Manifestation of the 21st Century Skills Among the Grade 4 Pupils in Relation to their Academic Performance

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ABSTRACT : This study aimed to assess the level of manifestation of manifestation of Grade 4 pupils on 21st century skills and its relation to their academic performance during the school year 2024-2025.The study involved the Grade 4 teachers and learners of the public elementary schools in the division of Cabuyao. It utilized descriptive correlational research wherein the survey questionnaires served as the main source of data to describe the level of manifestation of 21st century skills. The General Weighted Average of learners served as the secondary source of data to describe their academic performance. This study revealed that all the 21st century skills such as Information, Media, and Technology, Learning Innovation Skills, Communication Skills, and Life and Career Skills are all assessed Manifested by the teachers and Highly Manifested by the learners themselves. It was also found that there was a significant difference in the assessments of the two groups of respondents on the level of manifestation of the 21st century skills among grade 4 learners. Further, the study also disclosed that grade 4 learners have attained a GWA of 83.7 which falls under the Approaching Proficiency level. There is a significant relationship between Information, Media, and Technology Skills and the academic performance of learners. Other 21st century skills such as Learning and Innovation Skills, Communication Skills, and Life and Career Skills are not significantly related to their academic performance. Generally, there was a weak relationship between the manifestation of 21st-century skills and the performance of Grade 4 learners. The researcher has considered the indicators that attained the lowest level of manifestation of the 21st century skills as core rudiments of the capacity building program to improve the 21st century skills of the Grade 4 learners while enhancing their academic performance.

KEYWORDS: Manifestation. 21st century skills, Grade 4 pupils, Academic Performance

I. INTRODUCTION

Educational leaders have been seeking ways to discover the best educational experience for school children—the perfect place that would provide children with the best possible educational experiences and enable them to realize their potential, making them prepared to meet global challenges. This curriculum is still in adherence with the 9155 or the Governance of Basic Education and the adopted framework of the K to 12 curriculums following the approaches of teaching. The major change in the MATATAG Curriculum is to improve the Literacy and Numeracy where the low performance of the country have been shown in the latest Program for International Student Assessment (PISA) results in 2023, students in the Philippines remain among the world's weakest in math, reading and science, PISA 2022 scores published in December 2023 showed, with the Philippines' overall score showing no significant improvement from 2018, when it first joined the test. The DepEd has considered that the low level of proficiency in the 21st century skills have influenced this low performance of the learners. The investigation and root cause analysis of this low performance have turned the attention of the educators and key leaders to investigate a curriculum that will be responding to the real needs of learners and make the curriculum aligned with 21st century skills.

This study is primarily anchored on the 21st Century Learning Skills Framework. The detailed 21st century skills framework comprises the same four domains as originally set out in DepEd Order No. 21, s. 2019. These are: Information, Media, and Technology Skills, Learning and Innovation Skills, Communication Skills, Life and Career Skills. Creating holistically developed Filipino students with 21st century skills—that is, the knowledge, skills, attitudes, and competencies that students need to acquire in order to succeed in the workplace and in life in the twenty-first century—remains the DepEd's vision. Rationale No. 2 of the DepEd Order No. 10 s. 2024 stipulates that MATATAG Curriculum streamlines competencies to ensure logical progression, prioritize 21st century skills, improve the foundational literacy and numeracy skills, and cultivate future-ready skills needed in the job market. These 21st century learning skills include Information, Media, and Technology Skills, Learning and Innovation Skills, Communication Skills, and Life and Career Skills. The General Shaping Paper of the MATATAG Curriculum explains that the curriculum is aligned to RA 10533.

The curriculum prepares the learners for future integrating contemporary themes and issues, fostering 21st century skills, promoting inclusivity, and encouraging future thinking. The larger goal is to inspire all Filipino learners to take pride in their nationality, be skilled in their chosen fields, and be capable of contributing to society while considering sustainability and global partnership. The curriculum standards ensure mastery of concepts, lifelong learning, and competence to thrive in the 21st century environment. The DepEd deemed it necessary to help the learners enhance their 21st century learning skills to make them more prepared to face the challenges of higher level of studies and to deal with the ever-changing demands of society and the world of work.

The main attempt of DepEd to realize the preparedness of these learners and not be left behind by the neighboring countries is to focus the basic education, decongest the curriculum, and concurrently expose the learners with the activities that aim to improve their proficiency in the 21st century skills. The problem in the 21st century skill is highly evident to the poor performance of the learners to Program for International Student Assessment (PISA) last 2022. The learners have attained lower level of proficiency in the different learning areas due to their inability to answer the assessment related to the 21st century skills. According to Pena (2023) the results of PISA does not merely show poor performance in Reading, Science, and Mathematics, it also reflects the inability of learners to answer the test properly due to their poor level of proficiency in the 21st century skills.

There is various evidence that shows the low level of proficiency in 21st century skills. The teachers have observed that the learners have less capabilities to think critically. There are more passive than active learners, they have less focus and concentration towards their studies. They hate doing challenging activities; they do not want to think critically and usually ask for someone's help to accomplish the tasks assigned to them. Likewise, there are more learners who use the technology for their leisure, they enjoy surfing the net which are not related to their academics. Whenever they have the assignment, they used to search the net, copy and paste the answers. Further, most learners have less interest in communicating their ideas to the class. There are some of them who do not want to participate and cooperate with their classmates. Also, there are some learners who have less interest when they were asked about their plans and targets in life. The Division of Cabuyao is one of the new cities in the region but has been battling with the various academic problems of learners as well as the skills they needed on their studies and in life.

II. REVIEW OF RELATED LITERATURE AND STUDIES

The relevant research and literature for this study are presented and elaborated in this chapter. To determine the goals of the current study, it considers relevant readings from books, journals, magazines, and abstracts of both published and unpublished works. The thought is beneficial to have a thorough conversation about the research problem. Similarly, she deems that the earlier research on the subject will help her understand how to interpret the findings of the current study.

Implementation of MATATAG Curriculum: DepEd Order No. 10, s. 2024 known as the Policy Guidelines in the Implementation of MATATAG Curriculum explains that the curriculum embodies the aspirations of Filipino learners inscribed in the Ambisyon Natin 2040, to successfully deal with future challenges by embedding 21st century skills, preparing them to excel in the local and global market. It fosters inclusivity by teaching global citizenship and diversity while promoting a future-oriented mindset that empowers learners to embrace and shape change. The MATATAG curriculum also envisions producing lifelong and peace-loving Filipino learners who are holistic and future-ready and embody the core values. With the goal of bringing its foundational education standards into line with international standards, the Philippine educational system is about to undergo a radical change. Careful consideration of curriculum development will be necessary to achieve this crucial shift, guaranteeing that it is appropriate, responsive, and relevant to students both domestically and internationally. According to the General Shaping Paper released by the Department of Education (2023), the new curriculum in the Philippines is known as MATATAG.

Further, according to Oberro (2024) explained that notable modifications have been made to the MATATAG curriculum, such as lowering the number of competencies to alleviate the curriculum's overcrowding problems. In accordance with legal requirements, the Good Manners and Right Conduct (GMRC) and Values Education programs have also been strengthened and integrated. The increased focus on social studies, which is essential to achieving the Department of Education's goal of developing Filipinos with a strong and fervent love for their homeland, is another notable change.

Additionally, Lapaz (2024) asserts that the DepEd-launched MATATAG Curriculum seeks to develop well-rounded people who are equipped to handle the demands of both the workplace and life. It emphasizes lifelong learning skills and focuses on a number of topics, such as ICT, Agriculture and Fishery Arts, Family and Consumer Science, and Industrial Arts.Then, according to Raagas (2024) Science and technology are integrated into the social, economic, ethical, and personal facets of life through the MATATAG curriculum. The country's cultural heritage is preserved in part because the science curriculum fosters close ties between science and technology, including indigenous knowledge of how to use natural materials. Meanwhile, according to VP Duterte (2024) MATATAG "stands for "MAke the curriculum relevant to produce citizens who are active, responsible, and job-ready; TAke steps to accelerate the delivery of basic education services and provision facilities; TAke good care of learners by promoting learner well-being, inclusiveness learning, and positive learning environment; and Give support for teachers to teach better." In a survey with 4,843 respondents, including students, teachers, public and private school owners, government agencies, private organizations, and non-governmental organizations, Shaping Papers received 96 percent public approval.

Additionally, Milagros (2024) clarified that MATATAG is an improvement-oriented update to the Philippine educational system. Beginning in kindergarten and continuing through the tenth grade, it places a strong emphasis on life skills, math, and reading. It places a strong emphasis on the fundamental skills that students need, such as reading fluently, math skills, and knowledge for daily life and employment. Futher, the MATATAG Curriculum's core tenet is to proactively adjust to the demands and developments of society, guaranteeing efficient student preparation through humanized learning and resolving current educational inadequacies. Moreover, Marquez (2024) explicated that the MATATAG Curriculum integrates teaching tenets like innovation, integration, inclusivity, and ideation to promote holistic development and equip students for future challenges. By addressing current educational needs and promoting a more localized and contextualized learning experience, it aims to improve students' acquisition of knowledge.

21st Century Learning Skills

As a result of the study by Jones (2022), acquiring 21st-century skills is crucial for students' success in both their personal and professional lives in the future. Students improve their ability to solve problems and make decisions by honing these abilities. They acquire the skills necessary to collaborate on projects and interact with people in an effective manner. Similarly, according to Samson (2022) the skills needed to succeed in the world are always changing along with it. The competencies required for people to succeed in both their personal and professional lives have changed in the twenty-first century. This entails equipping students with abilities that will be useful in a labor market that is dynamic and fast-paced. These are some tactics educators can employ to encourage students to develop their critical thinking, teamwork, communication, and creativity. However, Junio (2021) have elucidated that the concept of 21st-century skills arose in response to the dramatic changes in global economies and societies due to technology, globalization, and the shift toward knowledge-based industries. Early models such as the Partnership for 21st Century Skills (P21) in the U.S. emphasized a range of skills from core academic subjects to essential life and career skills. The goal was to equip learners with the ability to think critically, work collaboratively, communicate effectively, and be literate in the digital age.

In addition, Manlapaz (2023) explicated that by offering resources like maker spaces or technology labs where students can test out new concepts and technologies, schools can create an atmosphere that supports the development of 21st-century skills. Establishing a secure and welcoming environment where all students feel free to express themselves and cooperate should be a top priority for schools. In the same way to Robles (2022) states that, to help teachers and students understand 21st-century skills and how to develop them, there are frameworks for doing so. These frameworks offer a path for incorporating these crucial abilities into all subject area curricula. Teachers, parents, and legislators must work together to prepare students for 21st-century skills. Prioritizing the development of these critical competencies in our children is crucial if we want them to succeed in a world that is constantly changing. We must invest in education at all levels to guarantee that students have access to the tools they require to acquire 21st-Century skills. This involves allocating funds for teacher training initiatives and technological infrastructure. Just as, Pans (2022) explained that the term "information, media, and technology skills" (IMTS) refers to the capacity to use digital tools and resources to efficiently and responsibly access, assess, analyze, produce, and communicate information in a variety of formats. In today's digital-first world, it encompasses everything from digital tools and platforms to systems that facilitate media creation, distribution, and consumption.

Similarly to Gagalang (2022) explained that even though the MATATAG Curriculum is in line with frameworks for 21st-century skills, there are still some areas where it could be made even more effective. The incorporation of technology into education is one important area. There are chances to further integrate digital tools to improve individualized and cooperative learning experiences, even though the curriculum covers information, media, and technology skills. Additionally, student-centered and inquiry-based learning strategies could be given more attention. By encouraging deeper engagement and giving students greater control over their education, these tactics help students develop their curiosity and critical thinking skills. To measure 21st-century skills more accurately, assessment procedures must be improved. Exams and quizzes are examples of traditional assessments that have limited capacity to measure abilities like creativity and teamwork. Portfolios, performance-based tests, and other real-world evaluation techniques may offer a more thorough picture of students' aptitudes.

Furthermore, Kaware (2022) explained that giving pupils media, information, and technology skills can help them make the connection between their academic and real-world experiences. Students can improve their thinking, learning, communication, teamwork, and production skills in unexpected ways thanks to information, media, and technology. Students must first acquire the knowledge and abilities necessary to comprehend, handle, and make use of this information, media, and technology before they can utilize this power. Even though many students are proficient in using technology, they lack comprehension and application skills regarding its use and effects. Schools now have a responsibility to incorporate technology into their curricula and learning processes, teach students how to assess, understand, and use information effectively, support technology in the classroom, and instruct students on how to use technology as a learning tool.

MATATAG Curriculum have explained that Learning and Innovation skills as the capacity for critical thought, problem-solving and analysis, innovation and implementation, and the production of functional knowledge. Creativity, openness, critical thinking, problem-solving, and reflective thinking are all emphasized in the science curriculum. As to the Learning and Innovation Skills, Merado (2022) explained that the teachers enable students to examine situations from various perspectives, spot trends, and come up with creative solutions by integrating creativity into the curriculum. These abilities go beyond the classroom and equip students to handle the difficulties of a world that is constantly changing. Likewise, Messer (2022) elucidated that it is becoming more widely acknowledged that learning and innovation skills are what distinguish students who are ready for the increasingly complex work and life environments of the twenty-first century from those who are not. To prepare students for the future, an emphasis on creativity, critical thinking, communication, and teamwork is crucial.In fact, Kesser (2022) explained that teachers and students are encouraged by educational innovation to investigate, study, and use all available resources to find something new. It entails approaching and resolving issues from a different perspective. Students' creativity and problem-solving abilities will grow because of the thought process involved. Innovation is not the same as making something out of nothing. It depends on investigating current solutions to develop a new hypothesis to test, as is the case with any good scientific endeavor.

Additionally, by So (2022) stressed that it can assist in bringing out what is already present; inner abilities and hidden talents may surface. It enables us to connect with our passions. Participation in the creative process fosters a sense of community. It unites people and fosters cooperation and teamwork skills. Innovation in learning takes place in a particular teaching and learning context, enhancing the application of standard practice or introducing a new practice to achieve better learning outcomes.

Similarly to study of Lazo (2022), explained that adopting innovation in education fosters traits that will benefit our students in the classroom, such as critical thinking, adventure, and adaptability. It will give them the skills and confidence to keep adapting, as well as the tools they need to face the challenges of their future workplace.
Especially De Sapin (2022) emphasized that the process of thinking that results in the creation of original and valuable ideas is known as creative thinking. Everyone has the capacity to think creatively and to exercise "everyday" creativity, which is the ability to approach routine tasks in novel ways. Not only can creative thinking be used in situations involving the expression of imagination, like creative writing or the arts, but it can also be used in other fields where the investigation of problems, issues, or societal concerns can benefit from the generation of ideas.In the same way Namientos (2023) explained that regardless of their circumstances or chosen career path, students can benefit from creative thinking as it helps them adjust to a world that is changing quickly and continuously. Students can make contributions to their community and society both now and in the future by encouraging their creative thinking. In order to handle new and complicated problems, organizations, society, business, and industry all rely on innovation and knowledge creation. This emphasizes the importance of innovation and creative thinking as a team-based, intricate process.

In terms of Communication skills, Wallace (2023) stressed that since the teacher has no idea what or how the student thinks, the two should collaborate and give the student the opportunity to be creative during the learning process. "The only thing that can produce critical thinking is dialogue, which itself necessitates it. Communication cannot exist without dialogue, and genuine education cannot exist without communication. Since it allows students to avoid being treated like objects and fosters growth, communication is essential to the learning process. Students' enthusiasm for learning is harmed when they are treated more like objects than like human beings with equal or greater stakes in their education. Both the teacher's perception of the students and the students' level of learning are influenced by each other. Moreover, Mitchelle (2022) explained that communication has an important role in all three points, mainly because students can store the information which is communicated properly and can be later on shared in other settings and cultures. Yet, while sharing it in different cultural contexts, one should be aware about the cultural differences and barriers that may come between. Communication is socially applicable and linguistically precise. Discourse analysis has its importance in communication, since it understands its social and linguistic context of communication. Some statements can have different meanings in different cultures.

Clearly, Handers (2023) express that interpersonal skills are just as important as communication skills. This skill aids in preserving positive relationships. Overall, the capacity to communicate clearly and precisely develops interpersonal skills and facilitates harmonious relationships free from many conflicts. and lay the groundwork for enduring relationships between individuals or groups. The ability for students to learn cooperation and teamwork is the next significant advantage that demonstrates the value of communication skills. It is simpler to convey the precise message and complete tasks in one sitting when one can communicate effectively. The teamwork is affected as a result. Additionally, it greatly enhances the team players' skill set. As a result of the study conducted by, Gamoy (2022) explained that strong communication skills boost confidence and self-esteem. When students can express themselves clearly, they feel more confident in their abilities. This confidence spills over into other areas of their lives, from participating in class to engaging in extracurricular activities. Feeling understood and valued by others enhances their overall self-worth. When it comes to Life and Career Skill, Frades (2022) explained that the students must focus hard on acquiring the necessary life and career skills to successfully navigate the complex work and life environments of the globally competitive information age. Adaptability and flexibility. Self-motivation and initiative. Cross-cultural and social skills.

Furthermore, Recaco (2022) he stressed that there are several frameworks for defining and evaluating 21st century skills, and school districts frequently develop their own profiles of graduates based on the needs of their communities. 21st century skills, sometimes known as "soft skills," encompass a wide range of abilities necessary for success in college, careers, and adult life. Teaching soft skills is becoming more and more important because these skills are essential for success in higher education and the workplace. Teaching 21st century skills require putting strategies in place to assist teachers and evaluate students' progress in acquiring these skills.

To emphasize, Del Rio (2022) explained the significance of teaching the life and career skills, that Possessing life skills is crucial to overcoming the obstacles of daily life in a setting that is continuously changing. Education, the workplace, and our personal lives are all being impacted by the significant shifts in technology that have coincided with the dramatic changes in global economies over the last five years. Students need to learn new life skills, like how to handle stress and frustration, to handle the fast-paced, ever-changing nature of modern life. Over their lives, today's students will hold numerous new jobs that require flexibility and come with pressures.

In addition, Kagan (2022) elucidated that along with academic achievement, employers are looking for key employability skills, such as the capacity to lead by influence, solve problems and comprehend the business environment, work well in a team, manage time and people, and be agile and adaptable to various roles and flexible working environments. And according to Caces (2022), the development of life skills fosters students' ability to: Think creatively and solve problems; recognize the consequences of their actions and learn to accept responsibility for their actions rather than place the blame elsewhere; build confidence in their ability to speak and collaborate with others in a group; analyze options, make decisions, and comprehend the reasons behind their choices outside of the classroom; and develop a greater sense of self-awareness and appreciation for others. As well as Roman (2022) explained that living in the People in the twenty-first century are urged to possess modern skills, particularly college students who hope to find employment after graduation. If so, students ought to take the initiative to develop and acquire the skills necessary for employment. The knowledge required to increase employment opportunities is referred to as life and career skills.

Employability skills, as defined by most employers, are comprised of life and career skills. In addition to employability skills, these abilities cover academic, technical, and soft skills necessary for survival in the twenty-first century. The creation of fundamental 21st-century skills with the express goal of educating students on how to acquire and effectively use these skills is the new paradigm for learning. Especially according to the new learning paradigm, students must be taught the following four domains to produce job-ready individuals, as explained by De Jesus (2022). Every teaching and learning process must prioritize certain components from each domain. Students should receive the proper instruction and acquire the necessary abilities to function in the real workplace. They must be prepared both mentally and physically by incorporating career and life skills into the curriculum of every program the polytechnic offers. When graduates find work and are in demand by employers, this will benefit polytechnics as well as students.

Performance of Learners

According to Grannt (2022), Academic performance plays a significant role in both the learning process and education. It now serves as a predictor of a child's future in this fiercely competitive society. It has been among the most significant objectives of the learning process. In all cultures, it is also a primary objective that every person must fulfill. Learners learn about their skills, talents, and competencies through academic achievement, which is a crucial component of creating career aspirations. Student achievement is one of the most crucial results of any educational system.

Such as Young (2022), explained a learners' academic performance is influenced by how much he values himself. Any desired learning that is seen in a student can be interpreted as achievement in an educational setting. The knowledge and skills students acquire in their academic subjects are referred to as their academic achievement. Academic achievement, then, refers to students' performance in academic subjects. Reviewing research on achievement correlates has revealed that the goal of all educational endeavors is achievement. The primary goal of all educational endeavors is to ensure that the student succeeds. Education researchers are paying more and more attention to quality assurance, control, and, more recently, total quality management of achievement.

As well as that, Bennds (2023), explained that academic performance is the degree to which a person performs in a school subject. In the educational context, it is known as the demonstration of acquired knowledge or skills in academic subjects. This accomplishment is indicated by test results or grades given by teachers. It is evident that educational psychologists have recently started to discuss what has traditionally been thought of as the gentler aspects of individual differences. This includes how students behave and perform in accordance with the expected tasks at hand, as well as their mood, feelings, and emotions in relation to academic achievement. Nonetheless, one could argue that instruction results in achievement. Furthermore, a learning experience culminates in achievement. Every parent, guardian, and teacher want their children, wards, and students to achieve a high level of academic performance. In general, schools and teachers receive qualitative grades based on student performance and achievement.

Another, De Leon (2021) clarified that academic performance or a student's ability to meet the standards set by the educational institution is the measure of success in educational institutions. As the workforce becomes more competitive, the significance of students performing well in school has drawn the attention of government education departments, parents, and lawmakers. Much work is done in schools to identify, assess, monitor, and support students' progress, even though education is not the only path to success in the workplace. Parents are concerned about their child's academic progress because they think that a strong education will lead to more career options and job stability.

But, Bansay (2020) briefly explained that stressed that numerous factors, such as gender, age, the teaching staff, the students' education, the father or guardian's socioeconomic status, the students' residential area, the medium of instruction in schools, the trend in tuition, the number of study hours per day, and housing options such as hostels or day scholars, all have an impact on students' academic progress and learning performance. Numerous researchers have carried out in-depth investigations into the elements influencing student performance at various study levels.

Likewise Jalinao (2020) express that, numerous studies on student performance have been carried out, and these studies identify and examine the various factors that influence a student's academic performance at the school, college, and even university levels. According to their findings, several significant factors influence students'

academic performance in various settings, including their effort, prior education, parents' educational backgrounds, family income, age, self-motivation, learning preferences, and entry qualifications.

Research Literature
Implementation of MATATAG Curriculum : The new curriculum in the Basic Education of the Philippines was implemented through DepEd Order No. 10, s. 2024 known as Policy Guidelines on the Implementation of the MATATAG Curriculum to provide context and directions and to articulate its features, design, and standards. The said DepEd order also seeks to prepare the students to successfully deal with the future challenges by embedding 21st century skills, preparing them to execel in the local and global job market. MATATAG Curriculum is anchored on flagship program of the department, which is Bansang Makabata, Batang Makabansa. The curriculum aims to make the curriculum relevant to produce competent and job-ready, active, responsible citizens. It streamlines competencies to ensure logical progression, prioritize 21st century skills, improve foundational literacy and numeracy skills and to cultivate future-ready skills needed in the job market.

One of the key features of MATATAG Curriculum is to enhance the learning experience of learners by offering manageable portions of content material and establishing clear learning objectives to prevent cognitive overload among learners. This curriculum also strengthened focus on foundational skills and strategically reduced the learning areas to streamline content. MATATAG is supported by the National Reading Program (NRP) which is additional curricular program that focuses on developing the literacy among learners. In the MATATAG Curriculum, the Grade 1 learners have five learning areas such as the Language, Reading and Literacy, Mathematics, Good Manners and Right Conduct (GMRC) and Makabansa. According to Villan (2024) the curriculum focuses on the development of the basic foundations among the young learners. The Grade 1 learners are given the five subjects that include the Reading and LIteracy.This is a way of the Department of Education to expose the learners with various reading activities and help them become readers before stepping to the higher level of their studies. The department believes that it is the very basics of study that must be improved among learners in Grade 1.

Connecting this initiative to the broader framework of the Sustainable Development Goals (SDGs), particularly SDG 4, which emphasizes inclusive and equitable quality education and promotes lifelong learning opportunities for all, is essential (United Nations, 2015). By focusing on enhancing self-help skills through educational videos this study aligns with the ethos of SDG 4. The SDGs, adopted by the United Nations in 2015, provide a global blueprint for dignity, peace, and prosperity for people and the planet, now and into the future. Improving self-help skills in early childhood education through innovative methods like educational videos not only contributes to the individual development of children but also plays a part in achieving these larger global objectives According to David (2024) the MATATAG program hopes to resolve basic education challenges, namely MA – Make the curriculum relevant to produce job-ready, active and responsible citizens; TA – Take steps to accelerate delivery of basic education facilities and services; TA – Take good care of learners by promoting learner well-being, inclusive education, and a positive learning environment; and G – Give support to teachers to teach better.

On the other hand, Carlos (2024) explained that The problems with the Matatag curriculum include implementation errors and inaccuracies, a lack of executive programming, a lack of coordination among teachers for integrated courses, a lack of access to adequate information resources to support the students, a lack of time for presenting curriculum, a lack of professional teachers' availability, educational inequality, the use of unprofessional teachers, a disregard for the preparatory material for some courses, a failure to meet standards of education in language instruction, a negative attitude toward the new curriculum, changes to the curriculum's structure, a lack of facilities, a shortage of professional human resources, and comprehensiveness of goals are among the challenges with the Matatag curriculum. Same with, Rivera (2024) also explained that aside from inadequate teacher preparation, other issues include subpar boarding facilities, poor catering services, insufficient time to apply concepts in lessons, a heavy workload, low teacher morale, conflicts of interest, non-collection/non-remittance of funds, high staff turnover, and the transfer of trainers to positions not related to curriculum implementation. Furthermore, even though the curriculum aims to enhance student experiences and academic achievement, it may be difficult to adjust to the changing needs of society and the educational landscape, necessitating ongoing review and improvement to keep up with the demands of a constantly changing world. 21st Century Skills

According to the study of Graffan (2023), explained that skills of the twenty-first century are those that help people adapt to change, build resilience, create projects and achieve positive outcomes, raise awareness of global issues, and support individual liberties and rights within a framework of respect for one another. These abilities serve as the cornerstone of a society made up of people who have a strong sense of obligation and accountability. Additionally, these abilities highlight the fundamental characteristics of the information age by embodying the individual's understanding of society.

In addition, Manalo (2020) explicated that the school, identifying the skills that 21st-century learners need to survive in the 21st-century environment should not be the primary focus of this training ground. They must acquire the fundamental abilities that are applicable to all subjects and professions in order to cope with these changes; these are known as the Four C's of 21st-century learning: creativity, critical thinking, communication, and teamwork. The Partnership for 21st Century Skills, based in the United States, has determined that the four C's are the fundamental abilities needed for education in the twenty-first century. Nonetheless, there are indications of underdeveloped 21st-century skills; students' abilities do not match the real skills required to thrive in a community. Such as Cataldo (2021) in his study, new innovations and technology of the twenty-first century are altering how government, business, education, and public culture are conducted globally. The K–12 STEM curriculum and education must be updated to meet the demands of the digital workforce because education is essential for preparing students for the workforce. The policies and practices of education today are not in line with assisting children in developing transferable skills. Children require assistance with both the application and retention of skills and knowledge. If they are adequately prepared in school to become critical citizens, workers, managers, parents, volunteers, and entrepreneurs, today's students can handle the challenges of the future.

Moreover, in the research of Addy (2021) he found out that assessments used in current educational policies and related accountability systems mainly concentrate on fact and procedure recall, which presents a problem for teachers and students learning transferable 21st century competencies. The study also found that college instructors and incoming students lacked the analytical thinking skills necessary to comprehend complex and advanced reading, conduct college-level research and writing, and apply what they had learned to real-world situations. Whereas Tim (2022) explained on his study that, for students to reach their full potential as adults, educational systems must prepare them to be 21st century learners. To help students master and apply English, math, and other subjects, schools must equip them with a variety of knowledge. Additionally, business and political leaders are increasingly asking schools to develop 21st century skills, which include cooperation, communication, critical thinking, problem solving, and self-management. Particularly to Ellis (2021) study that, the 21st century student must be flexible and able to adapt quickly to the changing job market and global needs. Many younger people will have jobs in their lifetimes that do not exist today. Employers are looking for candidates with a broad and interdisciplinary background. This trend is likely to continue as more professionals are called on to promote an increasingly expanding range of tasks. The United States needs to ensure that its students are being educated and trained to meet the demands of the 21st century economy.

In the study conducted by Fadel (2021) he explained that there are numerous terms used to characterize the technology, media, and information skills that are the subject of this study and are part of the 21st century skill sets. Digital skills and competencies are covered by terms like digital competence, ICT literacy, digital literacy, and digital skills. It is possible to interpret the lack of precise definitions for these concepts—which are occasionally used interchangeably—as a failure to meet the general provisions based on research. Theoretically, this deficiency reveals various definitions; each definition focuses on different aspects for a particular reason and does not encompass all the skill areas covered by the concept. Furthermore, in the research conducted by Trevor (2021) states that, the ability to comprehend information and, more crucially, to assess and incorporate information in various computer-presented formats is known as information, media, and technology skills. Being literate is a cognitive task that calls for both comprehension and reading. Consequently, the ability to use information obtained through computers and the Internet is known as digital literacy. Information, media, and technology skills are those that pertain to the digital realm. In today's educational, professional, and recreational settings, digital media is widely utilized in communication, learning, and production processes. According to some academics, the development of the concept of this literacy is connected to media studies and traditional literacy. The ability to carry out specific tasks in digital environments is known as digital literacy. Digital literacy refers to the ability to read and comprehend media, as well as the ability to reproduce data and images through digital applications and to use new information acquired in digital environments. Digital represents information in numerical form, which is typically used by computers.

From the study of Buan (2023) he explained that, before graduating from school, students in the twenty-first century need to learn a wide range of skills and competencies. Students develop into "deeper learners." Deeper learning is the process by which students apply their knowledge and abilities to novel and varied contexts. The world is changing, and students need to be able to adjust and apply what they have learned. Deeper learning produces transferable knowledge, such as subject-matter expertise and the understanding of how, why, and when to use this expertise to address issues and provide answers. In the study conducted by Edem (2020) regarding perceptions of 21st century skills, revealed that 62% (41 of 62 participants) believed critical thinking was the most important skill category, with an average response ranking of 1.52 (SD = .72). About half the participants (48%) (32 of 66) felt that communication and collaboration ranked as the second most important skill, with an average ranking of 1.70 (SD = .65). Moreover, 70% (46 of 66) felt that creativity and innovation was the least important skill, with an average ranking of 2.61,

Like the study of Gaffud (2020) he found out that, despite the highest mean score rank order of importance; critical thinking and problem solving had the largest standard deviation (SD.72) compared to communication and collaboration (SD = .65) and creativity and innovation (SD = .65). Conversely, when looking at rating of importance, the category of creativity and innovation had the largest standard deviation (SD = .33), whereas when asking the question in a manner that participants were asked to rank order of the skills, there was a different consensus, the category for critical thinking and problem solving had a larger standard deviation. In addition, Taylor (2022) has explained in his research that teachers have a complex role and orchestrate learning environments in modern, complex learning environments. Teachers should be willing to invite peers or other "experts" to collaborate with them to improve a lesson or classroom setting. The idea of "authentic learning" was also introduced, stating that "it is a common feature of many innovative learning environments to make the learning experience authentic and meaningful by engaging students with real-life problems, offering hands-on experiences, and incorporating students historical, natural, and cultural environment in learning activities." Inquiry and collaborative work will help prepare students for future learning through authentic learning.

Performance of Learners: In the study conducted by Handid (2020) he found out that the participants have a "high" 21st-century skills. Also, most of the participants were at the Proficient level concerning their academic performance. Meanwhile, there is no significant correlation exists between academic performance and 21st-century skills. Among the four 21st-century skills, only communication showed a significant relationship to academic performance, while the other three skills manifest no substantial association. On-the-other-hand, communication skill is the best predictor of academic performance. It was recommended that school administrators are encouraged to nurture a conducive teaching and learning environment between and among students and teachers to work hand in hand in providing ways to motivate students' decisions, actions, and academic and career success. Furthermore, Yellow (2020) explained that the study's participants, grade 12 students, have a high degree of 21st-century skills. For students to succeed in this new world and help them build self-confidence, we still need to improve these skills in the 21st century, particularly critical thinking, which has emerged as the skill with the lowest level.

Like the study conducted by Galos (2022) he revealed that, the four Cs of 21st-century skills—creativity, communication, collaboration, and critical thinking—have no discernible effect on students' academic achievement. The academic performance of students can only be linked to their communication skills. Since its P-value is less than 0.05, communication skill is a significant predictor of academic performance; this indicates that students who possess stronger communication skills may perform better academically.In the study conducted by Xiang (2020) in order to help students make decisions, take actions, and succeed academically and professionally, school administrators are urged to foster a positive teaching and learning environment for both students and teachers. They might conduct a more thorough investigation to develop a responsive and pertinent teacher training plan that will enhance students' capacity to adopt 21st-century competencies and skills.

Additionally, in the study conducted by Banilla (2020) to prepare students for the demands of the contemporary workforce and global marketplace, research emphasizes the significance of incorporating these skills into educational curricula. According to a thorough literature review, 21st-century competencies require both contextual skills like ethical awareness and lifelong learning as well as core skills like technical proficiency, communication, teamwork, creativity, critical thinking, and problem-solving. According to numerous educational policy documents and frameworks, these skills are essential for promoting innovation and preserving competitiveness in a knowledge-based economy. As a result, educational systems must implement pedagogical strategies that successfully teach and evaluate these crucial skills.

Same with the study conducted by Rodrigo (2022) he found out that, Core subjects and 21st-century themes form the foundational knowledge base for students, including traditional academic subjects like mathematics, science, and language arts, integrated with contemporary themes such as global awareness, financial literacy, and civic literacy. Embedding these themes into the curriculum enhances students' understanding and relevance of their education to real-world scenarios. Learning and innovation skills, often referred to as the "4Cs"—critical thinking, communication, collaboration, and creativity—are essential for navigating and succeeding in an increasingly complex world. Developing these skills through innovative teaching methods and collaborative projects helps students become more adept at problem-solving and critical thinking. Like the study conducted by Cipres (2020) he explained on his study that, life and career skills, including flexibility, adaptability, initiative, self-direction, social and cross-cultural skills, productivity, accountability, leadership, and responsibility, are crucial for success in both careers and personal lives. Proficiency in information, media, and technology skills, which involve accessing, analyzing, evaluating, and creating media in various forms, is essential in the digital age. Students with strong skills in these areas are better equipped to handle the demands of modern workplaces and academic environments, significantly contributing to their overall academic performance and future career success.

Same to Eris (2021) study he explained on his study that, the degree to which senior high school students meet their learning objectives is referred to as their academic performance evaluated using standardized tests, grades, and other evaluations. Information, media, and technology skills, learning and innovation skills, life and career skills, and students' mastery of core subjects are some of the many factors that affect it. Studies consistently demonstrate that students who possess these 21st-century skills perform better academically because they improve their comprehension and ability to interact with the curriculum. Additionally, Varona (2021) explained that the need for educators and policymakers to give 21st-century skills integration into the curriculum and instructional practices top priority is highlighted by the moderate proficiency levels in these skills among senior high school students and the weak but statistically significant positive correlation between these skills and academic performance. Schools can better prepare students for the demands and challenges of the quickly changing global landscape by investing in teachers' ongoing professional development and by giving them opportunities to develop critical thinking, problem-solving, creativity, teamwork, and technology literacy. Furthermore, to provide authentic learning experiences that develop 21st-century skills and encourage real-world problem-solving, cooperation between educational institutions, businesses, and community organizations is essential. This will ultimately help students succeed academically and maintain their general well-being as they negotiate the challenges of the twenty-first century.

Synthesis : The primary focus of this study has been examined in the reviewed literature and studies, which have also assisted the researcher in clarifying the primary goal of identifying and investigating the level of competence in the 21st century skills and its relation to the performance of Grade 4 learners under MATATAG Curriculum. The works of Oberro (2024), Lapaz (2024), Raagas (2024), Milagros (2024) Marquez (2024) as well as the study of Villan (2024), David (2024), Carlos (2024), and Rivera (2024) have discussed about the origin and the legal bases for implementing the MATATAG Curriculum. They have cited variety of sources concerning the main reasons for the immediate implementation of the new curriculum. They have discussed also the nature of the MATATAG curriculum that aims to improve the basics among learners such as the Literacy and Numeracy.

Silimarly, they have affirmed that another focus of the curriculum is to enhance the 21st century learning skills that will equip the learners confidently face the challenges of the 21st century and be more prepared for the world of work. As to 21st Century skills, the researcher was able to collect and analyze varuious works about this are such as the works of Jones (2022), Samson (2022), Junio (2021), Manlapaz (2023), Robles (2022), Pans (2022), Gagalang (2022), Kaware (2022), McRad (2022), So (2023), De Sapin (2023), Wallace (2023), Mitchelle (2022), Gamoy (2023), Frades (2022), Del Rio (2022), Caces (2022), and De Jesus (2022). Their works have concentrated on explaining the needs for the students to develop and enhance the 21st century skills among learners in this generation. They have even explained the needs of learners to be equipped with these various learning skills to be able to step up and achieve higher level of potentials to deal with the demands of the society, perform their roles and responsibilities more effectively, and to achieve their desire goals living in this century. Their works can also be summed up about the efforts of schools and their guiding principles of helping the learners become the best version of themselves ready to face the challenges in this century and to use their skills to live their dreams.

Lastly, the demands of modern life and the workplace go far beyond content knowledge and critical thinking abilities. Students must focus hard on acquiring the necessary life and career skills to successfully navigate the complex work and life environments of the globally competitive information age. As to the performance of learners, Grannt (2022), Young (2022), Bennds (2023), De Leon (2021), Bansay (2020), Jalinao (2020), Handid (2020), Yellow (2020), Galos (2022), Xiang (2020), Banilla (2020), Rodrigo (2022), Cipres (2020), Eris (2021) and Varona (2021) have explained the essence of helping the learners to improve their academic performance. They have shown how the learners in the 21st century perform on their classes. They have even shown evidence to the ways on how the learner's study and performance. Also, their works have shown the various factors that may affect the ability of the learners to perform better in school. They have even explicated the various factors which may negatively affect the study habits of these learners and how this low level of 21st century skill may impact their ability to achieve higher level of performance.

Research Gap : There are numbers of literature and studies that have provided the researcher to let her scrutinize issues concerning the level of proficiency of learners and how it is related to their performance. Even if there are a lot of studies and literature concerning the variables involved in the study, the researcher has identified that the former or previous researchers have focused on one 21st century skill and explored how the students have faced difficulties in these skills. Others have focused on the 4Cs which have been the former frameworks of the 21st century skills. There are some local studies that have explored the 21st century skills but have not tested its correlation to the performance of learners.

These are the gaps that this study intends to bridge. The studies and literature that have been explored and analyzed have prompted the researcher to dig down and explore the realities about the competence of learners in the 21st century skills that are aligned to the goal of the MATATAG curriculum and how the enhancing of these skills relate to their academic performance. Of all the type of research gaps identified by Miles (2017), the researcher has considered that the gap to filled by this study is Theoretical Gap, even if there are previous studies that have addressed the various aspects of the 21st century skills, some just focused on individual competencies, and others on the broader framework of the 4Cs such as the critical thinking, communication, collaboration, and the creativity, there is still a lack of cohesive theoretical framework that may directly connects 21st skills to the academic performance particularly in the context of the new MATATAG curriculum. The existing theories either treat 21st century skills as isolated constructs or fail to integrate them to an even more comprehensive model which explicates the influence on academic performance of learners. Further, the local studies have tended to remain descriptive or exploratory, and without advancing a theoretical explanation of how the said competencies interact with the learning performance of Filipino learners. This study sought to address their theoretical gap through exploring and establishing a conceptual linkage between the enhanced 21st century skills and the learners' academic performance, thereby contributing to the development of a more contextually grounded and practically applicable framework.

III. METHODOLOGY

Research Design : The descriptive-correlational method of research was considered by the researcher as the most appropriate design for this study. Descriptive types of research is used in determining the assessment of the respondents on the level of manifestation of 21st century skills among Grade 4 learners. The basis in determining their assessment was the results of the survey-questionnaires that were administered among the teachers and Grade 4 learners of the Public Elementary Schools in the Division of Cabuyao. The indicators presented in the instruments are based on the 21st century skills in the General Shaping Papers of MATATAG Curriculum such as Information, Media, and Technology Skills, Learning and Innovation Skills, Communication Skills, and Life and Career Skills. The academic performance of learners during the first-year implementation of MATATAG curriculum will be based on their level of proficiency in the General Weighted Average of School- Year 2024-2025. According to Hurtle (2019), descriptive method is a purposive process of gathering, analyzing, classifying and tabulating data about prevailing conditions, practices, trends and cause and effect relationships and making adequate and accurate interpretation about such data with or without the aid of statistical treatment. Estrada (2020) explained that descriptive research describes and interprets "what is". This type of research also reveals the condition of relationships that exist or do not exist. It also divulges that practices that prevail or do not prevail, the belief, point of view or attitudes that are held or not held. In some cases, this type of researcher also unfolds the processes that are going on or otherwise, effects that are being felt or trends that are developing. Further, the prime goal of this type of research is to describe the pertinent data and the characteristics about what is being studied. He also explained that the idea behind this type of research is to identify the frequencies, the average and even using the inferential statistics.

Although this research is accurate, it did not gather the causes behind a situation. Descriptive research was mainly done when a researcher wants to gain a better understanding of the topic that he wanted to explore and analyze. One of the advantages of descriptive research was that it revealed problems like difficulties, hindrances, and constraints of a new practice being introduced and from its results revealed measures that could be instituted to address the problems discovered. Hence, this method was appropriate to this study since its focus was to determine the relationship between the manifestation of 21st century skills and the academic performance of learners. From the findings, the researcher was able to propose a Capacity Building Program that is deemed helpful in enhancing the 21st century skills and in improving the performance of learners.

Research Locale : The study was conducted among the public elementary schools in the Division of Cabuyao in the City of Cabuyao, Laguna province during the School Year 2024-2025. The division has 19 public elementary schools in the 18 barangays of the city. To make sure that each school is represented in this study, the researcher involved the two public elementary schools in each district of the City Schools Division. Further, the researcher also involved the public elementary schools such as the North Marinig ES, Bigaa ES, Butong ES, Niugan ES, Pulo ES, San Isidro ES, Cabuyao ES, Gulod ES, Banaybanay ES, and Banlic ES.

Respondents of the Study : This study involved two groups of respondents such as the Grade 4 teachers and the Grade 4 learners. The researcher involved these two groups since they are the individuals who are considered as the main players in the teaching-learning process. And so, there are the ones who might have knowledge about the manifestation of the 21st century skills. Sampling Design

The Total or Complete Enumeration was used among the teacher-respondents. This means that all the Grade 4 teachers in the participating public elementary schools was involved in this study. According to Cochran (2020) it is a method of data collection by which every member of the population is surveyed, measured, and observed. It produces a highly accurate and represents the results which is not biased. Random-Sampling Technique -was applied among the Grade 4 learners. This is due to large number of its population. The researcher used the Slovin's Fomula to determine the valid number of samples to be involved among Grade 4 learners. This is also validated using Raosoft Online Calculator. After identifying the number of samples, the researcher utilized the Stratified Sampling Technique which helped her determine the number of learners to be involved in each participating school.

Research Instruments: This study utilized one set of instruments for the two groups of respondents. The instrument is divided into two parts. The first part contains the basic profile of the respondents such as their position, age and sex. The second part of the instrument includes questions about the assessments of the two groups of respondents on the level of manifestation of 21st century skills of Grade 4 learners in terms of Information, Media, and Technology Skills, Learning and Innovation Skills, Communication Skills, and Life and Career Skills. These are the 21st century skills that must be improved among the 21st century learners based on the General Shaping Paper of MATATAG Curriculum. The researcher has established the validity of the questionnaire by presenting to her adviser, consulting a statistician, and presenting to some experts who have been in the related field and in authority. Their comments were given appropriate consideration. A Pilot Testing was conducted with a similar group of respondents. After integrating these significant ideas, suggestions, and insights from the experts, the final draft of the instrument was crafted in accordance with the statement of the problem. The researcher personally administered the questionnaire to the actual group of respondents. The responses of the respondents in the administer questionnaire were of big and significant help to finish this study.

Data-Gathering Procedures : Upon the approval of the research title, the researcher embarked on asking permission to the supervisor and school administrators before conducting her study. With official permission from the Schools Division Superintendent of the City Schools Division of Cabuyao, the researcher personally appeared before the respondents and made herself available in answering questions and doing some clarifications regarding the study. She also ensured that the teachers have answered the instrument on their vacant time or beyond their official working time. Since the study involved learners, she also secured consent from the parents. Those learners who have not returned the consent from the parents were not forced to participate in this study. She discussed and explained individually the instrument and personally administered afterward. She gave the respondents 30 minutes to answer the instrument. The researcher herself has undertaken the retrieval of an answered instrument. The researcher has tabulated the data, consolidated the results, discussed, analyzed, and interpreted the data.

Statistical Treatment of Data
The following statistical tools were used for the quantitative analysis:
1. The Simple Percentage was used in presenting the data gathered regarding the profile of the respondents.
2. Mean was used to determine the level of manifestation of 21st century skills of Grade 4 learners as assessed by teachers and students.
3. t-test was used to determine the difference in the assessments of the two groups of respondents on the level of 21st century skills of Grade 4 learners.
4. The level of Proficiency from DepEd Order No. 08, s.2015 was used as basis for the performance of the Grade 4 learners as assessed by their general weighted average:
5. Pearson-r was used to determine the significant relationship between the level of manifestation of 21st century skills and the pupil's performance?
6. Proposed Capacity Building Program based on the salient findings of the study.

Ethical Consideration : All the necessary procedures were followed to obtain the proper consent from the authorities. This includes obtaining the approval from the Institutional Review Board and the Ethics Committees. The participation in the study was purely voluntary, both the teachers and the learners were not compelled to provide information against their will. All the respondents have guaranteed that the information they shared will be treated with proper confidentiality. This also includes measures to ensure the personal data will not be disclosed to anybody and unauthorized parties. The information was securely stored and handled in compliance with applicable data laws and regulations. This is to observe the Data Privacy Act (PDA) of 2012 which aims to protect the privacy of the individuals while ensuring the flow of information to promote innovation and growth, regulates the collection, recording, organization, storage, and updating or modification, retrieval, consultation, use, consolidation, blocking, erasure, or destruction of personal data, and ensure that this papers complies with the DPA 2013 standards set for data protection. Moreover, the teachers and the students were explicitly informed that the data were used for the sole purpose of this study, and any published results were presented in a way to ensure that no one will be personally identified. The researcher has asked for the consent in all of her activities that were undertaken during the conduct of the study like taking photos with the learners during the administration of survey questionnaires. Further, these learners were involved in this study through the signed consent from their parents. Lastly, this commitment to confidentiality will maintain the integrity of the process in the conduct of study and the trust of the participants.

IV. RESULTS AND DICUSSION

This chapter presents the tabulated data and the results of the study, the corresponding analysis as well as the interpretation of the data because of the statistical treatment used.

1.How are the 21st century Skills of Grade 4 learners manifested as assessed by the teacher and the learners in terms of:

Table 3. Information, Media, and Technology Skills

Indicators	Teachers		Learners		Composite	
	W.M	V.I	W.M	V.I	Mean	V.I
1.1.1 understand the information presented in the online platform or software application	2.98	Manifested	3.71	Highly Manifested	3.35	Manifested
1.1.2 use technology in doing their assignment and projects.	3.12	Manifested	3.56	Highly Manifested	3.34	Manifested

1.1.3 engage with the teacher-provided learning materials and demonstrate the ability to perform the tasks independently.	3.19	**Manifested**	3.58	**Highly Manifested**	3.39	**Manifested**
1.1.4 know how to access and perform the activities using the technology.	3.12	**Manifested**	3.52	**Highly Manifested**	3.32	**Manifested**
1.1.5 understand and critique the information from any form of media.	2.88	**Manifested**	3.38	**Manifested**	3.13	**Manifested**
General Composite Mean					3.31	**Manifested**

Verbal Description: 3.500 - 4.000 Highly Manifested ,2.500 - 3.499 Manifested ,1.500 - 2.499 Less Manifested 0.000 - 1.499 Not Manifested.

Table 3 presents the assessment of Information, Media, and Technology Skills among Grade 4 learners, as evaluated by both teachers and the learners themselves. The data indicates a clear discrepancy between the two perspectives. It includes Weighted Mean (W.M), Verbal Interpretation (V.I), and a composite analysis of these indicators. The teachers and learners general composite mean is 3.31, which falls under " Manifested" category. It suggests that, the overall, information media, and technology skills are present and demonstrated both teachers and learners but not "Highly Manifested"

The gap between teacher and learner perceptions suggests that while students feel proficient in using technology for learning, teachers may see areas for further development, particularly in students' ability to critically assess information from different media sources. This highlights the need for reinforcing digital literacy skills to ensure that students are not only skilled users of technology but also critical consumers of information. The result further implies that learners have to more assisted about how they should perceive the information they gather from using the internet. Having the knowledge to understand and critique the content of any multimedia may enable the learners to develop their critical thinking skills. This may enable them to assess and check the accuracy, the reliability and credibility of the information they find on the internet or any form of multimedia. It is the core of the information, media, and technology, to educate humankind and be able to become more informed and can navigate the continuously increasing multimedia landscape.

The study conducted by Felipe (2022) learners in this generation are noted for having much access to the internet. They have so many opportunities to navigate and learn anything and everything under the sun using technology. Even in school, the learners have better opportunities to use technology, be informed and equip themselves with knowledge through the internet and multimedia. However, there is a need for the learners and teachers to have the common goal of getting the benefits of the ICT in school in developing the 21st century skills of learners which is Information, Media, and Technology Skills. Teachers still must remind the teachers about the roles of technology to their studies and how to use them effectively. Further, teachers should direct the learners to critique and scrutinize the things they see, watch, and read from these media. They are also expected to prepare the learners to the real-world scenario that they really need to analyze, scrutinize, and respond to such information they encountered. Lamano (2022) she explained that the learners in this generation have higher level of access to technology. Most learners have more abilities to utilize the technology and to access the internet, and so they have more opportunities to gain more knowledge through the various forms of media. Learners have so much to enjoy, academically, these learners will also be able to get immediate support on their studies through different applications and search engines. They may learn a lot from utilizing the technology and accessing the internet.

Table 4. Learning and Innovation Skills

Indicators	Teachers		Learners		Composite	
	W.M	V.I	W.M	V.I	Mean	V.I
1.2.1 understand the learning activities and perform the tasks on their own.	3.04	Manifested	3.43	Manifested	3.24	Manifested
1.2.2 demonstrate originality and innovation at learning tasks.	2.91	Manifested	3.58	Highly Manifested	3.25	Manifested
1.2.3 develop, implement, and communicating new ideas to others.	2.99	Manifested	3.47	Manifested	3.23	Manifested
1.2.4 are open and responsive to new and diverse perspective.	3.01	Manifested	3.59	Highly Manifested	3.30	Manifested
1.2.5 act in creating ideas to make tangible and useful contribution to the domain in which innovation occurs.	3.01	Manifested	3.45	Manifested	3.23	Manifested
General Composite Mean					3.25	Manifested

Verbal Description: 3.500 - 4.000 Highly Manifested ,2.500 - 3.499 Manifested ,1.500 - 2.499 Less Manifested 0.000 - 1.499 Not Manifested.

Table 4 reveals the assessment of Learning and Innovation Skills among Grade 4 learners, as evaluated by both teachers and the learners themselves. The findings reveal differences in perception between the two groups. It includes Weighted Mean (W.M), Verbal Interpretation (V.I), and a composite analysis of these indicators. The teachers and learners general composite mean is 3.25, which falls under " Manifested" category. The perception gap between teachers and learners indicates that while students believe they possess strong learning and innovation skills, teachers see room for further development, particularly in fostering originality and creative problem-solving. This highlights the need for targeted strategies to enhance students' innovative thinking while ensuring alignment between teacher expectations and student self-perceptions.

According to Talens (2023) there are learners who tend to misunderstand how their teachers rate their performance and their learning outputs. They have higher level of expectations as to the quality of their works and creativity and innovativeness on their performances. However, the teachers who have set the standards and criteria have the basis for giving these learners the grades they deserve. However, the teachers need to teach their learners about the basis on their grading, teach them to do better considering the criteria, as well as to unleash the potentials of learners in making their performance more creative and innovative. Additionally, Craig (2022) explained that learners have been able obtain vast information through using the technology. However, these learners shall have to be reminded about the learners shall be assisted and guided in utilizing the various technologies particularly laptop, tablets, and cellphones. They shall also be guided in terms of accessing the internet, they shall be taught about responsible access to the internet and abusing the enjoyment that the technology is bringing them. It will be better if these learners are trained on how to utilize the technology and access the internet more responsibly and used them mostly for educational purposes which may give them sufficient information needed on their studies.

Table 5. Communication Skills

Indicators	Teachers		Learners		Composite	
	W.M	V.I	W.M	V.I	Mean	V.I
1.3.1 approach others to start or join the conversation.	3.28	Manifested	3.41	Manifested	3.35	Manifested

1.3.2 ask specific information and make a follow-up comment about the topic of conversation.	3.07	**Manifested**	3.55	**Highly Manifested**	3.31	**Manifested**
1.3.3 use digital technologies and applications to extend communication to a variety of audiences.	3.08	**Manifested**	3.39	**Manifested**	3.23	**Manifested**
1.3.4 recognize and respond to eye and hand movement, facial expression and other gestures.	3.18	**Manifested**	3.65	**Highly Manifested**	3.42	**Manifested**
1.3.5 Utilize body language and touch and appropriate physical distance between the communicator to respond suitability to the situation.	3.07	**Manifested**	3.64	**Highly Manifested**	3.56	**Manifested**
General Composite Mean					**3.37**	**Manifested**

Verbal Description: 3.500 - 4.000 Highly Manifested ,2.500 - 3.499 Manifested ,1.500 - 2.499 Less Manifested 0.000 - 1.499 Not Manifested.

Table 5 shows the assessment of Communication Skills among Grade 4 learners, as evaluated by both teachers and the learners themselves. The findings reveal differences in perception between the two groups. It includes Weighted Mean (W.M), Verbal Interpretation (V.I), and a composite analysis of these indicators. The teachers and learners general composite mean is 3.37, which falls under " Manifested" category. It suggests that the general performance in communication skills are present and demonstrated both teachers and learners but not highly manifestedTeachers rated the learners highest score was the statement from "1.3.1 approach others to start or join conversation" (3.28) while the lowest-rated was 1.3.5 "Utilize body language and touch and appropriate physical distance between the communicator to respond suitability to the situation" and 1.3.2 ask specific information and make a follow-up comment about the topic of conversation.

As per the results, the learners believe that they have full abilities to recognize and respond to eye and hand movement, and other non-verbal cues used in communicating with others. The learners themselves believed that there is still a need to improve their knowledge and capabilities to utilize the technologies and other applications to communicate with others in wider scope and with different audiences. The result implies that learners' communication skills are highly manifested as per their self-assessment and manifested as per the assessment of their teachers. Also, it can be gleaned from the results that the learners need to improve their capabilities of learners to use the body movements and observe proper distance to the people they are dealing with.

Also, as revealed by the results, the learners must be trained and guided in utilizing the technologies and other applications to communicate with various audiences. They shall be reminded about the proper ways of expressing their ideas with appropriate gestures and body movement which is necessary to support the ideas they wanted to convey. Learners shall also be assisted while they try to communicate using their gadgets, technologies, and other application which may enable them to speak with larger and more diverse audience.
Moreover, Smith (2022) explained the significance of enhancing the communication skills of 21st century learners. The teachers shall extend their hands in exposing the learners to speak out their minds and convey their ideas to their lessons. The teachers shall provide various activities that may enable the learners to gain confidence in sharing their thoughts and share their ideas to others. In this generation, even the students tend to get their phone access the internet and communicate with people they may encounter in this platform. However, they shall be guided in accessing the net and in communicating with others. They might be assisted by their parents and teachers who may spend time of watching over them and teach them what to observe in communicating with others.

Same with the study conducted by Hernandez (2022) that, there are a lot of ways that teachers may help the learners to improve their communication skills. They might provide various activities which may expose the learners to speak their mind and learn how to communicate well with the people around them. Further, they shall be assisted by the teachers on how to improve their capabilities to speak in class and be able to effectively express their ideas. Learners must be monitored by older individuals who are also expected to guide them on choosing the words and to express it well to people they are dealing with. This shall be done in all forms of communication.

Table 6.Life and Career Skills

Indicators	Teachers		Learners		Composite	
	W.M	V.I	W.M	V.I	Mean	V.I
1.4.1 read various texts and information on a topic to gain different perspectives before making an informed decision.	3.07	**Manifested**	3.65	**Highly Manifested**	3.36	**Manifested**
1.4.2 identify options for course of actions	2.93	**Manifested**	3.61	**Highly Manifested**	3.27	**Manifested**
1.4.3 make opportunities to develop talents to others.	3.00	**Manifested**	3.50	**Highly Manifested**	3.25	**Manifested**
1.4.4 help a classmate coming from a different community-adapt to the new environment	3.21	**Manifested**	3.55	**Highly Manifested**	3.38	**Manifested**
1.4.5 study and prepare for paper-and -pen tests and performance tasks.	3.18	**Manifested**	3.68	**Highly Manifested**	3.43	**Manifested**
General Composite Mean					3.34	**Manifested**

Verbal Description: 3.500 - 4.000 Highly Manifested ,2.500 - 3.499 Manifested ,1.500 - 2.499 Less Manifested 0.000 - 1.499 Not Manifested.

Table 6 presents the assessment of Life and Career Skills among Grade 4 learners, as evaluated by both teachers and the learners themselves. The findings show a notable difference in perception between the two groups. It includes Weighted Mean (W.M), Verbal Interpretation (V.I), and a composite analysis of these indicators.The teachers and learners general composite mean is 3.34, which falls under " Manifested" category. It suggests that the general performance in life and career skills are present and demonstrated both teachers and learners but not highly manifested. Teachers rated the learners' highest-rated score statement from "1.4.4 Help a classmate coming from a different community adapt to the new environment" (3.21), while the lowest-rated was "1.4.2 Identify options for a course of actions" (2.93). This suggests that teachers recognize students' ability to assist others in adapting but see some need for improvement in decision-making and evaluating different courses of action. The perception gap suggests that while learners believe they have strong life and career skills, teachers see room for further development, particularly in decision-making and identifying options for action.

In the study conducted by Llamano (2022) he explained the significance of enhancing the decision-making skills among learners. The learners shall be trained about how to face the challenge and think of ways on how to surpass the challenge.They shall also gain knowledge how to manage the problem and to come up with the decision that is appropriate and suited to address the challenge. The decision-making skills might be developed among learners even during their stay in school. They shall be taught on how to dig down the problem, find the possible options to solve the problem, and make necessary decision.Likewise, according to Aldueza (2022) as young as elementary level, the learners shall be exposed to light and yet meaningful decision-making activities. This involves simple analysis of activities that are related to their day-to-day works. This is a simple way and yet a powerful one to train the learners, when they grow older, they are expected to know what shall be done and what is good to undertake.

Table 7.Assessment of 21st Century Skills of Grade 4 Learners as Evaluated by Teachers and   Learners

Indicators	Teachers		Learners		Composite	
	W.M	V.I	W.M	V.I	Mean	V.I
Information, Media, and Technology Skills.	3.06	**Manifested**	3.55	**Manifested**	3.31	**Manifested**
Learning and Innovation Skills.	2.99	**Manifested**	3.50	**Highly Manifested**	3.25	**Manifested**
Communication Skills	3.14	**Manifested**	3.53	**Highly Manifested**	3.34	**Manifested**
Life and Career Skills	3.08	**Manifested**	3.60	**Highly Manifested**	3.34	**Manifested**
General Composite Mean					3.31	**Manifested**

Verbal Description: 3.500 - 4.000 Highly Manifested ,2.500 - 3.499 Manifested ,1.500 - 2.499 Less Manifested 0.000 - 1.499 Not Manifested.

Table 7 presents an assessment of the 21st-century skills of Grade 4 learners as evaluated by both teachers and the learners themselves. The skills are categorized into four areas: Information, Media, and Technology Skills; Learning and Innovation Skills; Communication Skills; and Life and Career Skills. The findings reveal a noticeable difference between the teachers' and learners' perceptions of these skills.Both teachers and learners rated all skill areas with an general composite mean of (3.31), which falls under the "Manifested" category. Among the four skill areas, Communication Skills and Life and Career Skills received the highest rating (3.34), while Learning and Innovation Skills received the lowest (3.25). The data suggests a perception gap between teachers and learners. While teachers view these skills as present but not highly developed, learners perceive themselves as possessing a higher level of proficiency. The most significant discrepancy is in Learning and Innovation Skills, where teachers gave the lowest rating (2.99, "Manifested"), but learners rated it at 3.50, categorizing it as "Highly Manifested". This difference indicates that while students may feel confident in their abilities, teachers may see areas where further improvement is needed.

The results also imply that the learners have a higher level of perceptions on how they manifest the 21st century skills over the perceptions of their teachers. The result also suggests that the learners themselves believe that they can exhibit various activities as part of the four 21st century skills. Further, the teachers have lower assessment based on how they witnessed the learners in exhibiting the 21st century skills in their respective classes. The results also suggest the needs among teachers to clarify the 21st century skills as well as its nature and the activities referring these skills. This might be big among the learners to have a better understanding of their own level of 21st century skills and how to achieve them effectively. In the study conducted by Roman (2022) learners nowadays have become more confident about how they perform in class and how they perform certain tasks. There are some of these learners who believe that they did the work well, and what they have undertaken has satisfied the requirements. However, the teachers must direct these learners and help them better understand the significance of validation. The teachers, as the managers of their respective classes, known as the More Knowledgeable Others, have higher levels of understanding and capabilities of assessing one's performance. It is their prime duty to measure how well the learners perform the task and then what the ways that these tasks should be undertaken.

The core of the 21st century skills shall be well explicated among learners. According to Hughens (2023) in her article, there are learners who believed they have successfully satisfied the requirements of their class. They have exhibited the various skills necessary for the tasks. However, the teachers should serve as their validators to tell them the areas that still need enhancement. The teachers are expected to redirect these learners and help them better understand the activities that would help them boost their capabilities and achieve a higher level of competence in the four 21st century skills.

2. Is there a significant difference between the assessment of the two groups of respondents on the 21st century skills manifestation in Grade 4?

Table 8. Significant Difference between the Assessment on the 21ˢᵗ Century Skills Manifestation When Grouped According to Respondents

Group of Respondents	Mean	Std. Deviation	U statistic	P-Value	Decision	Conclusion
• Learners	3.55	0.562	7091	<0.001	Reject Ho	Significant
• Teachers	3.07	0.364				

Legend: Significant if p<0.05

Table 8 reveals the results of the Mann-Whitney U Test, which was conducted to determine if there is a significant difference between the assessments of teachers and learners regarding the manifestation of 21st-century skills in Grade 4 students. The results indicate that teachers provided a higher mean rating (3.55) compared to learners (3.07). The computed p-value of 0.001 is less than the significance level of 0.05, leading to the rejection of the null hypothesis (Ho). This means that there is a statistically significant difference between the assessments of the two groups.

The findings suggest that teachers and learners perceive the manifestation of 21st-century skills differently. Teachers tend to assess these skills more favorably, possibly due to their broader experience and professional perspective on skill development. In contrast, learners may have a more critical self-evaluation or different criteria for judging their own competencies. This discrepancy highlights the need for further investigation into how students perceive their skills and how educators can support their development effectively. In the 21st century, the teachers are expected to have higher level of understanding towards the development of the skills of learners they handle. They shall also be aware on how to deal with these learners and assist them properly to be more prepared to the challenges in this generation. The MATATAG curriculum seeks to develop these major 21st century skills that would help learners improve their capabilities of facing the ever-changing society and to make them well-ready for the world of work.

According to De Villa (2022) teachers as the managers of their respective classes know more about their learners and how to direct them effectively. The 21st century might seem challenging since this is the time where the society demands a lot of skills among learners, to make them respond to the needs of society. The curriculum shall be crafted based on these needs, the schools shall take responsibilities of implementing the curriculum, teachers shall serve as the main channel of delivering the curriculum and make it relevant tot the needs of learners and guide them accordingly. Learners might see themselves as prepared enough for these, but teachers shall always be the individuals who shall direct and assist these learners towards their improvement in all aspects of life. Further, Crisanto (2022) explained that teachers are considered as the More Knowledgeable Ones on their respective classes, and so, they are expected to know more or beyond the capabilities of the learners they handle. They shall be able to manage their class effectively, as the managers, they are expected to have more abilities to teach, manage, and direct their learners not just academically but to prepare them to the real world-situation and to take the right path for the rest of their lives.

3. What is the pupils' performance based on their general weighted average during the first-year implementation of MATATAG curriculum?

Table 9. The Pupils' performance based on their General Weighted Average during the First-Year Implementation of MATATAG curriculum.

No. of Pupils	Mean GWA	Std Deviation	Performance Level
347	83.7	2.27	Approaching Proficiency

Legend: 90-100 Advanced, 85-89 Proficient, 80-84- Approaching Proficiency, 75-79 Developing, 74 and below – Beginning
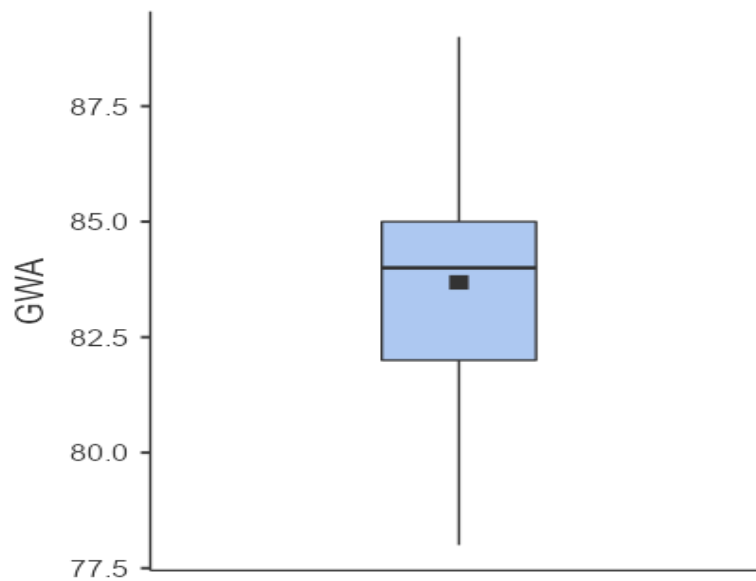
Table 9 presents the pupils' performance based on their General Weighted Average (GWA) during the first-year implementation of the MATATAG curriculum. The data indicates that out of 347 pupils, the mean GWA is 83.7 with a standard deviation of 2.27. Based on the provided performance level legend, this falls under the category of "Approaching Proficiency" (GWA range: 80-84). The plot further illustrates the distribution of the pupils' GWA scores, showing that the majority of students have scores clustered around the meaning, with some variability. The Approaching Proficiency classification suggests that while students are demonstrating a foundational understanding of the curriculum, there is still room for improvement to reach the Proficient (85-89) or Advanced (90-100) levels. These findings highlight the need for targeted interventions, such as enhanced instructional strategies and support programs, to help students progress toward higher proficiency levels under the MATATAG curriculum. This also manifests that the Grade 4 learners have attained mediocre performance, they have not been able to excel higher than what is expected on their Grade level. This also means that the performance could be enhanced through various strategic intervention and underpinning of the practices that would enhance their participation and performance.

On the conducted study of Marquez (2022) explained that there are more average learners who performed at mediocre level. These are the learners who have met the standards set by the DepEd and have satisfied the requirements in each learning areas. However, having the average performance also means that learners may spend more time and efforts on their studies to be able to achieve higher level of performance and learn things that can be used on their future. Likewise, the school and the teachers shall find ways to help these learners ton go beyond the minor requirements and attain higher level of performance in all subjects which may also be contributory to the overall improvement of the school performance.

4. Is there a significant correlation between the manifestation of the 21st century skills and the performance of Grade 4 learners?

Table 10. Test of Relationship between the Manifestation of the 21st Century Skills and the Performance of Grade 4 learners

Variable	Spearman's rho	Degree of Correlation	P-Value	Decision	Conclusion
21st Century Skills Manifestation					

• Information, Media and Technology Skills	0.125	**Weak Positive Correlation**	0.019	**Reject**	**Significant**
• Learning and Innovation Skills	0.084	**No correlation**	0.120	**Failed to reject**	**Not significant**
• Communication Skills	0.085	**No Correlation**	0.112	**Failed to reject**	**Not Significant**
• Life and Career Skills	0.061	**No Correlation**	0.259	**Failed to reject**	**Not Significant**

Legend: Significant if p<0.05; 0.60-0.79 Strong correlation, 0.40-0.59 Moderate correlation, 0.20-0.39 Weak Correlation, 0.00-0.19 Very Weak / No correlation (Evans, 1996)

The table 10 presents the results of a Spearman's rho correlation test, which examines the relationship between the manifestation of 21st-century skills and the performance of Grade 4 learners. The findings indicate that Information, Media, and Technology Skills have a weak positive correlation ($\rho = 0.125$, $p = 0.019$) with learners' performance, and since the p-value is below 0.05, the null hypothesis is rejected, confirming a correlation. This suggests that a slight increase in these skills is associated with better academic performance.
The result also implies that the the better the manifestation of the 21st century skills in the Information, Media, and Technology the higher the performance of the learners will be attained. If the teachers have been able to enhance this skills among learners through exposing them to activities that requiring knowledge and skills in Information, Media, and Technology, it would lead to better understanding of the what have been discussed to them. Also, it signifies the inclination of learners in using the technology and accessing the internet and media, to acquire information. However, the other three skill categories—Learning and Innovation Skills ($\rho = 0.084$, $p = 0.120$), Communication Skills ($\rho = 0.085$, $p = 0.112$), and Life and Career Skills ($\rho = 0.061$, $p = 0.259$)—show no significant correlation with performance, as their p-values exceed 0.05. This means that these skills, as assessed in this study, do not have a statistically significant impact on pupils' academic achievement.

Overall, the results imply that while Information, Media, and Technology Skills play a minor role in influencing performance, the other 21st-century skills may not directly correlate with academic success, at least in the context of this assessment. These findings highlight the need for further investigation into how these skills contribute to learning outcomes and how they can be integrated more effectively into the curriculum. The result also shows that enhancing these 21st century skills may have little to no correlation with the academic performance of learners. But it does not necessary means to ignore the development of these skills. These skills shall be enhanced if not to improve the scholastic performance of learners but to make them be more prepared to face challenges in life that may require these skills.

In the study conducted by Yalong (2022) he emphasized the needs for improving the 21st century skills to the learners in this generation. These skills are vital for their success in dealing with this fast-changing and interconnected world. This may not guarantee better performance in their schools, but enhancing these skills may enable them to thrive in this ever-evolving society and in taking-up space to solve their personal problems and societal issues where they belong. Likewise, Bandong (2022) explicated that it is very salient for the young learners to be trained and equipped with the 21st century skills. The schools are expected to cater quality education making the learners be more equipped with the skills that are needed by the society they will be dealing with. Also, the teachers shall be the driving force of transforming these learners, make them more prepared for the challenges in the 21st century and to enable them to live responsive to the demands and challenges in this century. The 21st century skills are important skills for the overall success of learner, but these are not always directly translated to the improvement of academic performance of learners.

Table 11. Test of Relationship between the Manifestation of the 21st Century Skills and the Performance of Grade 4 learners

Variable	Spearman's rho	Degree of Correlation	P-Value	Decision	Conclusion
21st Century Skills Manifestation					
	0.106	Weak Positive Correlation	0.049	Reject	Significant

Legend: Significant if p<0.05; 0.60-0.79 Strong correlation, 0.40-0.59 Moderate correlation, 0.20-0.39 Weak Correlation, 0.00-0.19 Very Weak / No correlation (Evans, 1996)

The table 11 present the results of the Spearman's rho correlation test presented in the table indicate a weak positive correlation (ρ = 0.106, p = 0.049) between the manifestation of 21st-century skills and the performance of Grade 4 learners. Since the p-value (0.049) is less than 0.05, the null hypothesis is rejected, meaning the relationship is statistically significant. Despite the statistical significance, the correlation remains weak, suggesting that while the development of 21st-century skills is associated with improved academic performance, its direct impact may be minimal. Other factors might play a more substantial role in shaping student performance. This finding underscores the importance of further research and targeted interventions to strengthen the integration of 21st-century skills in education to enhance learning outcomes effectively. In the study conducted by Smith (2023) the 21st century skills are considered as significant factor that bring impact to the improvement of the learners' academic performance. It also means that the success of academic facet of learners is directly influenced by these skills since these enable the learners to think critically, make effective decision, and make the learners be more engaged to various aspects of life.

Further, according to Jomelogo (2022) he explained the needs of teachers to have higher level of 21st century knowledge and skills. These are all needed to effectively teach the learners and cultivate these knowledge and skills that are vital to deal with the ever-changing demands of the society. The learners shall have been able to develop these skills and make themselves be more responsive to the needs of the society.

5. What capacity building program for teachers can be proposed towards pupils' manifestation of 21st-century skills?

Most academicians and practitioners believe that there is a very fast-changing world of education. Due to this, there is a need to equip the learners with essential 21st century skills that have been perceived to be pressing. In the Philippine, there has been a high regard in the integration of innovation, collaboration, and creativity which are needed in the classroom to prepare the learners to succeed in the increasingly globalized community. The Innovate, Integrate, and Inspire: Strengthening 21st Century Skills in the Classroom" which focuses on equipping both the teachers and learners with the skills that are needed to thrive in the today's dynamic digital and knowledge-driven economy. Through embracing the new teaching methods, technological tools, and fostering a culture of lifelong learning, the Philippine Education system can hone a generation of critical thinkers, problem solvers, and global citizens. Innovation in the classroom has always been considered as a transformative process that encourages the learners to think outside the box and apply their knowledge in real-world context. It is vital that the teachers introduce creative and relevant approaches to learning. This also involves incorporating digital technologies, project-based learning, and the interactive platforms that make the

lesson more engaging and applicable to real-life situation of learners. With the right resources and support, teachers can foster a learning environment where the learners are motivated to explore, question, and innovate, which also ensures that they are well-prepared for the challenges of the future. Based on the findings, there is a perception gap between teachers and learners regarding the manifestation of 21st-century skills, and only a weak correlation was found between these skills and academic performance. This suggests a need for teacher training programs that focus on effective strategies to foster 21st-century skills in students while ensuring their direct impact on academic achievement.

Objectives:
This program is guided by the following objectives:
1. To enhance teachers' knowledge and understanding of 21st-century skills and their role in student development.
2. To equip teachers with innovative teaching strategies that promote critical thinking, creativity, collaboration, and communication.
3. To integrate technology, media literacy, and digital tools into classroom instruction effectively.
4. To develop assessment tools that accurately measure the manifestation of 21st-century skills among students.
5. To strengthen student engagement through project-based, inquiry-based, and experiential learning approaches.

Program Components:
1. Workshop on 21st-Century Teaching Strategies
    Inquiry-based and project-based learning techniques
    Collaborative learning and student-centered approaches
    Differentiated instruction for diverse learners
2. Digital Literacy and Technology Integration
    Training in the use of educational technology tools (e.g., Google Workspace, interactive apps, coding basics)
    Effective strategies for blended learning and integrating digital media into lessons
    Developing student competencies in information, media, and technology skills
3. Creative and Innovative Thinking Development
    Encouraging design thinking and problem-solving activities
    Strategies to nurture student originality and innovation in learning tasks
    Cross-disciplinary approaches that integrate STEM, arts, and literacy
4. Communication and Collaboration Enhancement
    Training on fostering effective communication and teamwork among students
    Strategies for improving oral and written communication skills
    Activities that enhance peer-to-peer learning and global collaboration
5. Assessment and Feedback Mechanisms
    Developing authentic assessment tools for evaluating 21st-century skills
    Implementing formative and summative assessments that measure critical thinking and creativity
    Providing meaningful feedback to enhance student growth

V. CONCLUSIONS AND RECOMMENDATIONS

In the light of the foregoing findings, the following conclusions are drawn:

1. The Grade 4 learners have assessed what have highly manifested the 21st century skills. This somewhat shows their belief that they have highly exhibit these skills in performing the various learning tasks in school. Conversely, teachers have garnered lower level of assessment as to the manifestation of these skills among grade 4 learners. As learning managers, teachers believed that these skills are just manifested among learners and have not consistently gone beyond the expected standards in applying these 21st century skills.

2. That there is a disparity in the assessment of teachers and learners that highlight the crucial need for the learners to recognize that there is still room for improvement in mastering the 21st century skills. While the learners believe that they are highly manifested these skills, the teachers' assessment suggest that their actual performance falls short to achieve that level. The difference on their assessment also underscores the gap between learners' self-assessment and the teachers more critical objective assessment. The learners may have not yet fully understand the depth of manifestation to truly excel in various essential competencies.

3. That the learners' performance is in mediocre level. This claims that while learners are demonstration the

grasp of curriculum content, there is still a room for improvement in attaining higher level of proficiency. The narrow standard deviation also indicates a degree of consistency in the performance of learners. It points to potential for targeted individual to address the gaps and improve their overall academic improvement.

4. That, while the certain 21st century skills such as Information, Media, and Technology skills appear to have positive impact on the performance of learners, the broader range of skills assessed in this study show a more limited nor significant effect.

This underscores the significance of prioritizing the specific skill sets in the school, while highlighting the needs for continued exploration of how the diverse 21st century skills may collectively influence the academic performance of learners.

5. That the proposed output contains various activities concentrated to improve the manifestation of the 21st century skills needed by the learners. This also include the various activities that the teachers shall facilitate, monitor and evaluate to properly check and assess the progress of learners and provide them the necessary intervention when needed.

Recommendations

Based on the conclusions drawn from the findings of the study, the following recommendations are forwarded:

1. To bridge the gap on the assessment of learners and teachers on the manifestation of the 21st century skills, the teachers are encouraged to implement intervention plan that aim to raise the awareness of learners on specific competencies that need mastery. This 21st century focused intervention, may foster a deeper understanding of the various 21st century skills and how they will be applied beyond the basic expectation. Also, the teacher may consider integrating a more explicit formative assessment and feedback mechanism that may assist the learners to assess not only self-aware but even to track their progress toward higher level of skills manifestation.

2. The schools are advised to establish a clear guide of 21st century framework for the learners to better understand the criteria for proficiency in the 21st century skills. It is also recommended that the teachers may engage in reflective discussion with the learners to explain the expectations and provide them various concrete examples of how the 21st century skills should be manifested on their learning tasks. The teachers are also advised to promote the peer evaluation and self-reflection exercises which may help the learners to areas for improvement and encourage them to a more realistic assessment.

3. To ameliorate the academic performance of learners, it is recommended that the teachers shall concentrate on differentiated instruction and personalized interventions (e.g individualized learning materials based on their needs, interest, and intelligence) for the learners. Since learners are at mediocre performance, the teachers are advised to closely monitor the performance trends and adjust instructional strategies to cater the varying learning needs of this diverse learners. Focusing on the areas where the learners found hefty and reinforce their strength may enable the teachers to boost their performance.

4. Since there was a certain 21st century skills like the Information, Media, and Technology show positive relationship with the performance of learners, the teachers are encouraged to prioritize and strengthen these areas within the curriculum. The schools are also advised to provide more opportunities such as exposing the learners to responsible utilization of technology, accessing the internet, and gain information through various forms of media that will engage the learners to various activities focusing on enhancing these skills such as project-based learning, digital literacy initiatives and interdisciplinary lessons. This holistic approach may also contribute to the comprehensive skill set that can positively influence the overall academic performance.

5. The proposed activities seek to improve the manifestation of the 21st century skills. The school is encouraged to establish a close monitoring and continues evaluation of these activities to ensure its effective implementation. The teachers are also encouraged to receive the ongoing professional development to equip them with the tools and strategies necessary to facilitate, track, and assess the progress of learners. Further, the school shall take responsibilities of systematic feedback loop where both teachers and learners can review the progress regularly and allowing timely interventions and necessary adjustment.

6. It is recommended to conduct study relative to the relationship between Grade 4 pupils' manifestation of 21st-century skills (such as critical thinking, collaboration, creativity, and digital literacy) and their academic performance, focusing on how these competencies influence subject-specific achievements (e.g., problem-solving in math, teamwork in science projects, or creativity in language tasks) and whether targeted skill development strategies.

REFERENCES

1. Republic Act No. 9155, Governance of Basic Education Act of 2001 (2001). Official Gazette of the Republic of the Philippines. https://www.officialgazette.gov.ph/2001/08/11/republic-act-no-9155/
2. Bansay, L (2020). Comparing frameworks for 21st century skills. 21st century skills: Rethinking how students learn pp.13-19
3. Blinds, R (2023) Beyond breadth-speed-test: toward deeper knowing and engagement in an advanced placement course. American Educational Research Journal
4. Carlos, J (2024) A Comparative Study of K-12 and MATATAG Curricula, International Multidisciplinary Journal of Research for Innovation, Sustainability, and Excellence (IMJRISE): Vol. 1 No. 6 (2024): International Multidisciplinary Journal of Research for Innovation, Sustainability, and Excellence (IMJRISE)
5. David, A (2024) Educational Transformation: Perspectives on the Implementation of the Matatag Curriculum in the Philippines. International Multidisciplinary Journal of Research for Innovation, Sustainability, and Excellence (IMJRISE), 1(5), 306-311.
6. De Sapin, S (2022) Closing the expectations gap 2013. 50-state progress report on the alignment of state K-12 policies and practice with the demands of college and careers.
7. DepEd Order No. 10, s. 2024 Policy Guidelines in the Implementation of MATATAG Curriculum
8. Edem, L (2020) Assessment of Filipino Higher Education Students' Readiness for e-Learning During a Pandemic: A Rasch Technique Application. Philippine Journal of Science.
9. Frades, W (2022). 21st Century Learner Skills: An investigation of middle school students based on grade level and gender. Pamukkale University Journal of Education
10. Gaffud, M (2020) Defining twenty-first century skills. In Assessment and teaching of 21st century skills Springer, Dordrecht.
11. Gagalang, T (2022). 21st century standards and curriculum: Current research and practice. Journal of Education and Practice
12. Galos, S (2022) Deeper learning: Beyond 21st century skills. Bloomington, IN: Solution Tree Press.pp 78-81
13. Gamoy, L (2022) 21st century skills of Nueva Vizcaya State University BambangCampus, Philippines. Asia Pacific Journal of Education, Arts and Sciences, 2(2), 30-37
14. Grantt, N (2023) Level of 21st century skills among students of the special education department in the college of education at King Faisal University. Handid, C (2021) What we know about critical thinking: Part of the 4Cs research series. Retrieved from Partnership for 21st Century Learning
15. Jones, L (2020). Impact of leadership on professional development programs on districts' and schools' implementation of 21st century skills. ProQuest Dissertations & Theses Global database
16. Junio, D (2021) Transforming Learning for the 21st Century: An economic Imperative. Learning point Associates.
17. Kaware, E (2022) Infusing creativity and technology in 21st century education: A systemic view for change. Journal of Educational Technology & Society, 19(3), 27-37.
18. Lapaz, G (2024) The New MATATAG Curriculum in the Lens of the 21st- Century 7Cs, International Multidisciplinary Journal of Research for Innovation, Sustainability, and Excellence (IMJRISE): Vol. 1 No. 5 (2024): International Multidisciplinary Journal of Research for Innovation, Sustainability, and Excellence (IMJRISE)
19. Lazo, M (2022) Curriculum 21: Essential education for the changing world. Alexandria, VA: Association for Supervision and Curriculum Development.
20. Manlapaz, S (2023) Education for Life and Work: Developing Transferable Knowledge and Skills in the 21st Century. National Research Council for the National Academies
21. Messer, R (2022) The relation between 21st-century skills and digital skills: A systematic literature review. Computers in Human Behavior
22. Milagros, A (2024), Curriculum Innovation in Philippine Education: The MATATAG Curriculum, International Multidisciplinary Journal of Research for Innovation, Sustainability, and Excellence (IMJRISE): Vol. 1 No. 6 (2024): International Multidisciplinary Journal of Research for Innovation, Sustainability, and Excellence (IMJRISE)
23. Morado, O (2022) Integrating information literacy into the learning outcomes of academic disciplines: A critical 21st-century issue. College & Research Libraries News
24. Oberro, M (2024) cited from MATATAG Curriculum. Department of Education, Philippines. https://www.deped.gov.ph/matatag-curriculum/

25. Pans, G (2022) Transforming to 21st Century Learning Environments: Best Practices Revealed through a Study of Exemplar Schools, Brandman University, Ann Arbor. ProQuest Dissertations & Theses Global database.
26. Performance for International Student Assessment results in 2023
27. Raagas, S (2024), Student-Centered Learning: Examining the New MATATAG Curriculum, International Multidisciplinary Journal of Research for Innovation, Sustainability, and Excellence (IMJRISE): Vol. 1 No. 6 (2024): International Multidisciplinary Journal of Research for Innovation, Sustainability, and Excellence (IMJRISE)
28. Recasco, O (2022) Multidimensional 21st century skills scale: Validity and reliability study
29. Samsn, R (2022) Preparation for a global economy: 21st century career- readiness and academic-citizenship skills for African-American workforce entrants. University of Southern California, Ann Arbor. ProQuest Dissertations & Theses Global database
30. So, L (2022) 21st century skills: Rethinking how students learn (pp. 9-21). Bloomington, IN: Solution Tree Press.
31. Wallace, E (2023) 21st century skills for students and teachers. Honolulu: Kamehameha Schools, Research and Evaluation Division.
32. Xiang, J (2020), 21st Century Skills Development through Inquiry-based Learning from Theory to Practice. Asia Pacific Journal of Education
33. Yellow, M (2020) A case study of two 21st century schools: Are we preparing students for the global world? (Doctoral dissertation)
34. Young, L (2022), Preparing teachers for the 21st century using PBL as an integrating strategy in science and technology education. Design and Technology Education: An International Journal,