

PEDAGOGICAL APPROACHES USED BY TEACHERS IN TEACHING MAPEH IN THE DIVISION OF TUGUEGARAO CITY, PHILIPPINES

EDUARDO ACEBO CARAG
cathyguingabcarag@yahoo.com
Cagayan State University
Carig, Tuguegarao City
2020

Abstract

This paper aims to admonish the use of multiple innovative pedagogical approaches that would fit different kinds of students' abilities. Imbibing to the learners the technologically, globally and collaboratively equipped factors that consider success in teaching – learning process. Effectiveness of these approaches may vary depending on the subjects, strategies and methods used in teaching. In teaching the subject MAPEH, different approaches were employed.

This study made use of descriptive-correlation method of investigation to secure adequate and reliable data needed. The utilization innovative strategies for Inquiry Based, Collaborative, Integrative and Constructivist vary from different techniques used in teaching MAPEH is commendable yet need to be more effective.

As such, students may use academic concepts on visual and practical learning that may help them understand the real life. Through verbally expressing their ideas and responding to others, your students will be able to develop their self-confidence, as well as enhance their communication and critical thinking skills which are vital throughout life. Students may encourage to use probing questions during discussions that would help them develop critical thinking. As provider of knowledge, teachers in MAPEH may use technology as an innovative tool for improving quality teaching- learning process and may participate in a seminar workshop for them to enhance their teaching capabilities as mentors.

Keywords: inquiry based, collaborative, integrative, constructivist, innovative teaching, approaches

Introduction

The system of education in the Philippines has dramatically and dynamically equipped with numerous strategies and practices that would enable educators reach their goals as provider of knowledge. Thus, instilling to their students or learners the flexibility of using other technologically, innovatively, globally and collaboratively aware of the changes in the academe. Learners are encourage to be equipped with critical thinking and problem solving upbringings so as to define the insignia of real education among them.

The advent of technology in the teaching world are expected to be transferred to the learners. The medium is being monitored, the methods are being built, the strategies are being shared and the knowledge must be acquired. The teacher maneuvers learning process and the students are the center and even the heart of the teaching process. Teachers are expected to deliver factual and conceptual knowledge so as to determine the quality of education being imbibe.

So as to monitor the effectiveness of the learning outputs, teachers do have numerous strategies to ensure the adequacy of teaching- learning process. The approaches being used by the teachers are imperative to note as these lead to quality education acquired by the learners. It is now the responsibility of the provider of knowledge to lodge the approaches being used to monitor also the kinds of learners in the classroom. Learners may use physical, emotional, intellectual and social growth to acquire varied learning activities.

At present, multiple academe are moving forward for a problem-based learning solutions which are expected to be creative, problem-solver, critical thinker and analytical thinkers. With these kind of expectations among learners, strategies and approaches are deemed important to note in this study. These approaches may help a lot to improve the kind of graduates an academe has. The creativity and innovation bring about interest and motivation to learners which eventually lead to quality learning.

The Department of Education has the ulterior motives to guarantee the quality of education that learners intellectually acquire. This agency has the sole authority to disseminate quality information, practical and relevant issues on the needs of schools and even teachers as well.

As propounded, the innovative pedagogical approaches may empower the teaching – learning , assessment and supervision of the students.

In this light, the need to revisit the teaching strategies used or utilized by teachers becomes imperative if only to advocate the utilization and/or implementation of innovative teaching strategies and enhance the level of academic performance of learners through innovative strategies that are collaborative, integrative, inquiry-based, reflective and constructivist in essence. Thus, this motivated the researcher to conduct the study to assess the utilization of innovative strategies among Music, Arts, Physical Education and Health (MAPEH) teachers in the Public Secondary Schools in the Division of Tuguegarao City for school year 2018-2019, so that the strategies of these teachers become attuned to the demand of the times and the needs of the learners.

Statement of the Problem

This study aimed to assess the extent of utilization of innovative strategies of the MAPEH Teachers in Public Secondary Schools in the Division of Tuguegarao City for the School Year 2018-2019.

Specifically, it sought to answer to the following questions:

1. What is the profile of the respondents in terms of:
 - 1.1. age;
 - 1.2. gender;
 - 1.3. highest educational attainment;
 - 1.4. academic rank; and
 - 1.5. number of relevant trainings/seminars attended for the last three years?
2. What is the extent of utilization of innovative strategies of the teacher-respondents as assessed by themselves and their school heads on the following:
 - 2.1. Inquiry-based;
 - 2.2. Integrative;
 - 2.3. Collaborative;
 - 2.4. Constructivist; and
 - 2.5. Reflective?
3. Which pedagogical approach is most employed by teachers in teaching MAPEH?
4. Is there a significant difference on the extent of utilization of innovative strategies among the teacher-respondents when grouped according to profile variables?

Theoretical Framework

The use of innovative strategies in teaching learners has become a “must” in the 21st century in the context of Department of Education’s goal to align the teaching methods, approaches and techniques to the learners’ needs, interests, abilities, intelligences, learning styles and to the context. This involves the implementation of new, up-dated and customized strategies to facilitate teaching-learning process.

In order to prevent the dangers posed by the old or traditional strategies, the advocacy for progressive and constructive pedagogies or strategies is now the trend if only to bridge the generation gap between curriculum planners, teachers, curriculum implementers and learners.

This simply indicates that education development embraces something new or novel. Teachers themselves must also allow the change to happen as education moves onward and towards facilitation of learning and other skill-

Locale of the Study

Since the target respondents are MAPEH Teachers in city public secondary schools, therefore, the researcher distributed the questionnaires to teachers based in different Public Secondary Schools in Tuguegarao City.

Respondents and Sampling Design

The respondents of this study were the MAPEH Teachers coming from the six (6) Public Secondary Schools in Tuguegarao City, Cagayan distributed as follows:

Table 1. Distribution of MAPEH teachers in the public secondary schools in Tuguegarao City.

S/N	Educational Zone	Number of MAPEH Teachers
1	Cagayan National High School	31
2	Cataggaman National High School	4
3	Gosi National High School	2
4	Linao National High School	7
5	Tuguegarao West National High School	2
6	Tuguegarao Science High School	4
Total		50

Hence, the study utilized 50 teachers out 52 for its total enumeration. Two MAPEH teachers were found inaccessible when the researcher himself conducted the study.

Research Instrument

The major instrument that was used, was the questionnaire which was formulated based from description of the pedagogical approaches espoused in Republic Act 10533 on Enhanced Basic Education.

The instrument consisted of two parts. Part I gathered information on the profile of the respondents and Part II was confined on the assessment of the level of innovative strategies utilization by the teacher-respondents themselves.

Data Gathering Procedures

The researcher first requested permission and/or approval of the Schools Division Superintendent in Tuguegarao City, Cagayan.

During the administration of the questionnaire, the researcher explained the purpose of the study to the respondents before they answered. After which, the data gathered were kept in strict confidentiality and were personally retrieved by the researcher in order to ensure 100% percent retrieval rate. Finally, the results were tabulated, analyzed and interpreted.

Data Analysis

The study utilized the following statistical tools needed in the analysis and interpretation of the data gathered. To compile for the profile of the respondents, the frequency count and percentages were used. More so, weighted mean was employed to determine the extent of utilization of approaches and the most employed approach utilized in teaching MAPEH.

T-test was employed to compare difference between sexes and civil status while ANOVA (one way analysis of variance) was used to determine the difference between variables having more than two means when grouped according to profile variables. These include: ages, highest educational attainment, academic rank, and number of relevant trainings attended for the last three years.

FINDINGS, RESULTS AND DISCUSSION OF THE STUDY

Profile of MAPEH Teacher-Respondents

The first imperative thing to point out in this study was focused on the profile of the MAPEH Teachers in the public secondary schools in the City of Tuguegarao. The profile of the respondents was tabulated and computed according to the following: Age, Sex, Civil Status, Highest Educational Attainment, Academic Rank, and Relevant Seminars Attended for the last three years.

Age

The table shows the ages of the teacher-respondents teaching MAPEH in the Division of Tuguegarao City. It reveals that the youngest age is 23 years old while the oldest age is 54 years old. The mean age of the respondents is 38.44. This implied that there are still younger teachers in teaching their field of specialization.

Sex

It can be gleaned in the table that out of the 50 respondents 23 or 46.00% are males and 27 or 54.00% are females. This means there are more females than males during the conduct of this study. This concurs the findings of most research that in teaching profession, it is dominated in number by female teachers.

Highest Educational Attainment

It shows in the table that out of the 50 respondents, only 41 revealed their highest educational attainment in which 12 or 29.30% are BS degree holders while 29 or 70.70% are Master’s Degree holders. This implies that most of the teachers are very much qualified in terms of their educational attainment.

Academic Rank

The table reveals the academic rank of the respondents. Out of the 50 respondents, only 32 revealed their academic rank. Of the 32 respondents, 14 or 43.75% are Teacher III, only 3 or 9.37% are Master Teacher II and the rest are Teacher I, Teacher II and Master Teacher I.

Number of Relevant Trainings / Seminars Attended for the last 3 years

The table shows the number of relevant trainings/seminars attended for the last 3 years. It can be seen that only 26 respondents attended seminars/trainings for the last 3 years. Of the 26 respondents, 9 attended 1-3 seminars/trainings, 9 attended 4-6 seminars/trainings, 6 attended 10-12 seminars/trainings and only 2 attended 7-9 seminars/trainings relevant to their field of specialization.

Table 2. Frequency and Percentage Distribution of Respondents According to Their Profile.

Profile Variable	x	frequency	percentage	N
Age				50
	youngest = 23			
	oldest = 54			
	Mean = 38.44			
Sex				50
	Male	23	46.00	
	Female	27	54.00	
Civil Status				50
	single	12	24.00	
	Married	38	76.00	

Highest Educational Attainment				41
	BS Degree	12	29.30	
	Masters	29	70.70	
Academic Rank				32
	Teacher 1	5	15.63	
	Teacher 2	4	12.50	
	Teacher 3	14	43.75	
	Master Teacher 1	6	18.75	
	Master Teacher 2	3	9.37	
Number of relevant trainings/seminars attended for the last three years				26
	two	1	3.85	
	three	8	30.77	
	five	6	23.08	
	six	3	11.54	
	seven	1	3.85	
	eight	1	3.85	
	ten	5	19.23	
	twelve	1	3.85	

Assessment on the Utilization of Innovative Teaching Strategies

The second problem of this study dealt on the utilization of innovative strategies of the teacher-respondents as assessed by themselves.

Inquiry Based Strategies

Table 3.1. Assessment of Teacher-Respondents on the Use of Inquiry Based Strategies

Inquiry Based	Mean	Description
1. Activities that are problem-posing are given to learners.	3.45	great extent
2. Learners are tasked to ask questions both to their group mates and their teacher.	3.66	great extent
3. Various sources of information are used by learners to explore ideas and form questions.	3.66	great extent
4. Learners draw conclusions and revisit the conclusions by asking questions.	3.41	great extent
5. Learners explorations lead to more questions.	3.36	great extent

Grand Mean	3.51	great extent
-------------------	-------------	---------------------

From the table above, it is learned that the highest Inquiry Based strategy utilized according to the teacher-respondents are items 2 “Learners are tasked to ask questions both to their group mates and their teacher.” and 3 “Various sources of information are used by learners to explore ideas and form questions.” as indicated by the means of 3.66 each. On the other hand, item 5, “Learners explorations lead to more questions.” has the least mean of 3.36 but still registering to a description of on “*great extent*”.

Inquiry-Based refers to the strategies or approaches where learners are given topics to investigate or activities where they are asked to solve problems, make conclusions, ask questions leading to more questions.

Integrative Strategies

Table 3.2. Assessment of Teacher-Respondents on the Use of Integrative Strategies

Integrative Strategies	Mean	Description
1. Learners are immersed into differing disciplines to learn a given lesson.	3.49	great extent
2. Learners enhance themselves through holistic approach as provided by the teacher.	3.70	great extent
3. Teacher provides mechanisms for learners to see the connections of their lesson with other subject matters and disciplines.	3.77	great extent
4. Teachers provide scenarios where students arrive with life-related conclusions.	3.48	great extent
5. Problems posed by the teacher makes learners see the problem in different perspectives.	3.48	great extent
Grand Mean	3.65	great extent

On the use of Integrative Strategies, the MAPEH teachers reflected that they use the same at a *great extent* (3.65). Among the strategies, item 3 “Teacher provides mechanisms for learners to see the connections of their lesson with other subject matters and disciplines.” garnered the highest mean of 3.77 (great extent). Meanwhile, least mean are received by item 4 “Teachers provide scenarios where students arrive with life-related conclusions.” and item 5 “Problems posed by the teacher makes learners see the problem in different perspectives.” (3.48 each) but still on a *great extent* adjectival value.

Integrative refers to strategies that develop the whole person and a capacity to look into connections of ideas, concepts and discipline thereby making them process decisions. This approach connotes on the fact that students are able to connect what they learn in one subject to another. Students or pupils are able to integrate details.

Collaborative Strategies

Table 3.3. Assessment of Teacher-Respondents on the Use of Collaborative Strategies

Collaborative Strategies	Mean	Description
1. Classroom relies heavily on group work among students.	3.34	great extent
2. Learners acquire knowledge from themselves and their peers.	3.44	great extent
3. Learners review and reflect on their learning processes together.	3.51	great extent

4. Teacher uses the prior knowledge of the students to advance their knowledge.	3.85	great extent
5. Teacher makes sure that learners work in teams through brainstorming and buzz sessions.	3.78	great extent
Grand Mean	3.58	great extent

Rated highest item in Collaborative strategies is item 4, “Teacher uses the prior knowledge of the students to advance their knowledge” as indicated by a mean of 3.85 or *great extent*. On the other hand, item 1 “Classroom relies heavily on group work among students.” has the least mean of 3.34 but still on a *great extent* description. The over-all mean of the respondents in the use of collaborative strategies is 3.58 which is at a *great extent*.

Collaborative refers to strategies or approaches which maximize teamwork and socialization as a way of learning and where learners work in pairs or groups. Collaborative teachers maneuver the time before and after school to coordinate their efforts in developing substantial learning to students or pupils.

Constructivist Strategies

Table 3.4. Assessment Teacher-Respondents on Use of Constructivist Strategies

Constructivist Strategies	Mean	Description
1. Learners are tasked to produce or create new knowledge based on the lesson prepared for them.	3.63	great extent
2. Teachers consider the socio-cultural background of the learners in the discussion of their lesson.	3.78	great extent
3. Learners use their own “schema” in resolving issues.	3.39	great extent
4. Teacher makes sure that learners create and produce an output based on how they interpret situations.	3.85	great extent
5. The classroom provides freedom for the learners to arrive at their own thinking of given situations.	3.90	great extent
Grand Mean	3.71	great extent

According to the table 3.4 above, item 5 “The classroom provides freedom for the learners to arrive at their own thinking of given situations.” has the highest mean of 3.90 which means *great extent*. Meanwhile, item 3 “Learners use their own “schema” in resolving issues.” has the least mean of (3.39) but still practiced on *great extent*. Therefore, this study entails about how students used their experiences and reflect on it. The previous ideas are very helpful for them to learn things in school.

Constructivist refers to strategies that help learners develop or create a concept, construct or ideas grounded on their own schema or sociocultural experiences. It is basically a scientific based approaches which enhanced students ability to solve critically scientific problems.

Reflective Strategies

Table 3.5. Assessment Teacher-Respondents on Use of Reflective Strategies

Reflective Strategies	MEAN	Description
1. Learners control their own learning process by reflecting on their personal experiences.	3.49	great extent
2. Teacher creates situations where learners feel safe questioning and reflecting on the processes.	3.85	great extent
3. Through group discussions, learners are brought to critically think about a given situation as provided by the teacher.	3.71	great extent
4. Learners talk about what they learn together.	3.66	great extent
5. Learners provide insights on what they learned in the form of realizations.	3.78	great extent
Grand Mean	3.70	great extent

Table 3.5 presents the utilization of reflective strategies by the MAPEH teachers, it is shown that item 2 “Teacher creates situations where learners feel safe questioning and reflecting on the processes.” garnered the highest mean 3.85 which means a *great extent*. On the other hand, item 1 “Learners control their own learning process by reflecting on their personal experiences.”, which received the least mean of 3.49 but still described *great extent*.

Reflective are strategies or approaches that uses activities and situations where learners reflect on their own understanding, prior knowledge and personal experiences. This approach is being espoused by an idea that learners maneuver their own learning systems by coping with reflective idea that would help understand their life, Wood (2012). This approach scrutinizes how lesson was taught and how the practice must be improved for greater learning outcomes. This is a procedural form of self- observation and self- assessment , Hannessy et. al (2007).

Pedagogical Approach Most Employed by teachers in teaching MAPEH

Table 3. Summary on the Extent of Utilization of the Pedagogical Approaches by MAPEH Teachers

Pedagogical Approaches	Category Mean	Description
Inquiry Based	3.51	Great Extent
Reflective	3.70	Great Extent
Collaborative	3.58	Great Extent
Integrative	3.65	Great Extent
Constructivist	3.71	Great Extent
Over-all Category Mean	3.59	Great Extent

All the pedagogical approaches were utilized by the teacher-respondents with an over-all category mean of 3.59 which consequently described as at “Great Extent”.

Accordingly, constructivist strategies got the highest category mean with (3.71), while Inquiry Based got the least category mean (3.51). The findings imply that, generally, the teacher-respondents are employing the different pedagogical approaches in teaching MAPEH around public secondary schools in the Division of Tuguegarao City.

Comparison between the Extents of Utilization of Innovative Strategies among the Teacher-Respondents When Grouped According To Profile Variables

The fourth problem of this study dealt on the significant difference between the extents of utilization of innovative strategies among the teacher-respondents when grouped according to profile variables.

Age

Test of Difference for Age (One-way ANOVA)

One-Way ANOVA				
	f	Sig. (2-tailed)	Mean Square	Decision
Inquiry Based	.785	.708	.134	Not Significant
Integrative	.742	.749	.109	Not Significant
Collaborative	1.182	.363	.145	Not Significant
Constructivist	.922	.577	.101	Not Significant
Reflective	1.149	.386	.136	Not Significant

Table 4.1. Comparison on the Level of Extent of Utilization of Innovative Strategies among MAPEH teachers when grouped according to Age.

Strategies	Chi-square	df	P
Inquiry Based	1.531777	2	.46492
Reflective	1.240778	2	.53774
Collaborative	.63383863	2	.72839
Integrative	11.15321	4	.02490
Constructivist	1.240778	2	.50192

Significant at 0.5

As shown above, there is no significant difference between the level of extents of utilization of innovative strategies especially among the teacher-respondents when grouped according to their age. Meanwhile, significant difference was found in Integrative strategies (P=0.249).

Sex

Test of Difference for Sex (T-test for Independent Samples)

Independent Samples Test				
	t	Sig. (2-tailed)	Mean Difference	Decision
Inquiry Based	.214	.831	.02632	Not Significant
Integrative	-1.264	.214	-.13923	Not Significant

Collaborative	-1.248	.219	-.14246	Not Significant
Constructivist	-1.228	.227	-.12380	Not Significant
Reflective	-2.048	.047	-.22105	Significant

Table 14. Comparison on Level of Extent of Utilization of Innovative Strategies among when grouped according to Sex.

Strategies	Chi-square	df	P
Inquiry Based	.6899598	1	.40618
Reflective	.0026154	1	.95921
Collaborative	.6899598	1	.40618
Integrative	1.335515	2	.51286
Constructivist	.0026154	1	.95921

Significant at 0.5

Table 14 showed that there is no significant difference between the level of extents of utilization of innovative strategies among the teacher-respondents when grouped according to their gender. Meanwhile, significant difference was found on the same strategies which are the Inquiry Based and Collaborative strategies ($p=.40618$).

Number of Seminars Attended

Table 15. Comparison on Level of Extent of Utilization of Innovative Strategies among when grouped according to Seminars Attended.

Strategies	Chi-square	df	P
Inquiry Based	.2268519	2	.89277
Reflective	1.252841	2	.53450
Collaborative	1.887355	2	.38919
Integrative	1.878925	4	.75802
Constructivist	4.020026	2	.13399

Significant 0.5

According to the decision of the table above, there is no significant difference between the levels of extents of utilization of innovative strategies among the teacher-respondents when grouped in terms of the Number of Seminars Attended. On the other hand, there is significant difference that was found on Collaborative strategies ($p=.38919$) and Constructivist ($p=.13399$).

Civil Status

Table 16. Comparison on Level of Extent of Utilization of Innovative Strategies among when grouped according to Civil Status.

Dimension	Chi-square	df	P
Inquiry Based	.8430174	1	.35854
Reflective	.2787449	1	.59753
Collaborative	.8430174	1	.35854
Integrative	3.949436	2	.13880
Constructivist	.2787449	1	.59753

Significant at 0.5

As presented in the table, there is no significant difference between the levels of extents of utilization of innovative strategies among the teacher-respondents when grouped according to their Civil Status. Meanwhile, there are significant difference was found on Inquiry Based ($p=.35854$), Collaborative ($.35854$) and Integrative ($p=13880$).

Table 4.16 Highest Educational Attainment

Strategies	Chi-square	df	P
Inquiry Based	.1654641	1	.68417
Reflective	.0121429	1	.91225
Collaborative	.1654641	1	.68417
Integrative	2.247720	2	.32502
Constructivist	.6830357	1	.40854

Significant at 0.5

As shown above, significant difference was found on Integrative ($p=.32502$) and Constructivist ($p=.40854$). Meanwhile, there is no significant difference between the levels of extents of utilization of innovative strategies among the teacher-respondents when grouped according to their Highest Educational Attainment.

Test of Difference for Highest Educational Attainment (One-way ANOVA)

One-Way ANOVA				
	F	Sig. (2-tailed)	Mean Square	Decision
Inquiry Based	0.016	0.899	0.003	Not Significant
Integrative	0.855	0.361	0.108	Not Significant
Collaborative	3.818	0.058	0.481	Not Significant
Constructivist	1.364	0.250	0.142	Not Significant
Reflective	0.358	0.553	0.047	Not Significant

Test of Difference for Academic Rank (One-way ANOVA)

One-Way ANOVA				
	F	Sig. (2-tailed)	Mean Square	Decision
Inquiry Based	1.074	0.398	0.164	Not Significant
Integrative	0.772	0.579	0.102	Not Significant
Collaborative	2.464	0.059	0.268	Not Significant
Constructivist	2.804	0.037	0.265	Significant
Reflective	0.774	0.577	0.104	Not Significant

Test of Difference for Age (One-way ANOVA)

One-Way ANOVA				
	F	Sig. (2-tailed)	Mean Square	Decision
Inquiry Based	.785	.708	.134	Not Significant
Integrative	.742	.749	.109	Not Significant
Collaborative	1.182	.363	.145	Not Significant
Constructivist	.922	.577	.101	Not Significant
Reflective	1.149	.386	.136	Not Significant

Test of Difference for Number of relevant Trainings Attended (One-way ANOVA)

One-Way ANOVA				
	F	Sig. (2-tailed)	Mean Square	Decision
Inquiry Based	.259	.962	.057	Not Significant
Integrative	.329	.931	.032	Not Significant
Collaborative	0.377	.904	.049	Not Significant
Constructivist	.558	.780	.058	Not Significant
Reflective	1.160	.372	.088	Not Significant

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary.

The profile of the respondents show that they are matured and tenured as indicate with a mean age of 51. Majority of the respondents are female, married and have completed Master’s degree. Also, they have attended more seminars to enhanced and learn more strategies for teaching.

Their assessment on extent of utilization of innovative strategies showed that they utilize them on great extent. This means that teacher used different innovative strategies in different kinds of student with different types of learning

Moving on, there is significant difference was found on the comparison of the respondents’ assessment when group according to their profile variables.

The Levels of extent utilization innovative strategies for Inquiry Based, Collaborative, Integrative and Constructivist has the lowest mean score; hence, there is a need for these to be enhanced.

Conclusions

Based on the findings of the study, the researcher concluded that the K-12 Pedagogical Approaches of MAPEH Teachers in Public Secondary Schools brings many advantages for efficient and effective teaching strategies. It specifically, this study answered the following questions: (1) What is the profile of the teacher-respondents in terms of Age, Gender, Civil Status, Highest Educational Attainment and Number of Seminars?, (2) What is the extent of utilization of innovative strategies of the teacher-respondents as assessed by themselves and their school heads relative to Inquiry-based, Integrative, Collaborative, Constructivist and Reflective and (3) Is there a significant difference between the extents of utilization of innovative strategies among the teacher-respondents when grouped according to profile variables?.

Through the implementation of the different teaching strategies in MAPEH, the development of skills of learners can be of help and useful to achieve good learning outputs among learners. It was appropriate to use the different strategies to different kinds of learners. It was found out that by using these innovative strategies, students can clearly understand their lessons and even the discussions made.

Finally, the profile variables on age, gender, civil status, highest educational attainment, and number of seminars play a significant role in the extent of utilization of innovative strategies among the teacher-respondents.

Recommendations

Based on the findings and conclusions presented, the following recommendations are suggested:

1. MAPEH is a broad expertise so teachers have to enhance their teaching strategies to cope up with the needs of the students.
2. In Inquiry Based, teachers may need to improve teaching practices and may use academically and productivity learning to be delivers.
3. Students may use academic concepts on visual and practical learning that may help them understand the real life.
4. Through verbally expressing their ideas and responding to others, your students will be able to develop their self-confidence, as well as enhance their communication and critical thinking skills which are vital throughout life.
5. Students may encourage to use probing questions during discussions that would help them develop critical thinking.
6. Teachers may use technology as an innovative tool for improving quality teaching- learning process.
7. Teachers may participate in a seminar workshop for them to enhance their teaching capabilities as mentors.

ACKNOWLEDGEMENT

The author wishes to express his heartfelt gratitude and sincere appreciation to all those who gave their much needed assistance, cooperation, and encouragement without which this work should not have been realized.

Cagayan State University, Carig Campus Officials for their approval and valuable guidance in the preparation of the study headed by CEO Arthur G. Ibanez.

His wife, Catalina; children: Steven King, Kwin Millenjen, Reina Keithe, and Empress Kydee; parents: Orlando and Luzviminda: and Ingga, for their unending concern and prayers for the author's professional advancement.

Special acknowledgement is likewise given to Dr. Alma Bangayan-Manera of the Teacher Education of the Cagayan State University for her unselfish efforts in the pursuit publishing this study.

To all those in one way or another helped towards the completion of this research output.

Finally, the Divine Almighty for the guidance and protection which enabled the researcher to finish this study with success.

LITERATURE CITED

1. CR Weisser & S I Dobrin. 2012. Ecomposition: Theoretical and pedagogical approaches. SUNY Press.
2. Grossman, P. 2009. Research on pedagogical approaches in teacher education. *Studying teacher education*. , 437-488.
3. Guardia L., Maina M. & Sangra A. 2013. MOOC design principles: A pedagogical approach from the learners perspective. *Learning Papers*.
4. Hannessy S, Wishart J, & Whitelock R. 2007. Pedagogical Approaches for technology-integrated Science Teaching. *Computers & Education*. Volume 48. Issue 1: 137-152. Google Scholar
5. RB Kozma & RE Anderson. 2002. Qualitative case studies of innovative pedagogical practices using ICT. *Journal of computer assisted learning*. Volume 18, issue 4: 387-394
6. Wood E. 2010. Developing integrated pedagogical approaches to play and learning. *Play and learning in the early years*. 9-26
7. Yadav A, Hong H. & Stephenson C. 2016. Computational thinking for all : pedagogical approaches to embedding 21st century problem solving k-12 classrooms. *Tech Trends*. Volume 60, Issue 6: 565-568