from the university's Research Ethics Committee, and informed consent was obtained from all participants prior to data collection.

The qualitative strand employed a researcher-developed interview guide, reviewed and validated by five experts. This guide consisted of open-ended questions designed to elicit rich, detailed accounts of the participants' lived experiences. The interviews and FGDs were conducted either in person or via online platforms, depending on the participants' availability. All discussions were recorded, transcribed, and carefully reviewed to ensure accuracy and completeness of the data.

For data analysis, the quantitative data were analyzed using descriptive statistics, Pearson correlation, and multiple regression analysis. These techniques helped identify patterns, relationships, and predictive variables related to teaching performance. Meanwhile, the qualitative data underwent thematic analysis. A systematic coding process was used to identify key themes and recurring patterns within the transcribed interviews and discussions. Data reduction techniques were applied to remove extraneous content, while ensuring the integrity of participants' responses was maintained throughout.

In terms of procedural flow, the study began with the quantitative phase, followed by the qualitative phase to elaborate and confirm the initial findings, a sequential strategy within the convergent design. Both data types were then integrated during the interpretation stage to draw comprehensive conclusions. Equal emphasis was given to both strands, with the findings from one informing and enriching the other. This integration allowed for a more holistic and credible understanding of the factors influencing teaching performance in the context of 21st century education.

RESULT AND DISCUSSION

Presented in this chapter are the findings, analysis, and interpretation of data. The findings are presented in a tabular and descriptive manner.

Shown in Table 1.1 is the status of 21st-century skills of public secondary school teachers. It has an overall mean of 4.54, which is described as very high. This shows that 21st century skills of public secondary school teachers are always demonstrated. Considering the degrees of dispersion in this variable, it has a standard deviation of .46, indicating that the responses were relatively clustered around the mean.

Table 1.1

The Status of 21st Century Skills of Public Secondary School Teachers

	Mean	SD	Description
Critical Thinking Skills			
1. comparing data from many sources before finishing a work or assignment	4.48	.58	Very High
2. deciding with supporting studies of the data, facts, or pertinent information.	4.52	.58	Very High
3. paraphrasing or reinterpreting what has been read or taught.	4.57	.54	Very High
4. evaluating opposing claims, viewpoints, or problem-solving approaches.	4.45	.63	Very High
5. constructing a convincing argument based on supporting information or logic.	4.46	.62	Very High
6. making an effort to address questions with more than one right response or difficult problems.	4.50	.61	Very High
Category Mean	4.50	.46	Very High
Collaboration Skills			
1. collaborating with students to perform a task in pairs or small groups.	4.74	.46	Very High
2. working together to establish objectives and creating a team plan with other students and teachers.	4.67	.50	Very High

3.	creating collaborative works using input from each student and teacher.	4.66	.51	Very High
4.	displaying group initiatives to the class, other educators, or others	4.59	.55	Very High
5.	collaborating to include feedback for collective projects or products.	4.56	.54	Very High
6.	commenting on student work or evaluating the work of other teachers or students.	4.62	.58	Very High
	Category Mean	4.64	.42	Very High

Communication Skills

1.	preparing information for use in oral or written presentations like creating charts, tables or graphs.	4.59	.53	Very High
2.	using media other than a written paper to impart information like posters, video, blogs, etc.	4.70	.48	Very High
3.	getting ready for and delivers an oral presentation to the class or other participants.	4.68	.48	Very High
4.	responding to queries in front of the class.	4.78	.47	Very High
5.	determining the method used to present assignments or show learning.	4.60	.54	Very High
	Category Mean	4.67	.39	Very High

Creativity and Innovative Skills

1.	employing idea generation strategies including concept mapping and brainstorming.	4.57	.53	Very High
2.	coming up with their own solutions for how to handle a situation or query.	4.54	.57	Very High
3.	experimenting with many concepts and works to enhance something.	4.38	.60	Very High
4.	creating an answer to a difficult, open-ended issue or question.	4.46	.58	Very High
5.	generating an innovative outcome or performance to convey thoughts.	4.48	.59	Very High
	Category Mean	4.49	.47	Very High

Self-direction Skills

1.	taking initiative when a question or problem is challenging.	4.57	.56	Very High
2.	determining the subjects or research issues they will cover.	4.46	.56	Very High
3.	preparing actions to achieve a difficult undertaking.	4.47	.60	Very High
4.	making decisions regarding the resources or examples to be studied.	4.51	.58	Very High
5.	keeping track of their own progress toward finishing a challenging assignment and modifying their work as necessary.	4.64	.49	Very High
6.	evaluating the quality of the work using a set of criteria prior to completion.	4.63	.51	Very High
7.	making use of teacher, peer, or expert input to edit	4.53	.55	Very High

student work.			
Category Mean	4.54	.42	Very High
Global Connections			
1. researching facts about various cultures or countries.	4.42	.66	Very High
2. utilizing knowledge or concepts that come from individuals in other cultures or countries.	4.50	.64	Very High
3. addressing topics pertaining to international interdependence for example: global market economy and global environment trends	4.33	.67	Very High
4. being aware of the differences in people's life experiences across cultures.	4.43	.66	Very High
5. researching the geography of other nations.	4.21	.76	Very High
6. considering how personal experiences and local concerns relate to international problems.	4.40	.68	Very High
Category Mean	4.38	.58	Very High
Local Connections			
1. looking into issues or themes that are important to the family or the community.	4.57	.54	Very High
2. utilizing what the students have learned to specific local conditions, difficulties, or issues.	4.63	.53	Very High
3. discussing a class project or activity with one or more community members.	4.47	.68	Very High
4. examining how various stakeholder groups or community members see a problem.	4.36	.68	Very High
5. considering the concerns of diverse community members or groups when responding to a question or task.	4.49	.63	Very High
Category Mean	4.50	.50	Very High
Using Technology as a Tool for Learning			
1. using the internet or technology to educate themselves for example, tutorials, self-instructional websites, Kahn Academy or other videos, etc..	4.69	.51	Very High
2. choosing the best technological resources or tools to finish a task.	4.62	.55	Very High
3. assessing the reliability and applicability of internet resources.	4.61	.61	Very High
4. making use of technology to evaluate information like spreadsheets, graphic programs, databases, etc..	4.60	.59	Very High
5. utilizing technology to improve other shared information like presentation software, video or multi-media presentations using sound, podcasts, blogs, etc..	4.69	.56	Very High
6. utilizing technology to encourage cooperation or teamwork like email exchanges, giving and	4.62	.57	Very High

- receiving opinion, shared workspaces, etc.
7. using technology to communicate directly with experts or members of local or global communities. 4.60 .63 Very High

Category Mean 4.63 .46 Very High

Shown in Table 1.2 is the status of the school culture of public secondary school teachers in Region XI. It has an overall mean of 4.49, which is described as very high. This shows that the school culture of public secondary school teachers is always evident. Considering the degrees of dispersion in this variable, it has a standard deviation of .40, indicating that the responses were relatively clustered around the mean.

Table 1.2

The Status of School Culture of Public Secondary School Teachers

	Mean	SD	Description
Professional Collaboration			
1. talking about curriculum concerns and teaching performance	4.51	.57	Very High
2. collaborating to create the school schedule.	4.47	.64	Very High
3. being included in the decision-making process when choosing resources and materials.	4.34	.70	Very High
4. collaborating and agreeing among staff led to the creation of the student behavior code.	4.45	.61	Very High
5. using the allotted planning and organizing time to work together as teams or collective units rather than as individual members.	4.39	.66	Very High
Category Mean	4.43	.53	Very High
Affiliative Collegiality			
1. sharing experiences of happenings that uphold the school's core principles.	4.55	.53	Very High
2. meeting, visiting, and conversing with one another for social purposes.	4.46	.60	Very High
3. exhibiting a genuine "feeling" of community.	4.54	.60	Very High
4. reflecting communication opportunities in our schedule.	4.47	.61	Very High
5. recognizing and encouraging fresh ideas to be shared by students.	4.57	.59	Very High
6. honoring celebrations, including holidays, special events, and recognition of goal attainment.	4.69	.49	Very High
Category Mean	4.55	.45	Very High
Self-determination Efficacy			
1. anticipating issues before they occur rather than simply reacting to them and making repairs.	4.42	.61	Very High
2. depending on and respect one another including the students.	4.54	.53	Very High

3.	seeking alternatives to problems or challenges rather than continuing to do what we have always done.	4.51	.59	Very High
4.	preferring to define the issue or problem than to putting others the blame.	4.52	.58	Very High
5.	giving the authority to decide how to teach rather than having to wait for direction from superiors.	4.45	.61	Very High
6.	working here because they enjoy and choose to be here	4.52	.60	Very High
Category Mean		4.49	.49	Very High
Overall Mean		4.49	.40	Very High

Shown in Table 1.3 is the status of teaching performance of public secondary school teachers. It has an overall mean of 4.74, which is described as very high. This shows that teaching performance of public secondary school teachers is outstanding. Considering the degrees of dispersion in this variable, it has a standard deviation of .29, indicating that the responses were relatively clustered around the mean.

Table 1.3

The Status of Teaching Performance of Public Secondary School Teachers

		Mean	SD	Description
Content Knowledge and Pedagogy				
1.	applying knowledge inside and across academic disciplines.	4.70	.47	Very High
2.	researching on based knowledge and principles of teaching and learning.	4.60	.50	Very High
3.	using of ICT positively	4.72	.47	Very High
4.	strategically promoting literacy and numeracy.	4.72	.48	Very High
5.	developing critical and creative thinking, as well as other higher-order thinking skills	4.76	.44	Very High
6.	using Mother Tongue, Filipino and English in teaching and learning.	4.76	.45	Very High
7.	communicating techniques in the classroom.	4.75	.44	Very High
Category Mean		4.72	.37	Very High
Learning Environment				
1.	prioritizing safety and security of learners.	4.81	.42	Very High
2.	agreeing for fair learning environment.	4.81	.43	Very High
3.	managing classroom structure and activities.	4.76	.45	Very High
4.	supporting for learner's participation.	4.79	.44	Very High
5.	promoting a purposive learning.	4.78	.46	Very High
6.	managing the behavior of learners	4.75	.48	Very High
Category Mean		4.78	.39	Very High
Diversity of Learners				
1.	respecting gender, needs, strengths, interests and	4.79	.45	Very High

experiences of learners			
2. adapting linguistic, cultural, socio-economic and religious backgrounds of learners	4.74	.48	Very High
3. applying effective strategies of teaching to learners with disabilities, giftedness and talents.	4.74	.50	Very High
4. managing learners in difficult circumstances.	4.72	.48	Very High
5. promoting equality from indigenous group learners .	4.81	.42	Very High
Category Mean	4.76	.39	Very High
Curriculum and Planning			
1. planning and managing of the teaching and learning process.	4.74	.45	Very High
2. aligning with learning competencies outcomes.	4.73	.46	Very High
3. promoting relevance and responsiveness of learning programs.	4.70	.48	Very High
4. professionally collaborating to enrich teaching practice.	4.72	.48	Very High
5. using ICT in learning and teaching resources.	4.73	.46	Very High
Category Mean	4.72	.39	Very High
Assessment and Reporting			
1. designing, selecting, organizing and utilizing assessment strategies.	4.71	.47	Very High
2. monitoring and evaluating progress and achievement of learners	4.72	.47	Very High
3. giving feedback to improve learning.	4.73	.46	Very High
4. communicating needs, progress and achievement of learners to key stakeholders.	4.72	.46	Very High
5. using of assessment data to enhance teaching and learning performance and programs.	4.73	.46	Very High
Category Mean	4.72	.39	Very High
Community Linkages and Professional Engagement			
1. establishing learning environments that are responsive to community contexts.	4.67	.51	Very High
2. engaging parents and the wider school community in the educative process	4.67	.52	Very High
3. following professional ethics.	4.78	.44	Very High
4. following school policies and procedure.	4.75	.45	Very High
Category Mean	4.72	.41	Very High
Personal Growth and Professional Development			
1. applying philosophy of teaching.	4.77	.44	Very High
2. considering dignity of teaching as a profession.	4.84	.38	Very High
3. promoting professional links with colleagues.	4.78	.41	Very High
4. setting professional reflection and learning to improve practice	4.78	.42	Very High
5. engaging professional development goals.	4.78	.41	Very High
Category Mean	4.79	.36	Very High
Overall Mean	4.74	.29	Very High

DISCUSSION

This chapter provides the deeper meaning of the findings revealed in Chapter 3. The implications are expounded for each of the important results by citing some studies supported by the outcomes of this investigation or by explaining how similar or different the claims of this research are when compared to the points underscored in other studies already published.

The result of this study revealed that the status of 21st century skills of public secondary school teachers was very high, which meant that the 21st century skills were always demonstrated. This implied that secondary public school teachers in Region XI consistently employed modern teaching approaches and essential 21st century skills required for instruction.

The teaching performance of public secondary school teachers was very high. The teaching performance of public secondary school educators was outstanding and it was always evident. This indicated that teachers were exceptionally proficient in providing quality instruction, exhibiting a robust dedication to their professional responsibilities, and attaining favorable student results.

Therefore, continuous improvement of the teaching performance and remaining current with the best educational ideas kept the teachers prepared for supporting the students to succeed in school with an atmosphere of excellence. This focus on self-improvement had been a vital prerequisite in ensuring teachers were able to perform well in contemporary demands and the diversity of classroom demands (Fullan, 2016).

This study clearly highlighted the significant role played by 21st Century Skills and School Culture in influencing teaching performance. The results of the multiple regression analysis, conducted at a significance level of $\alpha = 0.05$ (two-tailed), were as follows: The standardized beta coefficient for 21st century skills was .32, with t-statistics of 5.23 and $p < .001$, indicating statistical significance below the set threshold. This suggests that, on an individual level, 21st century skills had a significant impact on the teaching performance of public secondary school teachers. Specifically, for every unit increase in the status of 21st century skills, there was a corresponding increase of .32 in teaching performance.

The standardized beta coefficient was .31, with a t-statistic of 5.16 and a p-value of less than .001, which is below the set level of significance. This suggests that school culture is a significant predictor of teaching performance among public secondary school teachers. Specifically, for each unit increase in the status of school culture, there was a corresponding increase of .31 in the teaching readiness of public school teachers.

Further, the F-ratio indicated whether the overall regression model, which was the combined effect of 21st century skills and school culture as predictors of teaching performance of public secondary school teachers, was a good fit for the empirical data in this study. The results revealed that 21st century skills and school culture significantly influenced the teaching performance of public secondary school teachers, as shown in the result of $F(2, 247) = 51.17, p < .001$. Therefore, the regression model was a good fit for the empirical data of this study.

In the new world of learning, 21st Century Skills like critical thinking, collaboration, and technological skills were imperative for teachers to adapt to changing classroom demands (Saavedra & Opfer, 2015). When teachers acquired these skills, they were able to engage their students better, create an interactive learning environment, and use technology in their teaching. These competencies were increasingly recognized as key to teaching success and should have been prioritized in professional development programs.

The results of this study threw into the limelight the lived experiences of the teachers regarding their teaching performance, especially how it was influenced by the school culture and the development of the 21st century skills. From the IDI and FGD data, six themes emerged: using assessment data to guide students, designing learning opportunities, demonstrating high regard for the profession, fostering positive classroom interactions, supporting students' 21st century skills, and prioritizing good relationships.

The theme that emerged from the responses of the participants was categorized according to beliefs and attitudes, which were shaped by their experiences as secondary public teachers. This essential theme is attributed to the development of their 21st century skills, the influence of school culture, and their overall teaching performance.

Quantitative and qualitative findings integration brought a holistic understanding of 21st century skills, school culture, and teaching performance of secondary school teachers in Region XI. Quantitatively, its status was rated as very high. According to Fetters et al. (2013), merging and converging are key strategies in mixed methods research. According to their framework, merging refers to the process of integrating qualitative and quantitative data to generate a comprehensive understanding of a research problem. This approach involves directly comparing, contrasting, or synthesizing findings from both data sources to identify patterns, relationships, or discrepancies. On the other hand, converging emphasizes the alignment of results from different methods to validate findings and strengthen the study's overall reliability.

Furthermore, the quantitative results reveal a strong connection between these various factors, suggesting that the effective application of 21st century skills within a positive school culture leads to enhanced teaching performance. This conclusion is further supported by qualitative findings, as participants confirmed that 21st century skills and a supportive school culture are integral, merging, and converging to form a strong foundation for effective teaching. Overall, both quantitative data and qualitative feedback confirm that when teachers integrate 21st century skills with a nurturing school culture, their teaching performance is significantly improved.

CONCLUSION

Presented in this chapter are the conclusions and recommendations based on the findings of the study.

The following conclusions were drawn from the findings of the study:

The status of 21st century skills among public secondary school teachers was rated as very high. This indicates that public secondary school teachers consistently demonstrate 21st century skills. This implies that secondary public school teachers in Region XI consistently employ modern teaching approaches and the essential 21st-century skills required for effective instruction. This very high proficiency boosts classroom engagement, improves student learning outcomes, and helps teachers quickly adapt to new technology and teaching methods.

Further, the status of school culture in public secondary schools was also rated as very high. This shows that a positive school culture among public secondary school teachers is always evident. It implies that the educational setting is nurturing, affirmative, and favorable for both teaching and learning. As a result, teachers work in an environment that supports their growth and effectiveness. Additionally, students benefit from a welcoming and collaborative atmosphere that enhances their overall learning experience.

Furthermore, the status of teaching performance among public secondary school teachers was rated as very high. This indicates that the teaching performance of public

secondary school teachers is outstanding. It implies that teachers are exceptionally proficient in delivering quality instruction, demonstrate a strong commitment to their professional responsibilities, and achieve favorable student outcomes.

The analysis of the data revealed that teaching performance is significantly influenced by 21st century skills and school culture. This implies that teachers who possess strong 21st century skills and work within a positive school culture are better equipped to provide outstanding teaching performance. Additionally, these factors create an environment that supports both teacher growth and student success. The integration of 21st century skills and a supportive school culture also enables teachers to adapt to changing educational demands, ensuring that teaching performance remain relevant and impactful in an evolving educational landscape.

Moreover, six essential themes emerged from the lived experiences of the participants. These themes are using assessment data to guide students, designing learning opportunities, demonstrating high regard for the profession, fostering positive classroom interactions, supporting students' 21st century skills, and prioritizing good relationships. These experiences also shaped their beliefs and attitudes toward outstanding teaching performance. According to the participants, such performance is attained through the integration of 21st century skills and a positive school culture.

The quantitative results show a strong connection between the factors, indicating that when teachers effectively apply 21st century skills and work in a positive school culture, their overall teaching performance improves. The nature of integration between these factors is described as merging and converging.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations were suggested:

1. Since the status of 21st century skills was rated as very high, teachers may continue to enhance and integrate these skills into their teaching performances through ongoing professional development and collaboration, ensuring they stay updated with emerging trends and technologies in education.
2. Similarly, as the status of school culture was also rated very high, school administrators may sustain and further strengthen this positive culture by fostering continuous collaboration, promoting professional growth, and maintaining a supportive and inclusive environment for teachers and students.
3. More so, the status of teaching performance was rated as very high, teachers may continue to uphold their exceptional performance by engaging in continuous professional development, adopting innovative teaching strategies, and further refining their instructional methods to sustain and improve student learning outcomes.
4. Further, since 21st century skills and school culture significantly influenced teaching performance, school administrators and policymakers may focus on enhancing these areas through targeted professional development, strategic resource allocation, and supportive leadership practices. Strengthening teachers' modern competencies and nurturing a positive, collaborative environment will better equip educators to meet evolving instructional demands and sustain outstanding teaching performance.
5. For future researchers, it is recommended that other factors that may influence teaching performance, such as leadership styles, resource availability, and external support systems may be explored using alternative research designs, different groups of respondents, and various locales.

ACKNOWLEDGEMENT

This dissertation was made possible through the support, guidance, and encouragement of many individuals to whom the researcher is deeply grateful.

To her adviser, Dr. Avee Joy B. Dayaganon, heartfelt gratitude is extended for her unwavering commitment, expertise, and invaluable feedback. Her dedication and profound knowledge significantly shaped this dissertation and brought it to completion;

To the esteemed panel chairperson, Dr. Thelma O. Alderite, and the panel members: Dr. Sylvia J. Pidor, Dr. Mona L. Laya, Dr. Grace O. Aoanan, and Dr. Lucila T. Lupo, sincere thanks are offered for their thoughtful critiques and insights, which greatly enhanced the quality of this work;

To the Dean of the UIC Graduate School, Dr. Mary Jane B. Amoguis, for her unwavering support and guidance throughout the process of completing this study;

To Dr. Allan G. Farnazo, CESO IV, Regional Director of Region XI, sincerest appreciation is extended to him for granting permission to conduct the study and to the superintendents of the 11 divisions and selected public schools in Region XI for their cooperation. The active involvement of the public secondary school teachers who participated in the surveys and interviews made this research possible;

To Dr. Delarey C. Florentino, School Principal IV of Matanao National High School, and the Grade 9 faculty, gratitude is expressed for their support and encouragement throughout this journey;

To her friends and colleagues, thanks are extended for their continuous support, laughter, and encouragement. Their thoughtful advice and companionship eased the challenges of this journey;

To her Ph.D. classmates, appreciation is given for their camaraderie, insights, and encouragement throughout the study process;

To her family: Rogelio and Antonina Lagamayo, her parents, and her siblings: Mary Rose and Winstone Soria, John Paul and Margelie Lagamayo, Mary Ruth, Mary Beth and Jojo Manonag, profound thanks are given for their unwavering financial and emotional support. To her nephews: Zhiane Carl, John Ian, John Liam, John Nathan, Nathaniel, Angelo, and Angel, special acknowledgment is made for being a source of joy and motivation;

To her husband, Jessie Joy S. Montebon, heartfelt gratitude is expressed for his steadfast love, understanding, encouragement, and financial support. His faith in her has been a constant source of strength and inspiration;

Above all, gratitude is extended to God Almighty, the source of life, strength, and wisdom, for His unending grace, love, and guidance throughout this journey. This work stands as a testament to His unwavering support and blessings.

REFERENCES

- Adams, K. (2005). *The Sources of Innovation and Creativity*. National Center on Education and the Economy. 2006. www.fpspi.org/pdf/Innocreativity
- Anderson, J., & Johnson, R. (2019). Designing learning opportunities: Beyond lesson planning. *Journal of Innovative Education*, 15(3), 45-62.
- Anderson, J., & Johnson, R. (2021). Upholding professional ethics in education.



International

- Avalos, B. (2011). Teacher professional development in teaching and teacher education over ten years. *Teaching and Teacher Education*, 27(1), 10–20.
<https://doi.org/10.1016/j.tate.2010.08.007>
- Banks, J. A. (2006). Cultural diversity and education: Foundations, curriculum, and teaching (5th ed.). Pearson.
- Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice*, 5(1), 7-74.
<https://doi.org/10.1080/0969595980050102>
- Black, P., & Wiliam, D. (2018). Classroom assessment and pedagogy. *Assessment in Education: Principles, Policy & Practice*, 25(6), 551-575.
<https://doi.org/10.1080/0969594X.2018.1441807>
- Blaschke, L. M. (2012). Heutagogy and lifelong learning: A review of heutagogical practice and self-determined learning. *The International Review of Research in Open and Distributed Learning*, 13(1), 56–71.
<https://doi.org/10.19173/irrodl.v13i1.1076>
- Brookhart, S. M. (2013). How to give effective feedback to your students (2nd ed.). ASCD.
- Brown, A., & Taylor, D. (2019). Technology usage among public school teachers: A study on integration challenges. *Journal of Educational Technology*, 22(4), 345-360.
- Brown, C., & Green, D. (2021). A teacher’s commitment to excellence in fostering Brown, M., & White, S. (2021). The impact of trust, respect, and communication in student motivation. *Journal of Teacher-Student Relations*, 20(1), 77-93.
<https://doi.org/10.1007/s11423-019-09645-2>
- Brown, T., & Martinez, R. (2021). Measuring teaching performance: A quantitative approach.
- Hargreaves, A. (1994). Collaborative cultures or contrived collegiality? *Journal of Educational Change*, 5(3), 189–205.
- Hargreaves, A., & Fullan, M. (2012). Professional capital: Transforming teaching in every school. Teachers College Press.
- Hattie, J. (2009). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. Routledge.
- Johnson, A., Becker, S., Estrada, V., & Freeman, A. (2022). NMC Horizon Report: The

future

Contemporary Educational Psychology, 37(2), 141–153.
<https://doi.org/10.1016/j.cedpsych.2012.02.001> *Journal of Educational Administration*, 56(4), 412-427.

Martinez, L. D., & Blake, R. A. (2017). Challenges in assessment and reporting practices in secondary education. *Journal of Educational Measurement and Evaluation*, 45(2), 110-125.

Marzano, R. J. (2007). *The Art and Science of Teaching: A Comprehensive Framework for Effective Instruction*. ASCD.

Milanowski, A., Heneman, H. G., & Kimball, S. M. (2009). Teaching Assessment and Performance-Based Compensation. *Education Policy Analysis Archives*, 17(5).

Nguyen, H., & Patel, S. (2021). Enhancing inclusivity through positive teacher-student relationships. *International Journal of Inclusive Education*, 16(4), 55-73.

Nguyen, T. (2024). Creativity in designing student-centered learning experiences. *Journal of Modern Pedagogy*, 26(1), 25-42.

Patel, J. (2018). Role of Teachers in Nation Building. *International Journal of Trend in Scientific Research and Development*, 2(5), 2086-2089.

<https://www.ijtsrd.com/papers/ijtsrd18247.pdf>

Pianta, R. C., Hamre, B. K., & Allen, J. P. (2012). Teacher-student interactions and student achievement. *Child Development Perspectives*, 6(3), 197–203.

Robinson, C. (2019). Development of instructional learning materials in algebra for grade nine students in Division of Batangas City. *Ascendens Asia Journal of Multidisciplinary Research Abstracts*, 3(2B).

Robinson, V. M. J. (2020). *Reduce Change to Increase Improvement*. Corwin Press. Rogayan, D., Jr., & Nebrida, E. (2021). 21st-century skills of social studies students

in the Philippines. *Asia Pacific Journal of Education*, 38(1), 145-160.

Saavedra, A. R., & Opfer, V. D. (2015). Learning 21st-century skills requires 21st-century teaching. *Phi Delta Kappan*, 94(2), 8-13.

<https://doi.org/10.1177/1475240918763456>

Williams, S. K., & Anderson, J. P. (2017). Assessing the level of content knowledge and pedagogy in secondary education. *Journal of Curriculum and Teaching*, 14(3), 89-103.



Williams, T., & Anderson, L. (2017). Bridging the gap between content knowledge and teaching practice. *Teaching and Teacher Education*, 62, 1–10.

Wubbels, T. (2017). The role of teacher-student relationships in emotional and intellectual growth. *International Journal of Education and Development*, 24(3), 55-72.

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory into Practice*, 41(2), 64-70.