

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY: APPLIED BUSINESS AND EDUCATION RESEARCH

2026, Vol. 7, No. 3, 1157 – 1164

<http://dx.doi.org/10.11594/ijmaber.07.03.13>

Research Article

Teachers' Practices In Developing The 21st Century Skills Of Learners In The New Normal Education: Basis For Skills Enhancement Plan

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Article history:

Submission 05 February 2026

Revised 16 March 2026

Accepted 23 March 2026

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ABSTRACT

This study assessed the strategies used by teachers in public elementary schools to develop learners' 21st-century skills in the context of the new normal education and served as the basis for developing a skills enhancement plan for teachers. Using a descriptive research design, the study involved 134 public elementary school teachers from the Hermosa District, Schools Division of Bataan, selected through simple random sampling. Data were gathered using a self-administered survey questionnaire and examined utilizing descriptive and inferential statistical methods, such as the independent samples t-test, weighted mean, frequency counts, percentages, and analysis of variance (ANOVA).

The findings showed that while communication skills were only occasionally worked on, teachers regularly used approaches that assist students' information, media, and technology skills, learning and innovation skills, life and career skills, and soft skills. When teachers were grouped by age, years of service, and highest level of education, significant differences in their approaches emerged. However, no significant differences were observed when teachers were grouped by sex. Based on the findings, a skills enhancement plan was formulated to address areas least practiced and further strengthen teachers' instructional practices.

The study concluded that public elementary school teachers play a vital role in cultivating learners' 21st-century skills despite the challenges posed by the new normal in education. Continuous professional development and the implementation of a responsive skills enhancement plan are recommended to further improve teachers' practices and ensure the holistic development of learners.

Keywords: 21st Century, New normal education, Skills enhancement plan, Students' learning skills, Teachers' practices

Background

How to cite:

Solon, J. P. C. (2026). Teachers' Practices In Developing The 21st Century Skills Of Learners In The New Normal Education: Basis For Skills Enhancement Plan. *International Journal of Multidisciplinary: Applied Business and Education Research*. 7(3), 1157 – 1164. doi: 10.11594/ijmaber.07.03.13

The continuous advancements of the 21st century have spurred educational progressions that continually evolve to provide a quality education aligned with the technology available today. Not only that, but students nowadays are also considered “digital natives,” meaning they can easily adapt to technological innovations and make the most of them.

However, education almost came to a halt due to the threat posed by the Corona Virus Disease (COVID-19). In a report published by UNESCO in 2020, more than 1.5 billion students worldwide were affected by pandemic-related school and university closures. With its unprecedented disruption to global education, the need to improve the quality of education and its adaptability is of utmost importance to cultivate the 21st-century skills of learners, despite the limitations and restrictions present.

Undeniably, the Philippine Education System has suffered greatly with these massive and emergent changes brought by COVID-19. In order to prepare teachers for the impending changes, create the necessary teaching and learning resources, and acquaint students, parents, and other stakeholders with the changes, the start of classes for the 2020–2021 school year was rescheduled from June to October. Casal (2020) pointed out that the shift from teacher-led education to student-led education, alongside technological advancements, was not only needed but also more apparent. Different learning modes, including online classes, TV/radio-based instruction, modular learning, and blended learning, quickly replaced the traditional classroom setup. With the ongoing changes and adaptations, providing quality education feels like a distant goal, and cultivating learners’ 21st-century skills has been especially challenging.

Fast-forward to a year later, new complications manifested: some students do not have gadgets or internet access, insufficient learning materials, difficulty tracking actual learning progress, and so on. Surely, these were addressed at the time, but the need to further develop students’ skills, despite the pandemic’s limitations, remains. Aiming to produce globally competitive students meant raising the bar and having teachers go the extra mile to achieve it.

Given the current situation, the researcher aims to assess elementary teachers’ practices in developing students’ 21st-century learning skills. Moreover, the study will serve as a basis for designing a skills enhancement plan for the elementary teachers in the Hermosa district, Division of Bataan.

Statement of the Problem

The study intends to evaluate how elementary teachers in Hermosa, Division of Bataan, build their pupils’ 21st-century learning skills and how these might be used to the skills enhancement plan for teachers.

Specifically, it will seek to answer the following questions:

1. How may the profile of the elementary school teachers be described in terms of:
 - 1.1 age;
 - 1.2 sex;
 - 1.3 highest educational attainment; and
 - 1.4 length of service?
2. How may the teachers’ practices support students dealing of the following 21st century learning skills:
 - 2.1 information, media, and technology skills;
 - 2.2 learning and innovation skills;
 - 2.3 communication skills;
 - 2.4 life and career skills; and
 - 2.5 soft skills?
3. Is there a significant difference in practices of public elementary school teachers on the 21st century students’ learning skills when their profiles are grouped accordingly?
4. What enhancement plan may be developed to support students’ 21st-century learning skills?

Methods

This study employed a descriptive research design to examine public elementary school teachers’ practices in developing learners’ 21st-century skills. The design was appropriate for describing and analyzing teachers’ instructional practices and related characteristics.

A total of 134 public elementary school teachers from the Hermosa District, Schools Division of Bataan, were selected from a popula-

tion of 326 teachers using simple random sampling. G*Power analysis was used to calculate the sample size with a medium effect size, power of 0.95, and alpha level of 0.05. A self-administered survey questionnaire comprising two parts was used to gather data: (1) the profile of respondents in terms of age, sex, and highest level of education; and (2) the practices of teachers that support 21st century skills, such as information, media, and technology skills, learning and innovation skills, communi-

cation skills, and life and career skills. After obtaining the required authorization and adhering to health regulations, the survey was disseminated online using Google Forms.

Descriptive statistics (frequency counts, percentages, weighted mean, and standard deviation) and inferential statistics (independent samples t-test and analysis of variance) were used to statistically examine the data. Teachers' practices were interpreted using a five-point Likert scale that ranged from Never to Always.

Results and Discussion

Table 1. Comparison According to Age

Domains	Group	Mean	SD	F	Sig.	Decision on H ₀	Interpretation
Information, Media, and Technology Skills	30 years old and below	4.52	0.32	4.36	0.01	Rejected	Significant
	31 to 40 years old	4.31	0.50				
	41 to 50 years old	4.09	0.55				
	above 50 years old	4.25	0.89				
Learning and Innovation Skills	30 years old and below	4.57	0.37	6.08	0.001	Rejected	Significant
	31 to 40 years old	4.39	0.58				
	41 to 50 years old	4.11	0.40				
	above 50 years old	4.10	0.77				
Communication Skills	30 years old and below	4.22	0.49	5.07	0.001	Rejected	Significant
	31 to 40 years old	4.17	0.62				
	41 to 50 years old	3.73	0.46				
	above 50 years old	3.79	0.89				
Life and Career Skills	30 years old and below	4.82	0.30	5.71	0.001	Rejected	Significant
	31 to 40 years old	4.54	0.55				
	41 to 50 years old	4.48	0.42				
	above 50 years old	4.39	0.62				
Soft Skills	30 years old and below	4.77	0.32	3.67	0.01	Rejected	Significant
	31 to 40 years old	4.63	0.52				
	41 to 50 years old	4.57	0.32				
	above 50 years old	4.37	0.57				

Legend at .05 level of significance

Information, media, and technology skills (F=4.36, p=0.01), learning and innovation (F=6.08, p=0.001), communication skills (F=5.07, p=0.001), life and career skills (F=5.71, p=0.001), and soft skills (F=3.67, p=0.01) all show a significant difference in the

methods used by public elementary school teachers to reject the null hypothesis.

In terms of information, media, and technology skills; learning and innovation skills; communication skills; life and career skills; and soft skills, the data showed a significant difference between the age of the teachers and their

practices that support 21st century learning skills. In a related study, Alufohai & Ibhafidon (2015) confirmed this. They discovered that younger teachers—those between the ages of

21 and 34—were more productive and generated higher test scores for students than older teachers—those 49 and older.

Table 2. Comparison According to Sex

Domains	Group	Mean	SD	F	Sig.	Decision on H ₀	Interpretation
Information, Media, and Technology Skills	Male	4.56	0.50	1.96	0.06	Accepted	Not Significant
	Female	4.32	0.52				
Learning and Innovation Skills	Male	4.45	0.39	0.64	0.52	Accepted	Not Significant
	Female	4.37	0.55				
Communication Skills	Male	4.22	0.38	1.16	0.25	Accepted	Not Significant
	Female	4.05	0.64				
Life and Career Skills	Male	4.58	0.53	0.53	0.60	Accepted	Not Significant
	Female	4.64	0.47				
Soft Skills	Male	4.60	0.44	0.54	0.59	Accepted	Not Significant
	Female	4.66	0.44				

Legend at .05 level of significance

Information, media, and technology skills ($t=1.96$, $p=0.06$), learning and innovation ($t=0.64$, $p=0.52$), communication skills ($t=1.16$, $p=0.25$), life and career skills ($t=0.53$, $p=0.60$), and soft skills ($t=0.54$, $p=0.59$) are among the 21st-century students' learning skills that do not significantly differ from the Independent Sample t-test.

In terms of information, media, and technology skills, learning and innovation skills,

communication skills, life and career skills, and soft skills, the data showed no discernible difference between the sexes of the teachers and their practices that support 21st-century learning skills. A study by Abrami & d'Apollonia (1999), referenced by Alufohai P. & Ibhafidon H. (2015), it's likely that pupils' learning is unaffected by teachers' gender characteristics.

Table 3. Comparison according to Highest Educational Attainment

Domains	Group	Mean	SD	F	Sig.	Decision on H ₀	Interpretation
Information, Media, and Technology Skills	Bachelor's Degree	4.33	0.63	1.55	0.20	Accepted	Not Significant
	Masteral Units	4.34	0.48				
	Master's Degree	4.90	0.00				
	Doctoral Units	4.27	0.55				
Learning and Innovation Skills	Bachelor's Degree	4.43	0.68	2.21	0.09	Accepted	Not Significant
	Masteral Units	4.36	0.44				
	Master's Degree	4.93	0.05				
	Doctoral Units	3.97	0.90				
Communication Skills	Bachelor's Degree	4.08	0.74	1.08	0.36	Accepted	Not Significant
	Masteral Units	4.08	0.56				
	Master's Degree	4.40	0.00				
	Doctoral Units	3.57	0.72				
Life and Career Skills	Bachelor's Degree	4.60	0.53	3.66	0.01	Rejected	Significant
	Masteral Units	4.65	0.42				

Domains	Group	Mean	SD	F	Sig.	Decision on H ₀	Interpretation
Soft Skills	Master's Degree	5.00	0.00	5.33	0.01	Rejected	Significant
	Doctoral Units	3.87	1.03				
	Bachelor's Degree	4.66	0.47				
	Masteral Units	4.66	0.38				
	Master's Degree	4.98	0.05				
	Doctoral Units	3.77	1.00				

Legend at .05 level of significance

According to the results of the Analysis of Variance (ANOVA) analysis, there is a significant difference between the methods used by public elementary school teachers to teach 21st-century students' life and career skills (F=3.66, p=0.01) and soft skills (F=5.33, p=0.001). The null hypothesis is rejected because the p-values are less than the alpha level of 0.05.

The null hypothesis cannot be rejected since the p-values for information, media, and technology skills (F=1.55, p=0.20), learning and innovation (F=2.21, p=0.09), and

communication skills (F=1.08, p=0.36) are higher than the alpha of .05.

According to the research, there is a significant difference between the instructors' greatest level of education and the ways in which they assist 21st century learning skills, including soft skills and life and job skills. On the other hand, there is no discernible difference in the sex of the teachers and how they assist 21st century learning abilities in terms of communication, learning and creativity, and information, media, and technology skills.

Table 4. Comparison according to Years in Service

Domains	Group	Mean	SD	F	Sig.	Decision on H ₀	Interpretation
Information, Media, and Technology Skills	1 to 5 years	4.52	0.31	4.53	0.001	Rejected	Significant
	6 to 10 years	4.32	0.48				
	11 to 15 years	4.04	0.49				
	16 years and above	4.14	0.77				
Learning and Innovation Skills	1 to 5 years	4.54	0.43	3.75	0.01	Rejected	Significant
	6 to 10 years	4.32	0.54				
	11 to 15 years	4.48	0.16				
	16 years and above	4.17	0.64				
Communication Skills	1 to 5 years	4.21	0.57	3.46	0.02	Rejected	Significant
	6 to 10 years	4.08	0.55				
	11 to 15 years	4.24	0.22				
	16 years and above	3.79	0.72				
Life and Career Skills	1 to 5 years	4.80	0.29	7.67	0.001	Rejected	Significant
	6 to 10 years	4.49	0.57				
	11 to 15 years	5.00	0.00				
	16 years and above	4.42	0.52				
Soft Skills	1 to 5 years	4.75	0.32	4.01	0.01	Rejected	Significant
	6 to 10 years	4.56	0.52				
	11 to 15 years	5.00	0.00				

Domains	Group	Mean	SD	F	Sig.	Decision on H ₀	Interpretation
	16 years and above	4.51	0.48				

Legend at .05 level of significance

Information, media, and technology skills (F=4.53, p=0.001), learning and innovation (F=3.75, p=0.01), communication skills (F=3.46, p=0.02), life and career skills (F=7.67, p=0.001), and soft skills (F=4.01, p=0.01) are among the 21st century students' learning skills that show a significant differences in the analysis of variance (ANOVA).

Regarding information, media, and technology skills, learning and innovation skills, communication skills, life and career skills, and soft skills, the data showed a significant difference between teachers' years of service and their practices that support 21st-century learning skills. Less experienced teachers are more likely to assist pupils in developing 21st-century learning skills. Years of teaching experience can impact a teacher's capacity to engage pupils and employ successful teaching strategies, as confirmed by Maolosi (2013) in her related study. Teachers may get weary and less motivated after many years of service.

Conclusion

The results of the study indicate that most public elementary school teachers were female, under 30 years old, had master's degrees, and had worked in the field for 1 to 5 years. The findings also showed that teachers regularly used strategies to help students develop 21st-century skills, especially in the areas of information, media, and technology skills, learning and innovation skills, life and career skills, and soft skills. In contrast, communication skills received relatively less attention.

When teachers were categorized by sex, statistical analysis revealed no significant differences in their behaviors. On the other hand, minimal significant differences were detected by level of education, but significant disparities were observed when teachers were categorized by age and years of service. These results suggest that the extent to which 21st-century abilities are incorporated into classroom

activities depends on instructors' professional and demographic traits.

In response to these findings, a skills enhancement plan was proposed to strengthen the areas least practiced. The plan emphasizes the use of credible digital resources, structured learning activities, peer evaluation strategies, reflective practices, collaborative learning, and differentiated instruction. In general, the study emphasizes the necessity of ongoing, flexible, and responsive professional development to further improve teachers' ability to support students' 21st-century skills and meet the changing demands of modern education.

Acknowledgment

The researcher would like to express his heartfelt gratitude and profound acknowledgement to the individuals who provided their valuable time and assistance in completing this study. The researcher extends profound gratitude to the following individuals whose guidance, support, and cooperation made this study a success:

To the respondents, who were incredibly cooperative, patient, and honest about their experiences and perspectives regarding their practices in the 21st Century, students' learning skills are truly admirable;

DepEd Hermosa District and SDO Bataan, for their persistent support;

His parents, Mr. Roberto L. Solon and Mrs. Paulina C. Solon, for the inspiration;

His wife, Caryl Dorothy A. Solon, for the love, prayers, tolerance, and understanding;

And most importantly, to the Almighty God, for the strength, wisdom, and guidance given to the researcher in the conduct of the study.

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