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#### Original Research Article

# Innovation and Integration of 4Cs in the Quality of Teaching: Basis for Educational System in the 21<sup>st</sup> Century

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Abstract: The study aims to identify the innovation and integration of 4Cs in the educational system as the basis for support in the quality of teaching in the 21st century among the respondents in the area of critical thinking, creativity and innovation, communication process, and collaboration. The research employs a descriptive quantitative design because it relates to the study under investigation. It aims to quantify the innovation and integration of 4Cs in the educational system as the basis for support in the quality of teaching in the 21<sup>st</sup> century among the respondents in the area of critical thinking, creativity and innovation, communication process, and collaboration. Hence, random sampling technique is utilized in the study to represent the entire group of the population as a whole. The goal is to provide samples of the population and representative of the study as far as the number of population is concerned. The participants of the study are professional teachers in the various public and private institutions and are exposed to teaching experiences where they utilized the 4Cs in their teaching process. The study comprised fifty-five (55) respondents only. Results shows that innovation and integration of critical thinking reveal that students allow to think and to solve the problem by providing to boost and self-esteem the student opportunity to express themselves in the learning process and expand their critical thinking through proper demonstration of the right approach to learning that will create student to summarize their own interpretation to what is being taught in their learning process and enhancement, innovation and integration of communication reveal that it provides upliftment and achievement on the academic performance of students information and advancement which leads to their development in the learning process, innovation and integration of creativity reveal that it provides the proper thought and creativity through their imagination and resourcefulness in a form of devices and methods which is useful in their learning process and competency and to provide their interest in the process of learning that enhances their gifts, talents, and creativity that will improve and develop their skills in learning, and innovation and integration of collaboration reveal that team teaching and interactive model must be given emphasis through proper planning in the actual lecture activities which involve students where it pushes students to work as a team where they can share their ideas in the lesson and task given to them. Findings show that there is a significant correlation between the innovation and integration of the 4Cs in the educational system as the basis for support in the quality of teaching in the 21<sup>st</sup> century as observed among the respondents.

**Keywords:** Innovation and integration of 4Cs, quality of teaching, educational system in the 21<sup>st</sup> century, critical thinking, creativity and innovation, communication process, and collaboration.

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### Introduction

One of the trends in the quality of teaching is to enhance better learning among students as the center of learning to emphasize the proper approach and thinking on students to construct their learning path and knowledge in the educational system during the 21<sup>st</sup> century. This is guided by the various domain of

learning, outcome design learning, engagement with learning activities, and incorporating the learning outcome assessment. It explores the classification and system of thinking abilities for the acquisition of information on the complex process, Jaiswal, & Al-Hattami, (2020). Hence, quality of teaching must be given emphasis where domains of learning must be

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integrated as the trends in teaching to explore the academic performance of students where they can participate in the various activities for better learning and in-depth knowledge. This will provide to help students as the center of learning to work in their own ways and style of learning based on their needs. This includes the domains of learning in the area of psychomotor, affective, and cognitive. It carries the ability to implement the active attention and motivation for students to respond in their learning process as to the preferences, commitment of students, beliefs, worth, and acceptance for different kinds of learning in the academic achievement of students, Mallillin, (2020).

On the other hand, innovation and integration of quality teaching and in support with the educational system in the 21st century focuses on the trends of technology in teaching. This can be explored on the knowledge and integration that influences the lecturers in the teaching and integration of technology among professionals, beliefs, and knowledge that focuses on the enhancement of students learning where it identifies the issues in the innovation of teaching and learning enhancement. It is choice effectiveness in the characteristics of innovation and integration of the quality in teaching during the 21st-century educational system, Mallillin, Carag, Mallillin, & Laurel, (2020). It explores the operation and effectiveness of strategy as to delivery, flexibility, quality, and cost in the influences and orientation in learning and innovation and performance of both students and lecturers in the 21st-century educational system to support the quality of teaching where it influences the supply and strategy chain and integration of knowledge that impacts directly to performance and innovation positively. This can be improved through the performance and innovation that embodies the quality and flexibility capability of the learning orientation, Jabarzadeh, Jeihouni, & Garza-Reyes, (2020).

Moreover, the 4Cs refers to critical thinking, creativity and innovation, communication process, and collaboration that utilizes in the quality of teaching in the educational system of the 21st century as trends in the enhancement of learning among students. It is a 4Cs that builds the system in education where it provides proficiency and competency in the modern educational system through collaboration, critical thinkers, creators, and communicators. It requires technological literacy and information beyond knowledge and sufficient in the past with the challenges applicable to the shool curriculum essential to the 21st century quality of teaching in the educational system, Chiruguru, (2020). Hence, it suggests and proposes the learning and model of effectiveness of the innovation and integration of the 4Cs in support with the quality teaching in the educational system in the 21st century especially in the delivery skills among the teachers and the learners as well. The need for the new teaching approaches prepares the younger generation for the success of individuals in the  $21^{st}$  century system of education signifying the

Furthermore, the trend of the innovation and integration of 4Cs in the educational system depends on the readiness of the implementation especially in the new normal process where the curriculum is shifted for blended and online learning to have a smooth flow of learning among the students since social distancing is implemented. The trend in the pedagogy of education is through online learning as part of mandated policies in the prevention of the virus that can possibly contaminate both the students and the teachers. It explores the educational design in the 21<sup>st</sup> century in the pedagogy and student competence development in learning literacy through collaboration of advanced technology. It provides transition on the implementation of the readiness in the educational system in the 21st century and to provide quality teaching despite the pandemic through the access of the advanced technology, access to links in the internet, online learning platform, and effectiveness from the different educational institutions and practices. The trends also in the 4Cs innovation and integration includes the digital work, course materials, resources, and learning tools to transform the responsibility in the 21st-century educational system in the learning experience and learning to empower the technology in the quality of teaching to be more connected and creative in the activities of learning and adjustment, Mallillin, Mendoza, Mallillin, Felix, & Lipayon, (2020). On the other hand, the instruction in the classroom tradition will no longer require preparing the students for their future learning in the 21<sup>st</sup> century. It transforms to advance technology of innovation and integration of quality teaching in the educational system where it acquires a new set of learning skills through the 4Cs as to creativity, collaboration, communication, and critical thinking. It is expected that teachers will adjust in the trends of the 21st-century educational system through the use of technology and innovation in the acquisition of the 4Cs and effectiveness of knowledge and strategies as to online learning, utilization of redefinition, modification, augmentation, substitution that will engage on the problem-based collaborative learning in the educational system and quality teaching in the 21st century, Ambarsiwi, & Priyana, (2020).

Subsequently, the innovation and integration of 4Cs in the educational system to support the quality of education in the 21<sup>st</sup> century are developed and designed the learning model that will enhance the integration of technology to foster the instructional materials and design in the learning and teaching. This will focus on the instructional system and instructional technology design system to equip with advanced technology as the trend in teaching at present. This will foster a new learning atmosphere in the 21<sup>st</sup> century relative to teaching and the integration of technology

and innovation in the educational system. This includes the innovative instruction and curriculum, creative learning atmosphere knowledge innovation, technology innovation, and pedagogy innovation with the utilization of 4Cs, reflection, creation, coaching, collaboration, and problem-based learning resources, Atisabda, Kaosaiyaporn, & Prompalad, (2021). Hence, it explores the educational system in the development change and structure in the present era. It introduces the 21st century skills and achievement in determining the activities in the classroom implementation in the quality teaching and task of teachers. It evaluates the performed-based activities in the innovation and integration of the educational system in the 21<sup>st</sup> century. It describes the activity as to the evaluation in the quality of teaching, implementation, and preparation to include the 4Cs in providing significance to the skills of students in the 21st century, Agaoglu, & Demir, (2020).

#### **Research Questions**

1. What is the innovation and integration of 4Cs in the educational system as the basis for support in the

- quality of teaching in the 21<sup>st</sup> century among the respondents in the area of
- a. critical thinking,
- b. creativity and innovation
- c. communication process, and
- d. collaboration?
- 2. Is there a significant correlation between the innovation and integration of 4Cs in the educational system as the basis for support in the quality of teaching in the 21<sup>st</sup> century as observed among the respondents?

#### **Hypothesis**

There is a significant correlation between the innovation and integration of the 4Cs in the educational system as the basis for support in the quality of teaching in the 21<sup>st</sup> century as observed among the respondents.

#### Flow of the Study

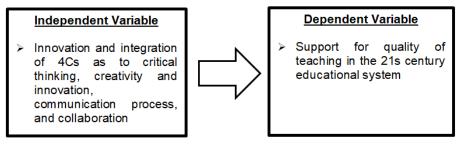


Figure 1: Independent variable and dependent variable in the innovation and integration of 4Cs in the educational system as a basis for support in the quality of teaching in the 21<sup>st</sup> century

#### **Research Design**

research employs a descriptive quantitative design because it relates to the study under investigation. It aims to quantify the innovation and integration of 4Cs in the educational system as the basis for support in the quality of teaching in the 21st century among the respondents in the area of critical thinking, creativity and innovation, communication process, and collaboration. It is a design that discovers the aim of the respondent's point of view on the questions in the 4Cs innovation and integration in the study. It concentrates on the quantity response as to the Likert Scale and point of view of the respondents where it ensures fairness in the analysis of data. It is a quantitative design of research that tends to favor the questions that are closed-ended. It is efficient to carry the process and time-consuming vast quantities of the response of the respondents. This has been introduced in quantifying the procedures in the quantitative descriptive perception. It provides concepts in the descriptive new testing and opinion of the respondents. It describes the evolution and application of quantitative descriptive analysis in a rapid approach, and descriptive diagnosis as to the rationale and procedures in the support of the

method and research design, Bleibaum, Tao, & Thomas, (2020).

#### **Sampling Techniques**

The random sampling technique is utilized in the study to represent the entire group of the population as a whole. The goal is to provide samples of the population and representative of the study as far as the number of population is concerned. It ensures to obtain the approximate number of respondents in the entire population to be measured that have an equal chance to be selected. The researchers randomly selected the respondents in a google form. The questionnaire is forwarded to a group of respondents and selected the numbers in even numbers order for the answered questionnaire until it reaches the allowed number of respondents to be analyzed using the statistical treatment. It involves demand and development on the performance and procedures to be evaluated on the needs and realization of the study using the subjects of random performance in the iteration number of the population, Nuñez, & Niz, (2020).

#### Participants of the Study

The participants of the study are professional teachers in the various public and private institutions and are exposed to teaching experiences where they utilized the 4Cs in their teaching process. They are

selected randomly based on the result of the answered questionnaire. The study comprised fifty-five (55) respondents only.

#### **Instruments Used**

1. Innovation and integration of quality teaching in terms of critical thinking

Scale	Descriptive level	Descriptive Interpretation
4.20-5.00	Strongly Agree	Innovation and integration of critical thinking is highly observed
3.40-4.19	Agree	Innovation and integration of critical thinking is observed
2.60-3.39	Moderately Agree	Innovation and integration of critical thinking is limited
1.80-2.59	Disagree	Innovation and integration of critical thinking is not observed
1.00-1.79	Strongly Disagree	Innovation and integration of critical thinking is not observed at all

2. Innovation and integration of quality teaching in terms of communication

Scale	Descriptive level	Descriptive Interpretation
4.20-5.00	Strongly Agree	Innovation and integration of communication is highly observed
3.40-4.19	Agree	Innovation and integration of communication is observed
2.60-3.39	Moderately Agree	Innovation and integration of communication is limited
1.80-2.59	Disagree	Innovation and integration of communication is not observed
1.00-1.79	Strongly Disagree	Innovation and integration of communication is not observed at all

3. Innovation and integration of quality teaching in terms of creativity and innovation

Scale	Descriptive level	Descriptive Interpretation
4.20-5.00	Strongly Agree	Innovation and integration of creativity is highly observed
3.40-4.19	Agree	Innovation and integration of creativity is observed
2.60-3.39	Moderately Agree	Innovation and integration of creativity is limited
1.80-2.59	Disagree	Innovation and integration of creativity is not observed
1.00-1.79	Strongly Disagree	Innovation and integration of creativity is not observed at all

4. Innovation and integration of quality teaching in terms of collaboration

Scale	Descriptive level	Descriptive Interpretation
4.20-5.00	Strongly Agree	Innovation and integration of collaboration is highly observed
3.40-4.19	Agree	Innovation and integration of collaboration is observed
2.60-3.39	Moderately Agree	Innovation and integration of collaboration is limited
1.80-2.59	Disagree	Innovation and integration of collaboration is not observed
1.00-1.79	Strongly Disagree	Innovation and integration of collaboration is not observed at all

## **RESULTS**

Table 1: Innovation and integration of quality teaching in terms of critical thinking

Indicator	WM	I	R
It allows students to think and to solve the problem, boosts self-esteem by providing an opportunity for			2
students to express themselves in their learning process.			
It enables students to apply what they've learned to different situations, weigh the pros and cons of a variety	3.89	Α	5
of solutions, then decide which ideas work best.			
It expands their thinking and worldview by demonstrating that there is a right way to approach a problem in	4.21	SA	2
their learning process.			
Students involved in exploring a concept from multiple perspectives to establish the idea from different	3.89	Α	5
points of view and give students a chance to share their own viewpoints.			
Students can also construct inventions, and other activities in their subject and explore their learning	3.67	Α	7.5
process.			
Students enable to compare information from different sources before completing a task or assignment in			7.5
their learning process.			
Students can draw their own conclusions based on analysis of numbers, facts, or relevant information in	3.89	Α	5
their lesson.			
Students can summarize or create their own interpretation of what they have read or been taught to enhance	4.21	SA	2
their learning process.			
Students can analyze competing arguments, perspectives, or solutions to a problem.	3.38	MA	10.5
Students can develop a persuasive argument based on supporting evidence and reasoning.			9
Students try to solve complex problems or answer questions that have no single correct solution or answer			10.5
Average Weighted Mean			
Standard Deviation	0.326		

Table 1 presents the weighted mean and the corresponding interpretation on innovation and integration of quality teaching in terms of critical thinking.

As gleaned in the table, rank 1 is shared by the three indicators which are "It allows students to think and to solve the problem, boosts self-esteem by providing an opportunity for students to express themselves in their learning process", "It expands their thinking and worldview by demonstrating that there is a right way to approach a problem in their learning process", and "Students can summarize or create their own interpretation of what they have read or been taught to enhance their learning process", with a weighted mean of 4.21 or Strongly Agree which means that innovation and integration of critical thinking is highly observed. Rank 2 is shared by the three indicators which are "It enables students to apply what they've learned to different situations, weigh the pros and cons of a variety of solutions, then decide which ideas work best", "Students involve in exploring a concept from multiple perspectives to establish the idea

from different points of view and give students a chance to share their own viewpoint", and "Students can draw their own conclusions based on analysis of numbers, facts, or relevant information in their lesson", with a weighted mean of 3.89 or Agree which means that innovation and integration of critical thinking is observed, Rank 3 is shared by the two indicators which are "Students can also construct inventions, and other activities in their subject and explore their learning process", and "Students enable to compare information from different sources before completing a task or assignment in their learning process", with a weighted mean of 3.67 or Agree which means that innovation and integration of critical thinking is observed. The least in rank is "Students can analyze competing arguments." perspectives or solutions to a problem", and "Students try to solve complex problems or answer questions that have no single correct solution or answer", with a weighted mean of 3.38 or Moderately Agree. The overall average weighted mean is 3.80 or Agree which means that innovation and integration of critical thinking is observed in this aspect.

Table 2: Innovation and integration of quality teaching in terms of communication

Indicator	WM	I	R
It controls the instructional process, the content, and delivery to the entire class and the teacher			9.5
tends to emphasize factual knowledge.			
It delivers the lecture content and the students listen to the lecture process effectively.	3.39	MA	8
It provides a better communication context, the teacher is the sender or the source, the	4.00	A	3
educational material is the information or message, and the student is the receiver of the information.			
It provides information and knowledge as an important and critical input for growth in the	3.35	MA	9.5
academic performance of students.			
It provides achievement and upliftment in their performance academically for advancement			1
information era propelled with knowledge and leading to student development.			
Students can extract data for use in written products or oral presentations creating charts, tables,			6
or graphs, etc.			
Students can convey their ideas using media other than a written paper poster, video, blogs, etc.	4.00	A	3
Students can prepare and deliver an oral presentation to the teacher and their classmates.	3.67	Α	6
Students can answer questions in front of an audience and express themselves.			3
Students have the initiative to decide how they will present their work or demonstrate their		A	6
learning process.			
Average Weighted Mean			
Standard Deviation	0.315		

Table 2 presents the weighted mean and the corresponding interpretation on innovation and integration of quality teaching in terms of communication.

As observed in the table, rank 1 is "It provides achievement and upliftment in their performance academically for advancement information era propelled with knowledge and leading to student development", with a weighted mean of 4.24 or Strongly Agree which means that innovation and integration of communication is highly observed. Rank 2 is shared by the three indicators which are "It provides a better communication context, the teacher is

the sender or the source, the educational material is the information or message, and the student is the receiver of the information", "Students can convey their ideas using media other than a written paper poster, video, blogs, etc.", and "Students can answer questions in front of an audience and express themselves", with a weighted mean of 4.00 or Agree which means that innovation and integration of communication is observed. Rank 3 is shared by the three indicators which are "Students can extract data for use in written products or oral presentations creating charts, tables, or graphs, etc.", "Students can prepare and deliver an oral presentation to the teacher and their classmates", and "Students have the initiative to decide how they will

present their work or demonstrate their learning process", with a weighted mean of 3.67 or Agree which means that innovation and integration of communication is observed. The least in rank is shared by the two indicators which are "It controls the instructional process, the content and delivery to the entire class and the teacher tends to emphasize factual knowledge", and "It provides information and

knowledge as an important and critical input for growth in the academic performance of students", with a weighted mean of 3.35 or Moderately Agree which means that innovation and integration of communication is limited. The overall average weighted mean is 3.73 or Agree which means that innovation and integration of communication is observed in this aspect.

Table 3: Innovation and integration of quality teaching in terms of creativity and innovation

Indicator	WM	I	R
It provides creative thoughts and new imaginations in a form of a new device or method that can			1.5
be used interchangeably with science or technology in their learning process and competency.			
It provides interest in their learning process that enhances their creativity and gifts or talents, and	3.75	A	1.5
it develops student's life skills.			
It provides innovation in technology or should be innovative enough to make their lesson more	3.71	A	3.5
applicable to this modern type of learners or students.			
It guides students to do their own research on lessons and opens opportunities that will lead	3.71	Α	3.5
students to explore their learning process and competency.			
It integrates digital innovations in today's textbook in their subject that can encourage the use of			5
internet-based resources that will better meet the needs and interests of the learners' competency.			
Students enable to use idea creation techniques such as brainstorming or concept mapping in			7
their lesson			1
Students can generate their own ideas about how to confront a problem or question.	3.64	Α	7
Students can test out different ideas and work to improve their learning process and competency.			9.5
Students can invent a solution to a complex, open-ended question or problem.			7
Students can create an original product or performance to express their ideas			9.5
Average Weighted Mean			
Standard Deviation	0.218		

Table 3 presents the weighted mean and the corresponding interpretation on innovation and integration of quality teaching in terms of creativity and innovation

As noted in the table, rank 1 is shared by the two indicators which are "It provides creative thoughts and new imaginations in a form of new device or method, can be used interchangeably with science or technology in their learning process and competency", and "It provides interest in their learning process that enhances their creativity and gifts or talents, and it develops student's life skills", with a weighted mean of 3.75 or Agree which means that innovation and integration of creativity is observed. Rank 2 is also shared by the two indicators which are "It provides innovation in technology or should be innovative enough to make their lesson more applicable to this modern type of learners or students", and "It guides students to do their own research on lessons, and opens

the opportunity that will lead students to explore their learning process and competency", with a weighted mean of 3.71 or Agree which means that innovation and integration of creativity is observed. Ranks 3 is "It integrates digital innovations in today's textbook in their subject that can encourage the use of internetbased resources that will better meet the needs and interest of the learners' competency", with a weighted mean of 3.65 or Agree which means that innovation and integration of creativity is observed. The least in rank is shared by the two indicators which are "Students can test out different ideas and work to improve in their learning process and competency", and "Students can create an original product or performance to express their ideas", with a weighted mean of 3.18 or Moderately Agree which means that innovation and integration of creativity is limited. The overall average weighted mean is 3.59 or Agree which means that innovation and integration of creativity is observed in this aspect.

Table 4: Innovation and integration of quality teaching in terms of collaboration

Indicator	WM	I	R
It provides methods and the ability to observe students, how they work in a team.			4
It provides personal support in the event of lack of clarity, difficulty in communication,	3.30	MA	10.5
understanding tasks or even realizing the connection between the student and the teacher.			
It provides a parallel teaching and learning content in various groups that involve the	3.60	Α	8.5
adaptation of their learning process and competency to the best they can.			
It provides a complementary and supporting teaching method to provide the information	3.60	Α	8.5
content through the lecture method in their learning competency.			
It provides team teaching or the interactive model to actual lectures or the planned activities,			1.5
with a maximum degree of involvement with the students.			
It enables students to work in pairs or small groups to complete a task together.			6.5
It helps students to work with other students to set goals and create a plan for their team.			6.5
It helps them to create joint products using contributions from each student.			10.5
It helps students to present their group work to the class, teacher, or others.			4
It enables students to work as a team to incorporate feedback on group tasks or products			1.5
It helps to provide feedback to peers or assess other students' work			4
Average Weighted Mean			
Standard Deviation	0.291		

Table 4 presents the weighted mean and the corresponding interpretation on innovation and integration of quality teaching in terms of collaboration.

As shown in the table, rank 1 is shared by the two indicators which are "It provides team teaching or the interactive model to actual lecture or the planned activities, with a maximum degree of involvement with the students", and "It enables students to work as a team to incorporate feedback on group tasks or products", with a weighted mean of 4.20 or Strongly Agree which means that innovation and integration of collaboration is highly observed. Rank 2 is shared by the three indicators which are "It provides a method and the ability to observe students, how they work in a team", "It helps students to present their group work to the class, teacher or others", and "It helps to provide feedback to peers or assess other students' work", with a weighted mean of 3.65 or Agree which means that innovation and integration of collaboration is observed. Rank 3 is shared by the two indicators which are "It enables students to work in pairs or small groups to

complete a task together", and "It helps students to work with other students to set goals and create a plan for their team", with a weighted mean of 3.64 or Agree which means that innovation and integration of collaboration is observed. The least in rank is shared by the two indicators which are "It provides personal support in the event of lack of clarity, difficulty in communication, understanding tasks or even realizing the connection between the student and the teacher", and "It helps them to create joint products using contributions from each student", with a weighted mean of 3.30 or Moderately Agree which means that innovation and integration of collaboration is limited. The overall average weighted mean is 3.68 or Agree which means that innovation and integration of collaboration is observed in this aspect.

3. On the significant correlation on the innovation and integration of 4C's in the educational system as the basis for support in the quality of teaching in the 21st century as observed among the respondents

Table 5: Test of the significant correlation on the innovation and integration of 4C's

Test of Variables	z-computed value	comparison	z-critical value	Decision	
Critical thinking	49.4218	>	± 1.96	Rejected	
Communication	48.8371	>	± 1.96	Rejected	
Creativity and Innovation	56.5019	>	± 1.96	Rejected	
Collaboration	50.1301	>	± 1.96	Rejected	
Two-tailed test, df of 54 at 0.05 level of significance					

Table 5 presents the test of significant correlation on the innovation and integration of  $4\mathrm{C}$ 's among the respondents.

As revealed in the table, the z-computed value of critical thinking is 49.4218, communication is 48.8371, creativity and Innovation is 56.5019, and collaboration is 50.1301 which is lower than the z-

critical value of  $\pm$  1.96, two-tailed test, with df of 54 at 0.05 level of significance which means that the result is significant and arrived at the decision of rejection. Therefore, it is safe to say that there is a significant correlation between the innovation and integration of the 4Cs in the educational system as the basis for support in the quality of teaching in the  $21^{st}$  century as observed among the respondents.

# **DISCUSSION**

The innovation and integration of the 4Cs as to creativity and critical thinking, innovation. communication process, and collaboration has an impact on the quality of teaching in the educational system during the 21st century where the demands is needed in the competencies and skills among the students and teachers. This is the trend in the 21st century to explore the best quality of teaching especially on the trends on the new normal. It provides focus on the innovation and integration in the classroom setting of teaching through creativity, innovation, making decisions, critical thinking, problem-solving, skills in ICT, communication, and cooperation, Sumiati, Lustyantie, & Iskandar, (2020).

On the other hand, interpretation on innovation and integration of quality teaching in terms of critical thinking shows that it provides students to solve and to think the problem that provides an opportunity to boost the self-esteem in the student opportunity to express themselves in the process of learning. It also allows to think and to expand the worldview through a demonstration on the various approaches in their process of learning and to summarise the creativity on the student's interpretation on what they learn and taught to the learning process and enhancement. Critical thinking provides the students' effect on their learning performance and learning motivation in the learning process of the students. It also provides a positive cognitive in the learning impact and performance, Law, Geng, & Li, (2019). Hence, it also shows that students enable to apply what their learn in various situation and apply the advantages and disadvantages of the different solution on the task given to them through their critical thinking that best work on their decision and ideas. Students also explore and involve the multiple concepts and perspectives to the different ideas and establish their viewpoints that can draw to a concrete conclusion on the analysis based on the facts and information in their lesson. Critical thinking is established on the standard based on the needs of the students as to the attitude and personal values where it reflects the creativity of the students, Din, (2020). It also reveals in their critical thinking that students may intervene in the construction of their activities to explore the subject in the process of learning and to enable the students in their information as a comparison to the various sources of their assigned task in their process of learning. It provides innovation on their skills and intervention in the achievement of the students in the development of their skills in their critical thinking where it perceives their techniques in their critical thinking development in the teaching practice of the respondents, Gonzalez, Hsiao, Dees, Noviello, & Gerber, (2020). Lastly, it reveals that students will analyze the perspective and competing arguments on the solution of the problem through their critical thinking and to solve complex problems in answer to questions raised by their teacher during the discussion of the lesson and provides

possible solutions. It provides and guides students in their perspective of learning, List, (2020).

Furthermore, innovation and integration of quality teaching in terms of communication show that students are provided to uplift and achieve their performance and in advance information academically propelled with knowledge in the development of students which means that proper communication and correct instructions are given emphasis where it provides to implement the proper character values and development of students, Fitria, Kristiawan, & Rasyid, (2019). On the other hand, it also shows that it provides better context and communication among the teachers or other sources of communication in the learning process as to information on the materials in the educational system where it conveys ideas among the students through what is being observed in the learning process to express themselves in the teaching quality in the educational system during the 21st century. It provides teachers and students the experiences in the interaction of the communication process involves in the learning process and initiatives on the intercultural communication in the lesson provided for students in the proper understanding of the subject matter to drawback the learning process and task among the students in an effective manner, Othman, & Ruslan, (2020). In addition, it shows that students can extract their communication through the data provided on their oral and written presentation through graphs, tables, or charts where they can deliver and prepare their presentation through their classmates and teachers and provides initiatives on how the flow of their presentation that will demonstrate the process of learning where they develop the skills and presentation that will require expertise through constant practice on the part of students. This has been developed and observed among students. This has been adequately discovered and evaluated in the setting of learning on their presentation especially during their activities and tasks in their lesson through the various dimension in their presentation inside the classroom, Ochoa, & Dominguez, (2020).Lastly, it shows communication controls the process of instructions and directions on the delivery of the content of the class that emphasizes the factual knowledge on the part of students where it provides knowledge and information on the necessity of the crucial input on the academic performance and growth of the students where it focuses on the concepts and integration of the instructional communication and application of technology in the competency and performance of students, Farhan, Razmak, Demers, & Laflamme, (2019).

Subsequently, innovation and integration of quality teaching in terms of creativity and innovation show that students are provided a task to exercise their new imagination and creative thoughts in a form of methods or devices for the enhancement of competency

and learning process where they are also provided learning process and interest that enhances their talents, gifts, and creativity to develop the learner's skills. This kind of approach in learning and teaching among students will help them to explore their creativity, imagination, and development of students as they explore their learning enhancement. The critical and competency of their creativity and flexibility development will adapt and empower change in the learning habits of students. It helps them also provides artificial intelligences in the increase options of teaching and learning among students to profit and benefit the learners in exploration and possibilities of learning process through collaboration, sharing, practices, and creativity on the development of learning that emphasizes the improvision and exploration of the dynamics in the learning process adequate in the pedagogy of assessment to respond in the various changes of setting, Galés, & Gallon, education (2020).Furthermore, it shows that innovation on technology in the application of the lesson in the modern type of the students to be guided properly on their lesson and to open the privilege on the part of the student to explore competency of learning. It explores the learning process in the modern environment that emerges the education setting process and quality teaching in the 21st century. It provides the pedagogical skills in enhancing technology to strengthen the learning and teaching process to perform and attempt in the quality of learning and integration of the continuous process of learning through creativity and flexible sources of learning in maintaining the contribution of the effort in assisting the teaching process and performance, Huda, et al., (2019). In addition, it shows that innovation and integration of the learning materials are encouraged to be used on the resources in addition to the internetbased materials to meet the interest and needs of the competency in learning. It analyzes the usage of the various materials for learning since it is essential in their learning process for the instruction process on the creativity and innovation of test materials used in the teaching process that advances to attract students in their educational resources for implementation from the various educational institutions, Nipa, & Kermanshachi, (2020). Hence, it shows that students through innovation and creativity will improve their academic ideas and competency in their learning process especially on their performance through the teaching quality that supports the educational system in the 21s century. It emerges from the learning analysis on the curriculum-driven evidence on the improvement of the learning process and decision making that presents the work performance of the students in their creativity and innovation tool for learning, Hilliger, Aguirre, Miranda, Celis, & Pérez-Sanagustín, (2020, March).

Lastly, innovation and integration of quality teaching in terms of collaboration show that students

are provided the interactive model and team teaching on the planned activities in an actual lecture that involves students since teaching and learning is a two-way process. It also provides students that enable learners to control the group task and team activities. It indicates that cooperative learning will make the classroom atmosphere conducive for learning and teaching that will focus the student's attention on the materials in the learning process. It requires an implementation of collaborative learning in time and effort among students in their class activities and tasks. It will be difficult to monitor students in collaborative learning however, when there is proper implementation and rubrics it is easy to define and monitor students' performance, behaviors, attitude, interaction, and reflection of activities to determine student academic performance through team teaching, Salim, Abdullah, Haron, Hussain, & Ishak, (2019). Moreover, it shows that collaboration provides the ability and method to students on they work as a team in their task provided by their teachers where it helps to present their group task and work for their classmates and teachers. It also helps to assess their work output in their academic performance. It analyzes the making process and collaboration of students in their task requirements that engage in the design and intervention of learning in the development and process of collaboration among students. Riikonen, Seitamaa-Hakkarainen, Hakkarainen, (2020). In addition, it shows that collaboration enables students to perform their tasks accordingly through cooperation in the learning process. This can even assist students to create and place the set goals of their team in the learning process where it provides the wide expansion on the needs of various quality of teaching and tools in technology for an individual active collaborative learning. It helps in the design pedagogy in the academic performance of students and develops competency and literacy among students in collaborative regulation to enhance the technology of learning, Blau, Shamir-Inbal, & Avdiel, (2020). It also provides support and lack of event and clarity in the barriers of instruction and direction in the understanding of the tasks between the teachers and the students. It helps in the contribution of the success of students in their learning process and academic performance. It supports the collaborative and potential learning management and planning of students which is essential in the skills for the improvement of the learning process. It engages in the reflection of the knowledge sharing and thinking on the cognitive presence and experiences the intellectual ability of students and development, Baanqud, Al-Samarraie, Alzahrani, & Alfarraj, (2020).

# **CONCLUSIONS**

1. Innovation and integration of critical thinking show that students allow to think and to solve the problem by providing to boost and self-esteem the students opportunity to express themselves in the learning process and expand their critical thinking

- through proper demonstration of the right approach to learning that will create student to summarize their own interpretation to what is being taught in their learning process and enhancement.
- 2. Innovation and integration of communication show that it provides upliftment and achievement on the academic performance of students information and advancement which leads to their development in the learning process.
- 3. Innovation and integration of creativity show that it provides the proper thought and creativity through their imagination and resourcefulness in a form of devices and methods which is useful in their learning process and competency and to provide their interest in the process of learning that enhances their gifts, talents, and creativity that will improve and develop their skills in learning.
- 4. Innovation and integration of collaboration show that team teaching and interactive model must be given emphasis through proper planning in the actual lecture activities which involve students where it pushes students to work as a team where they can share their ideas in the lesson and task given to them.

#### RECOMMENDATIONS

- There is a need for critical thinking on innovation and integration of quality teaching to analyze the needs of students and task given must be based on their capacity and perspective to solve the complex problems on the question raised to students for them to think critically and provide a concrete answer to the task given in their lesson. This will help students to maintain a better output in their academic performance.
- 2. There is a need to impose proper communication on innovation and integration of quality teaching to uplift the academic performance of students and train them to develop their full potential in their academic performance especially in the process of instruction so that they can deliver their task well and learning outcome based on the set objectives in the lesson. This can help to provide facts and knowledge in the lesson performance and be able to express themselves in sharing their ideas and information about the lesson.
- 3. There is a need to allow the student to express their innovation and creativity to improve their potentials as students where they can use their own resources in the learning process and competency where they can express in their innovation in the lesson being taught. Allowing students to boost their innovation with full potential in their learning process and enhancement.
- 4. There is a need for students to practice collaboration in innovation and integration in the quality of teaching because it is one way of supporting them in their learning process as to the clarity of the task and lesson to be taught for them, support in their communication barriers and in

understanding their task to have a two-way process of learning where it helps students to contribute their knowledge to the best they can in the learning process.

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