International Journal of Advanced Multidisciplinary Research and Studies

Innovation and Integration of Teaching: A Transition to Educational System in the 22nd Century

[1] **Leovigildo Lito D Mallillin,** [2] **Ma. Aurora T. Caday,** [3] **Edgardo G Canda**
[1] Professor, Faculty of Languages and Literature, Philippine Normal University, Manila, Philippines
[2] Professor, De La Salle University, Manila, Philippines
[3] Professor, Pamantasan Lungsod ng Marikina, Marikina City, Philippines

Corresponding Author: **Leovigildo Lito D Mallillin**

Abstract

The study aims to identify the innovation and integration of teaching as a transition to the educational system in the 22nd century in the area of students' engagement and retain information, multiple learning styles and accommodation, encouragement and collaboration, instant feedback for teachers, and prepares students learners' future and to explore on how does innovation and integration contribute to teaching as a transition to the educational system in the 22nd century among the respondents.

Stratified random sampling is utilized in the study where descriptive quantitative is the research method and designed for the conduct of the study. The study comprised One Hundred (100) respondents only from the selected private and public Higher Education Institutions (HEI).

Results reveal that student engagement and retain information shows to motivate students to feel comfortable in the classroom and participate in the learning activities worth for the educational goal in teaching, multiple learning styles, accommodation shows to attempt to fit students' approach in effectiveness of teaching and learning. It encourages active learning conditions in accommodating the multiple styles in the delivery of teaching, encouragement and collaboration to bring the technology of teaching in the classroom that leads to progress in the educational system. Instant feedback for teachers shows as an efficient and timely method for better progress and improvement of students' meaningful and productive learning. It shows how to prepare students' learners in their future and focuses as they begin their life after graduation and apply the principles of teaching ability to balance knowledge as individuals.

Introduction

Innovation and technology provide accessibility and instant information on the vital presence of the classroom. Advanced technology in teaching equip educational systems with various educational technologies. This is the trend of technology that faces in the 22nd century especially on the devices in the classroom. It explores creation of meaningful experiences in teaching and learning for students of all ages. Utilizing the various technologies in the classroom engages the learners actively in the objectives of learning and integration (Mallillin, *et al*. 2020). The technology implements the various instructions that creates unique needs of students in a better classroom perspective. Hence, the implementation integration and innovation in teaching in the educational system explores the pedagogical design in the academic achievement and competency of the learners' development in digital literacy, in collaborative technology, and in enhancing learning. It provides better transition in the educational system in the readiness and implementation of the 22nd century teaching for both students and faculties in the access of the digital teaching, availability of the technology and adequacy, access to learning platform and effectiveness, technology advancement and internet, and school system practice in teaching. It transforms readiness and implementation for teaching in various learning tools and pedagogy, courses, materials, and resources to empower the learning experience and responsibility to the new opportunity of student connection of creative technology activity and process, engagement and retain information, multiple learning styles and accommodation, encouragement and collaboration, instant feedback for faculties, and prepares students' learners in their future (Mallillin, *et al*. 2020).

On the other hand, the innovation and integration of teaching enhances students' learning process. It provides and implements the technology in the different pathways to instruction in a broader climate learning environment. It provides the effects of the modules in teaching and strategies as a mode of alternative program for students, (Mallillin, *et al*. 2020). It develops materials relevant to carry the strategy and module for teaching the concept of teaching. It develops achievement of the direct measures of teaching innovation and integration of learning. It provides strategies on the use of modern technology and means for students in teaching training and implementation modules and the styles of teaching facilities (Padullo, *et al*. 2021) [21]. It explores the mass innovation and integration in undertaking the mission and vision of the educational system and setting. It establishes the system and integrates innovative design in practical teaching and classroom educational models in the professional direction and teaching (Yang, & Ma, 2021) [29].

Furthermore, the integration of innovation in teaching fosters students' engagement of learning through visual and auditory like integration of the PowerPoint, games, homework internet assignment, grading online system in the growth of students. On the other hand, the integration of innovation in teaching is important in the classroom because success provides technology and opportunity in the classroom for the effects and benefits of teaching instruction in the educational system and in a positive way. It is infinite that assesses the monitored classroom technology and engagement in the lesson plan and is collaboratively independent in technology interaction (Mallillin, 2020). It helps students on the various learning styles in the technology information and instruction capability of learning among students. It explores instruction and teaching in its effectiveness and level of techniques and methods. The teaching promotes literacy of technology in encompassing the broad nature of the educational setting in the 22nd century. It focuses on teaching and techniques that affect the quality of lecturers in teaching the subject matter among students (Tan, 2021) [24].

Moreover, the objectives of the innovation and integration of teaching in transition to the educational system in the 22nd century examine and identify the students' engagement and retain information, multiple learning styles, accommodation, encouragement, collaboration, instant feedback for faculties, and prepare student learners' future. It energizes innovation and efficiency in the context of instructional teaching (Mallillin, 2024, pp. 120-132) [11]. It provides a crucial issue on sustainable perspective development in analyzing the approaches and methods of teaching innovation and impact positively. It explores the concept and innovation policy in the needs of teaching in the educational system especially on the development and sustainability objectives in the school setting. It conceptualizes the approach of teaching and devices to ensure advancement and innovation in the implementation of teaching among students and teachers. Considering the conditions and challenges of the educational system in the 22nd century. It involves advanced innovation and technology in a simultaneous potential commitment and efforts of the educational setting (Shkabatur, *et al*. 2021) [23].

Consequently, the innovation and integration of teaching provides a transition on the educational system in the 22nd century through various structural domains in learning as to the strategies which are very essential in teaching. It describes the profile of the respondents' skills, training, educational attainment, and teaching experiences. It also provides structure in the knowledge and understanding on the various teaching domains of learning among students in the area of cognitive, affective, and psychomotor learning in teaching which is needed in the 22nd century pedagogy of teaching. This includes the various strategies in teaching and approaches to explore the teaching process innovation aspect especially on the techniques and achievement performance of students in the analysis comprehension level and academic performance. It shows that innovation and integration reveals the domain of learning function and meaning in constructive activities to the modules in teaching. This is to provide proper feeling and satisfaction in the students' learning process, willingness to learn in the aspect of teaching, and proper motivation to learn where it stresses the commitment to value of learning, preference, worth, belief and attitude in an innovative way. It also shows that strategies in teaching and approach provides the analysis and comprehensive learning through competition in learning, creativity in the aspect of teaching, innovation in the learning process, integration outline, and concept of lesson (Mallillin, *et al*., 2021). Moreover, the research identifies the integration and innovation of teaching in the educational system in the 22nd century in the area of collaboration of the lesson, communication process in the learning aspect, innovation and creativity in the activities in teaching, and critical thinking of students to explore competency in the educational system. It reveals that critical thinking in the integration and innovation of teaching boosts the morale and self-esteem of the learners and the privilege to express and expand their learning process through proper demonstration and critical thinking approach to innovation and right approach to learning. It reveals creativity on the integration and innovation through resourcefulness and imagination on the device and methods in the competency of learning (Mallillin, *et al*. 2021).

Research Questions
1. What is the innovation and integration of teaching as a transition to the educational system in the 22nd century in the area of?
1. Students' engagement and retain information,
2. Multiple learning styles and accommodation,
3. Encouragement and collaboration,
4. Instant feedback for teachers, and
5. Prepares students to learn in their future?

2. How does innovation and integration contribute to teaching as a transition to the educational system in the 22nd century among the respondents?
3. Is there a significant correlation between the innovation and integration of teaching as a transition to the educational system in the 22nd century as observed by the respondents?

Hypothesis
There is a significant correlation between the innovation and integration of teaching as a transition to the educational system in the 22nd century as observed by the respondents.

Research Design
The research employs the descriptive quantitative design for the data gathering of the research in depth and breadth of corroboration and understanding. It is offsetting the inherent

approach by itself. It is a method of research in conducting the characteristic of the innovation and integration of teaching as a transition to the educational system in the 22nd century for students' engagement and retain information, multiple learning styles, accommodation, encouragement, collaboration, instant feedback for teachers, and prepares student learners' future. It analyses the integration of the quantitative collection as to surveys and interviews for better understanding and analysis of the research problem. Descriptive quantitative information data includes the rating scale that measures the holistic point of view of the respondents' behaviors on checklist and observation in the instrument performance. It is the type of data and analysis that consists of the statistical treatment in the collected scores of the data. It reviews the epistemology of the study, condition, and empirical claims as to the basis for the analysis of the study and knowledge condition standards (King, *et al.* 2021) [8].

Sampling Techniques
Stratified random sampling is employed in the study and a

type of sampling and probability in the research organization of the entire population in overlapping the strata of research on the improved efficiency. It is a sampling method that partitions the group of individual teachers in both public and private Higher Education Institutions (HEIs). It varies on the advantage of the subpopulation and independently. It measures the total characteristics in the index and distinguishes the reference of variables in a random simple sampling. It collects the stratified random sampling data of reference in efficient random application (Liu, & Pontius, 2021) [6].

Participants of the Study
The participants of the study are the selected faculties of both public and private Higher Education Institutions (HEIs) using the required criteria in the selection of the subjects of the study. They are chosen randomly based on the questionnaire given that are sent via google form. The study comprised One Hundred (100) respondents only.

Results

Table 1: Innovation and Integration of Teaching in the Area of Student Engagement and Retain Information

Indicators	WM	I	R
1. It entertains the entire thoughts of students that gazes at their common mind and critical thinking.	4.15	A	2.5
2. It provides involvement in the process of learning in teaching subjects for better learning.	3.30	MA	5
3. It provides excitement in the entire activities of teaching to energize the technology of learning.	4.15	A	2.5
4. It motivates students to feel comfortable in the classroom and participates in the learning activities worthy of the educational goal in teaching.	4.23	SA	1
5. It engages students to learn and to retain the teaching and learning process.	4.00	A	4
Average Weighted Mean	3.96	A	
Standard Deviation	0.381		

Table 1 presents the weighted mean and the corresponding interpretation on the innovation and integration of teaching in the area of student engagement and retaining Information. As noted in the table, rank 1 is "It motivates students to feel comfortable in the classroom and participates in the learning activities worth for educational goal in teaching", with a weighted mean of 4.23 or Strongly Agree which means student engagement and retain information is highly observed. Rank 2 is shared by the two indicators which are "It entertains the entire thoughts of students that gazes at their common mind and critical thinking", and "It provides excitement in the entire activities of teaching to energize the technology of learning", with a weighted mean of 4.15 or

Agree which means student engagement and retain information is observed. Rank 3 is "It engages students to learn and to retain the teaching and learning process in teaching retention", with a weighted mean of 4.00 or Agree which means student engagement and retain information is observed. The least in rank is "It provides involvement in the process of learning in teaching subjects for better learning", with a weighted mean of 3.30 or Moderately Agree which means student engagement and retain information is limited. The overall weighted mean is 3.96 or Agree which means that innovation and integration of teaching in the area of student engagement and retain information is observed among the respondents.

Table 2: Innovation and Integration of Teaching in the Area of Multiple Learning Styles and Accommodation

Indicators	WM	I	R
1. It attempts to fit the students' approach in the effectiveness of teaching and learning.	4.10	A	1.5
2. It explores the teaching approaches to various strengths and weaknesses of teaching and learning styles in different ways.	3.38	MA	6
3. It breaks and is useful in the learning styles of technology in teaching and effectiveness.	4.03	A	3
4. It helps to explore the auditory learners in teaching as to audiobooks, podcasts, recorded lessons, and woven lesson effectiveness.	3.98	A	4.5
5. It fosters visual learners in details of the learning process technology integration classroom interaction.	3.98	A	4.5
6. It encourages active learning conditions in accommodating the learning and multiple styles delivery of the lesson.	4.10	A	1.5
Average Weighted Mean	3.93	A	
Standard Deviation	0.294		

Table 2 presents the weighted mean and the corresponding interpretation on the innovation and integration of teaching in the area of multiple learning styles and accommodation.
As gleaned in the table, rank 1 is shared by the two indicators which are "It attempts to fit students' approach effectiveness of teaching and learning", and "It encourages

active learning conditions in accommodating the learning and multiple styles delivery lesson", 4.10 or Agree which means multiple learning styles and accommodation is observed. Rank 2 is "It breaks and is useful in the learning styles technology of teaching and effectiveness", with a weighted mean of 4.03 or Agree which means multiple

learning styles and accommodation is observed. Rank 3 is shared by the two indicators which are "It helps to explore the auditory learners in teaching as to audiobooks, podcasts, recorded lessons, and woven lesson effectiveness", and "It fosters visual learners in details of the learning process technology of the integration classroom interaction", with a weighted mean of 3.98 or Agree which means multiple learning styles and accommodation is observed. The least in rank is "It explores the teaching approaches to various strengths and weaknesses of teaching and learning styles in different ways", with a weighted mean of 3.38 or Moderately Agree which means multiple learning styles and accommodation is limited. The overall weighted mean is 3.93 or Agree which means that innovation and integration of teaching in the area of multiple learning styles and accommodation is observed among the respondents.

Table 3: Innovation and Integration of Teaching in the Area of Encouragement and Collaboration

Indicators	WM	I	R
1. It advances the technology in the classroom setting that promotes collaboration of teaching and learning innovation among students.	3.56	A	3.5
2. It promotes and encourages collaboration on the opinion and ideas to be shared by the learners as part of innovation in teaching.	3.27	MA	5
3. It helps to bring the technology of teaching in the classroom that leads to progress and greater collaboration in the educational system.	4.22	SA	1
4. It encourages the learners and the teachers to perform together in the collaboration of the learning process.	3.56	A	3.5
5. It forces classroom collaboration that can be tracked to encourage useful skills and teamwork for the subject matter.	4.19	A	2
Average Weighted Mean	3.76	A	
Standard Deviation	0.423		

Table 3 presents the weighted mean and the corresponding interpretation on the innovation and integration of Teaching in the area of encouragement and collaboration among the respondents.

As observed in the table, rank 1 is "It helps to bring the technology of teaching in the classroom that leads to progress and greater collaboration in the educational system", with a weighted mean of 4.22 or Strongly Agree which means encouragement and collaboration is highly observed. Rank 2 is "It forces classroom collaboration that can be tracked to encourage useful skills and teamwork for the subject matter", with a weighted mean of 4.19 or Agree which means encouragement and collaboration is observed. Rank 3 is shared by the two indicators which are "It advances the technology in the classroom setting that promotes the collaboration of teaching learning innovation among students", and "It encourages the learners and the teachers to perform together in the collaboration of the learning process, with a weighted mean of 3.56 or Agree which means encouragement and collaboration is observed. The least in rank is "It promotes and encourages collaboration on the opinion and ideas to be shared by the learners as part of innovation in teaching", with a weighted mean of 3.27 or Moderately Agree which means encouragement and collaboration is limited. The overall average weighted mean is 3.76 or Agree which means that innovation and integration of teaching in the area of encouragement and collaboration is observed among the respondents.

Table 4: Innovation and Integration of Teaching in the Area of Instant Feedback for Teachers

Indicators	WM	I	R
1. Teachers can monitor and communicate through obtaining feedback in the performance of students.	3.85	A	2.5
2. Feedback is the exchange of information and can be an interactive process for better progress and improvement of the learners.	3.24	MA	5
3. Feedback in teaching may be done through writing so that students may be reminded of the room for improvement as part of the development program in school.	3.85	A	2.5
4. Students can discuss the questions or concerns in teaching and learning subjects directly to the lecturers concerned.	3.62	A	4
5. Feedback is an efficient and timely method for the progress and improvement of teaching students' meaningful and productive learning.	4.03	A	1
Average Weighted Mean	3.72	A	
Standard Deviation	0.304		

Table 4 presents the weighted mean and the corresponding interpretation on the innovation and integration of teaching in the area of instant feedback for teachers among the respondents.

As shown in the table rank 1 is "Feedback is an efficient and timely method for the progress and improvement of teaching students' meaningful and productive learning", with a weighted mean of 4.03 or Agree which means instant feedback for teachers is highly observed. Rank 2 is shared by the two indicators which are "teachers can monitor and communicate through obtaining feedback in the performance of students in teaching and learning", and "feedback in teaching may be done through writing so that students may be reminded of the room for improvement as part of the development program in school", with a weighted mean of 3.85 or Agree which means instant feedback for teachers is observed. Rank 3 is "Students can discuss the questions or concerns in the subject directly to the faculties concerned", with a weighted mean of 3.62 or Agree which means instant feedback for teachers is observed. The least in rank is "Feedback is the exchange of information and can be an interactive process for better progress and improvement of the learners", with a weighted mean of 3.24 or Moderately Agree which means instant feedback for teachers is limited. The overall weighted mean is 3.72 or Agree which means that innovation and integration of teaching in the area of instant feedback for teachers is observed among the respondents.

Table 5: Innovation and Integration of Teaching in the Area of Preparing Students Learners in their Future

Indicators	WM	I	R
1. It encourages teamwork among the learners to succeed in the ability to learn and work as a team and in their future.	3.82	A	4
2. It helps to focus on their future as they begin life after graduation and apply the principles of teaching and learning.	4.12	A	1.5
3. It prepares to develop complex and skills in thinking and in the best path that reinforces students' context, problem-solving, and decision making.	3.51	A	5
4. It helps to prepare a career wherever they go in life and path in the ability to balance knowledge as individuals.	4.12	A	1.5
5. It helps to identify career pathing for tomorrow's workforce in a well-rounded learning educational system.	4.00	A	3
Average Weighted Mean	3.91	A	
Standard Deviation	0.257		

Table 5 presents the weighted mean and the corresponding interpretation on the innovation and integration of teaching in the area of preparing student learners' future among the respondents.

As noted in the table, rank 1 is shared by the two indicators which are "It helps to focus on their future as they begin life after graduation and apply the principles of teaching and learning among them", and "It helps to prepare career wherever they go in life and path in the ability to balance knowledge as individuals", with a weighted mean of 4.12 or Agree which means preparing students in their future is observed. Rank 2 is "It helps to identify career pathing for tomorrow's workforce in a well-rounded learning educational system", with a weighted mean of 4.00 or Agree which means preparing students in their future is observed. Rank 3 is "It encourages teamwork among the learners to succeed in the ability to learn and work as a team and in their future", with a weighted mean of 3.82 or Agree which means preparing students in their future is observed. The least in rank is "It prepares to develop complex skills in thinking and in the best path that reinforces students' context, problem-solving, and decision making", with a weighted mean of 3.51 or Agree which means preparing students in their future is observed. The overall weighted mean is 3.91 or Agree which means that innovation and integration of teaching in the area of preparing students' learners in their future is observed among the respondents.

Table 6: Test of significant correlation between the innovation and integration of Teaching as a transition to the educational system in the 22nd century as observed by the respondents

Test of Variables	Computed z-value	Interpretation	Decision
1. students' engagement and retain information	56.660	significant	non acceptance of the Ho
2. multiple learning styles and accommodation	64.018	significant	non acceptance of the Ho
3. encouragement and collaboration	51.058	significant	non acceptance of the Ho
4. instant feedback for teachers	59.587	significant	non acceptance of the Ho
5. prepares students learners in their future	68.117	significant	non acceptance of the Ho

Table 6 presents the test of significant correlation between the innovation and integration of teaching as a transition to the educational system in the 22nd century as observed by the respondents.

It reveals in the table that z-computed value of students' engagement and retain information is 56.660, multiple learning styles and accommodation is 64.018, encouragement and collaboration is 51.058, instant feedback for teachers is 59.587, and prepares students learners in their future is 68.117 respectively which shows that z-computed value is higher than the z-critical value of ±1.96, two-tailed test at 0.05 level of significant which resulted to the decision of rejection or non-acceptance of the null hypothesis. The test result stressed that there is a significant correlation between the innovation and integration of teaching as a transition of the educational system in the 22nd century as observed by the respondents.

Discussion
The innovation and integration of teaching in the area of students' engagement and retain information reveals that they are comfortable and are motivated to participate in the classroom learning and goals in the educational activities which emphasizes that there is a learning for student centered that provides individual learning in the educational salient setting advocate enhancement. It highlights the aspects and keys on the learning process in terms of building the skills, engagement in the class, and motivation that manifolds the learning possibilities (Trinidad, 2020) [27]. It also shows that engagement in teaching and learning provides exciting technology and the entire activities where it entertains learning process and gazes critical thinking. This shows that lessons provided for students are interesting in the innovation and integration of teaching and learning the lesson (Mallillin, 2022, pp. 99-121) [12]. It determines the teaching strategies and effects skills and in critical thinking particularly on technical learning and innovation (Trilles, 2021). Hence, student engagement in the lesson retains the process of teaching enhancement. It provides student retention and systematizes the learning engagement in the educational setting especially for their module subject. It provides solutions to the issues, practices and application, relationship, and meaning of the lesson to include provision of improved learning process in the educational system for the 22nd century. It focuses on the engagement of students' alignment and understanding of teaching and learning innovation and integration (Tight, 2020) [26]. On the other hand, student engagement provides a learning process and involves learning of subjects as part of integration and innovation in the 22nd century educational setting. This also measures the performance of faculties in teaching as to innovation and integration of teaching concerned skills and competency since faculty profession is the noblest among all where it challenges the lecturers' innovation to motivate students' teaching technicalities involvement self-management, action, strategy, teamwork, planning, and communication (Mallillin, & Mallillin, 2019) [16].

On the other hand, the innovation and integration of teaching in the area of multiple learning styles and accommodation shows that students effectiveness and approach attempts in the learning and teaching. It conditions learning actively encourages the multiple learning style and accommodation in the delivery of lessons where students are guided and are motivated in the learning style and study habits to enhance better learning. This can also develop the initiative of learning enhancement to focus on motivation habits in learning innovation and integration for the improvement and performance of students' academic achievement (Mallillin, *et al.* 2020). On the other hand, multiple learning and accommodation is very essential and useful to break the learning style and effectiveness of high quality and technical teaching. It provides a suitable style of learning that is interactive and effective. It provides various learning and characteristics based on the immersive needs that improves and creates learning outcomes and experiences in exploring the learning environment. It influences the effectiveness, intensity, learning process and results outcome. This adopts and improves necessary understanding of various styles in learning (Sari, *et al.* 2021) [22]. Eventually, learning style and accommodation explores and assists the learners' auditory in teaching as to effectiveness of the advanced technology knowledge. It provides details and fosters visual learners' innovation and integration learning process and classroom interaction. It augments the positive impact of technology in teaching relative learning outcomes as to the type and effect of interaction technology in teaching, achievement assessment, and measures of students' learning in the application of advanced techniques in teaching (Ibáñez, *et al.* 2020) [4]. Yet, multiple learning styles and accommodations provide various approaches to teaching in terms of positive and negative aspects. This provides motivation and teaching practice in various educational institutions. It addresses the function and role of the various educational institutions' controlled belief and student motivation mindset and growth approaches structure of teaching (Vermote, *et al*, 2020) [28].

Furthermore, innovation and integration of teaching in the area of encouragement and collaboration shows to bring and help the classroom technology to explore greater and progress leading systems in education collaboration. It measures self-efficacy of lecturers' belief in the teaching process and enhancement of collaboration learning. It increases professional development implementation of teaching practice for the improved innovation pedagogy (Kelley, *et al.* 2020) [7]. Nevertheless, encouragement and collaboration, innovation and integration of teaching pedagogy in the 22nd century encourages and forces a classroom that tracks the skills and useful teamwork in the subject matter. It introduces the digital and expansion of the wide educational system and setting for active individuals and quality of teaching and tools in collaborative learning. It explores pedagogical design and develops different competency and literacy of learning. This will support the learning process of students in technology learning outcome. It contributes to the extending theory in the perceived learning educational setting, pedagogy and innovative adoption in quality teaching (Blau, Shamir-Inbal, & Avdiel, 2020) [1]. Hence, the collaboration of teaching and learning of students advances the classroom setting and technology that promotes collaboration of learning where it encourages the faculties and students to perform the learning process.

This can provide better orientation of lecturers that reflects the process and intensification of the learning process in teaching to prove professional condition and crisis for faculties as to development in teaching, strategies, and classroom management (Lipayon, 2020) [5]. Moreover, the collaboration and encouragement of students' innovation and integration of learning promotes teaching enhancement in the academic performance of students.

Subsequently, innovation and integration of teaching and learning in the area of instant feedback for faculties shows that it is effective improvement progress in timely method for productive learning in a meaningful process lesson to explore the concept in the project-based learning, underlies learning theory, implements the project-based learning competency and productive learning. This carries the learning teaching and process for the expectation of students competency and enhancement process. It explores to equip students with academic performance and practice. It designs the progress and student monitoring competency concept of learning (Fajra, & Novalinda, 2020) [3]. Yet, the feedback on the performance of faculties monitors the performance of students in their subject since the feedback can be done through constant reminders in the development and improvement of the learners. It provides student feedback and development on literacy and potential to address the challenges in teaching practices. Feedback involves development and literacy to make capacity and opportunity for the feedback process and active involvement. It conceptualizes the key mechanics that embed the gaps in the curriculum of the literacy feedback process, (Malecka, *et al.* 2020) [9]. Nevertheless, the feedback of teachers in the learning process discusses the concerns directly to the teachers in addressing the issues if any or progress improvement learning enhancement. It involves students and actively processes the generation of the feedback information and response and effectiveness in the improved innovation and integration of the subject and curriculum. It provides and transmits approaches in the feedback and resources for students (Carless, 2020) [2]. Notwithstanding, feedback on the performance of students can be interactive in process and information for the learners' improvement and progress. Therefore, feedback positions the focus and increase of the learning process in support design among the learners. This emphasizes the perspective of the learners' role and experiences for the benefits of the feedback and alignment to the improved standard literacy and feedback development (Molloy, *et al.* 2020) [20].

Moreover, the innovation and integration of teaching in the area of preparing students learners in their future shows a focus on the learning process where it helps students after graduation to apply the learning process and principles of teaching. This guides them from choosing a career path as they foresee and predict the future to balance learning process and knowledge for what is suited and demands in the industry. On the other hand, it also prepares students to identify a career path that helps to think for a brighter tomorrow especially in the educational setting to lead students fullest. It also provides and encourages the success of the learners through the ability of teaching process and guidance to be given among students. This encourages teamwork in building a career for the future. Lastly, it prepares them to develop and identify the skills and complexity of productivity thinking that reinforces problem solving, context process, and decision making. It provides

skills on the problem solving and collaboration in the learning skills and development in the 22nd century educational system especially in the area of teaching pedagogy such as communication process of teaching since learning is a two way process, collaboration in teaching activities and learning, creativity in the learning process, and critical thinking which is best enhancement for students. This can contribute to the practice and theory of the advanced development and facility skills of students' innovation and integration of teaching and learning transition of the educational system in the 22nd century (Tang, *et al*. 2020) [25].

Conclusions

Students' engagement and retain information shows to motivate students to feel comfortable in the classroom and participate in the learning activities worth for the educational goal in teaching where it entertains the entire thoughts of students that gazes at their common mind, critical thinking, and provides excitement in the entire activities to energize the technology of learning. It also shows how to engage students to learn and to retain teaching and learning processes in the retention involvement process of better learning.

On the other hand, it shows that multiple learning styles and accommodation attempts to fit students' approach for effective teaching and learning and to encourage active learning conditions in accommodating delivery of the lesson where it breaks and is useful in the learning style. It shows to explore the auditory learners in teaching as to audiobooks, podcasts, recorded lessons, woven lesson effectiveness, and fosters visual learners in details of the learning process in the technology integration classroom interaction to explore teaching approaches to various strengths and weaknesses on the teaching and learning style in different ways.

Nevertheless, it shows that innovation and integration of teaching and learning in the area of encouragement and collaboration brings technology of teaching in the classroom that leads to progress in the educational system where it forces classroom collaboration that can be tracked to encourage useful skills and teamwork for the subject matter. It also advances the technology in the classroom setting that promotes collaboration of learning among students and encourages the learners and the faculties to perform together in collaboration of the learning process to promote and encourage opinion and ideas to be shared by the learners as part of innovation in teaching and learning.

Nonetheless, it shows that innovation and integration of teaching and learning in the area of instant feedback for teachers provides feedback as an efficient and timely method progress and improvement of students' meaningful and productive learning where teachers can monitor and communicate through obtaining feedback in the performance of students in teaching and learning that may be done through writing so that students may be reminded of the room for improvement as part of the development program in school. It also shows that students can discuss the questions or concerns in the subject directly to the faculty concerned and feedback. It is the exchange of information and can be an interactive process for better progress and improvement of the learners.

Lastly, innovation and integration of teaching in the area of preparing student learners shows focus as they begin life after graduation and apply the principles of teaching among them. It also shows how to help students to prepare for a career wherever they go in life and path in the ability to balance knowledge as individuals. It helps to identify career pathing for tomorrow's workforce in well-rounded learning in the educational system. It also encourages teamwork among the learners to succeed and work as a team. It prepares to develop complex and skills in thinking to the best path that reinforces students' context, problem-solving, and decision making.

References

1. Blau I, Shamir-Inbal T, Avdiel O. How does the pedagogical design of a technology-enhanced collaborative academic course promote digital literacies, self-regulation, and perceived learning of students? The internet and higher education. 2020; 45:100722.
2. Carless D. From teacher transmission of information to student feedback literacy: Activating the learner role in feedback processes. Active Learning in Higher Education, 2020, 1469787420945845.
3. Fajra M, Novalinda R. Project Based Learning: Innovation to Improve the Suitability of Productive Competencies in Vocational High Schools with the Needs of the World of Work. International Journal of Multi Science. 2020; 1(08):1-11.
4. Ibáñez MB, Portillo AU, Cabada RZ, Barrón ML. Impact of augmented reality technology on academic achievement and motivation of students from public and private Mexican schools. A case study in a middle-school geometry course. Computers & Education. 2020; 145:103734.
5. Lipayon IC. Coping Mechanism of Junior High School (JHS) Teachers in Facing Challenges surrounding the Classroom Management, Teaching Strategies, and Professional Development. European Journal of Education Studies, 2020.
6. Liu Z, Pontius Jr RG. The Total Operating Characteristic from Stratified Random Sampling with an Application to Flood Mapping. Remote Sensing. 2021; 13(19):3922.
7. Kelley TR, Knowles JG, Holland JD, Han J. Increasing high school teachers self-efficacy for integrated STEM instruction through a collaborative community of practice. International Journal of STEM Education. 2020; 7(1):1-13.
8. King A, Goldfarb B, Simcoe T. Learning from testimony on quantitative research in management. Academy of Management Review. 2021; 46(3):465-488.
9. Malecka B, Boud D, Carless D. Eliciting, processing and enacting feedback: Mechanisms for embedding student feedback literacy within the curriculum. Teaching in Higher Education, 2020, 1-15.
10. Mallillin LLD. Different Domains in Learning and the Academic Performance of the Students. Journal of Educational System. 2020; 4(1):1-11.
11. Mallillin LLD. Instructional teaching theory: Basis for effective teaching device in learning. Eureka: Journal of Educational Research. 2024; 2(2):120-132.
12. Mallillin LLD. Teaching and learning intervention in the educational setting: Adapting the teacher theory model. International Journal of Educational Innovation

and Research. 2022; 1(2):99-121.

13. Mallillin LLD, Cabaluna JC, Laurel RD, Arroyo PAC, Señoron Jr. TM, Mallillin JB. Structural Domain of Learning and Teaching Strategies in the Academic Performance of Students. European Journal of Education Studies. 2021; 8(9).

14. Mallillin LLD, Cabaluna JC, Mallillin JB, Cuntapay ED. Innovation and Integration of 4Cs in the Quality of Teaching: Basis for Educational System in the 21st Century, 2021.

15. Mallillin LLD, Carag EA, Mallillin JB, Laurel RD. Integration of knowledge through online classes in the learning enhancement of students. European Journal of Open Education and E-learning Studies. 2020; 5(1).

16. Mallillin LLD, Mallillin JB. Competency Skills and Performance Level of Faculties in the Higher Education Institution (HEI). European Journal of Education Studies, 2019.

17. Mallillin LLD, Mallillin JB, Carag EA, Collado JB, Largo MGD. A framework in online learning process: A guide to educational teaching during covid 19 pandemic. European Journal of Open Education and E-learning Studies. 2020; 5(2).

18. Mallillin LLD, Mallillin JB, Laurel RD. Learning Styles: A Motivation to Study Habits of Students. Global Journal of Human-Social Science Research, 2020.

19. Mallillin LLD, Mendoza LC, Mallillin JB, Felix RC, Lipayon IC. Implementation and Readiness of Online Learning Pedagogy: A Transition to Covid 19 Pandemic. European Journal of Open Education and E-learning Studies. 2020; 5(2).

20. Molloy E, Boud D, Henderson M. Developing a learning-centred framework for feedback literacy. Assessment & Evaluation in Higher Education. 2020; 45(4):527-540.

21. Padullo ZM, Fuertes AC, Casa-alan RMM, Garalda JT, Quintana EP, Fuertes Jr DG. Using E-Modules in Teaching Technology & Livelihood Education for the Revitalized Alternative Delivery Mode Program of Holy Spirit National High School. Academic Journal of Digital Economics and Stability. 2021; 3:34-43.

22. Sari RC, Warsono S, Ratmono D, Zuhrohtun Z, Hermawan HD. The effectiveness of teaching virtual reality-based business ethics: Is it really suitable for all learning styles? Interactive Technology and Smart Education, 2021.

23. Shkabatur J, Bar-El R, Schwartz D. Innovation and entrepreneurship for sustainable development: Lessons from Ethiopia. Progress in Planning, 2021, 100599.

24. Tan MC. Technology and Livelihood Education (TLE) Instruction in the Secondary Schools in Northern Samar Division, Eastern Philippines. Asian Journal of Advanced Research and Reports, 2021, 75-84.

25. Tang T, Vezzani V, Eriksson V. Developing critical thinking, collective creativity skills and problem solving through playful design jams. Thinking Skills and Creativity. 2020; 37:100696.

26. Tight M. Student retention and engagement in higher education. Journal of further and Higher Education. 2020; 44(5):689-704.

27. Trinidad JE. Understanding student-centred learning in higher education: Students' and teachers' perceptions, challenges, and cognitive gaps. Journal of Further and Higher Education. 2020; 44(8):1013-1023.

28. Vermote B, Aelterman N, Beyers W, Aper L, Buysschaert F, Vansteenkiste M. The role of teachers' motivation and mindsets in predicting a (de) motivating teaching style in higher education: A circumplex approach. Motivation and Emotion. 2020; 44(2):270-294.

29. Yang C, Ma H. On the Reform of the Integration of Innovation & Entrepreneurship Education and Professional Education in Universities. In 2021 2nd International Conference on Computers, Information Processing and Advanced Education, May, 2021, 81-85.