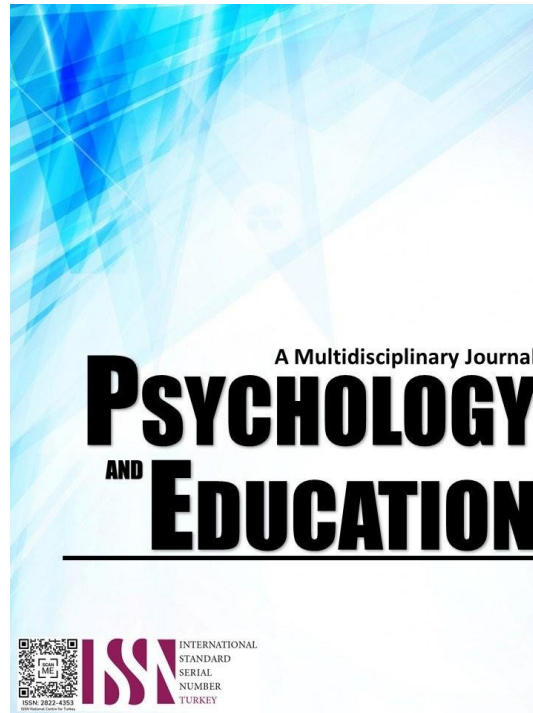


**CREATIVE TEACHING STRATEGIES OF TEACHERS TO FACILITATE
LEARNING AND VALUES FORMATION AMONG LEARNERS OF
SELECTED SCHOOLS IN CAMARINES NORTE: BASIS FOR
DEVELOPMENT PROGRAM**



PSYCHOLOGY AND EDUCATION: A MULTIDISCIPLINARY JOURNAL

Volume: 26

Issue 2

Pages: 171-194

Document ID: 2024PEMJ2455

DOI: 10.5281/zenodo.13893872

Manuscript Accepted: 09-07-2024

Creative Teaching Strategies of Teachers to Facilitate Learning and Values Formation among Learners of Selected Schools in Camarines Norte: Basis for Development Program

Rosabel R. Pobre,* Decimo L. Espiritu
For affiliations and correspondence, see the last page.

Abstract

Teachers often struggle with learners with low performance and become equally frustrated as the learners themselves. Teachers acknowledge that enhancement of learners' achievement is a major focus of education for the longest time. Accordingly, the security of the nation requires fullest development of the mental resources and technical skills of its young men and women. On this, the major aim of the teaching learning process is achievement in terms of grades, as its sole measure of learning in many cases. To achieve this target, teachers use diverse teaching methods, including lecture, discussion, and demonstration. This study would like to determine what teaching strategies do teachers of selected schools in Camarines Norte employ that best facilitate learning and develop values among students. The researcher, who is a teacher in the said institution, believes that determining what creative teaching strategies are used in teaching the subjects will be of important value to others as to sustain the interest of learners towards the subject matter. Teachers' understanding of educating students for holistic citizenship is crucial as the former has the moral and social obligation of preparing these future citizens. This study is premised on the concept of creative teaching encompassing the principle of teaching creatively and teaching for creativity which is one of the key sources of an educational institution's goal for providing excellent quality education through its teaching force to enhance and maximize their creative potentials. The variables that were considered in the study were the respondents' profile which includes age, gender, civil status, employment status, educational attainment, area of specialization, subjects being taught, and teaching experience which was then correlated to the factors that are influential to creative teaching and the extent to which creative teaching practices were utilized in the classroom by the teachers. According to her creative teaching is defined in two ways: teaching creatively and teaching for creativity. Teaching creatively refers to teachers using imaginative approaches to make learning more interesting, exciting and effective. This includes developing materials and approaches that stimulate student's interests and motivate learning in this case, it is the teacher's creativity that is being developed. By the teaching for creativity, it refers to forms of teaching that are intended to develop students' own creative thinking and behavior.

Keywords: *creative motivation, creative teaching, creative teaching practices, divergent thinking and doing dimension*

Introduction

Teachers often struggle with learners with low performance and become equally frustrated as the learners themselves. Teachers acknowledge that enhancement of learners' achievement is a major focus of education for the longest time. Accordingly, the security of the nation requires fullest development of the mental resources and technical skills of its young men and women. On this, the major aim of the teaching learning process is achievement in terms of grades, as its sole measure of learning in many cases. To achieve this target, teachers use diverse teaching methods, including lecture, discussion, and demonstration.

The students' academic performance is the result then of the multitude of activities that are graded related to the subject. It contributes to the standards of the quality of education that every school is aiming for. This somehow triggers the question on how the school and teachers be able to provide instruction that will best develop the potential of each individual, leaving nobody behind untapped. Finding a way to develop learners' potential and prepare them for lifelong learning in a constantly changing educational landscape that is hinged on the teachers' ability to bring out the best among learners. Only innovative and competent teachers can encourage learners to look for ways and new knowledge to build on their skills.

Tebabal and Kahssay (2011) cited that the primary purpose of teaching at any level is to bring a fundamental change in the learner. To facilitate the process of knowledge transmission, teachers should apply appropriate teaching strategies that will bring out the specific objectives and level outcomes. Thus, the effectiveness of teaching strategies is reflective of the achievements of learners. According to Ayeni (2011), teaching is a process that involves bringing about desirable changes in learners so as to achieve specific outcomes while Adunola (2011) maintained that teachers need to be conversant with numerous teaching strategies that take recognition of the magnitude of the complexity of the knowledge to be covered.

In this context, teachers depend on a variety of strategies for them to use in their day-to-day teaching. With this, they need to know which among these strategies will best fit their diverse learners. They need to know which among this range of strategies that will best drive home the lesson that will develop knowledge, skills and values that are needed and that will work well with the learners.

A recollection of these teaching strategies will then upscale the understanding of the present situation of teaching especially in the teaching in the K to 12 curricula. The teachers, alongside with their oral teaching should then be supplemented with strategies involved

to ensure maximum benefit for the students' welfare and learning. What the teachers do inside the classroom will clearly determine their students' learning and achievement.

Teachers, as the central image in education, must be capable and conversant in order to communicate the facts they could bestow to their learners or students. Good quality teaching bespeaks of effectual teaching that deals with the learners as a person and with their general improvement. It is but expected that teachers must be familiar with individual differences among their learners so as to regulate instructions that will best fit the latter. Undeniably, teachers have varied and vital roles in the classroom and part of these multi roles are the administration of intervention programs. It is their responsibility to be able to recognize the needs of their learners. Teachers then need to be creative enough to diversify their teaching styles or strategies just to help their students, especially those who are struggling.

In the same manner, teachers should be able to recognize individual differences among students so that they could adjust instructions that best suit the learners. It is then necessary to understand the need to be motivated in doing the work well, which will result to learning. However, making students motivated to learn takes a lot of effort on the part of the teachers. This requires a variety of teaching practices or strategies.

On this regard, this study would like to determine what teaching strategies do teachers of selected schools in Camarines Norte employ that best facilitate learning and develop values among students. The researcher, who is a teacher in the said institution, believes that determining what creative teaching strategies are used in teaching the subjects will be of important value to others as to sustain the interest of learners towards the subject matter. Teachers' understanding of educating students for holistic citizenship is crucial as the former has the moral and social obligation of preparing these future citizens.

Research Questions

This study aimed to determine the creative teaching strategies of teachers to facilitate learning and values formation among learners of selected schools in Camarines Norte. Specifically, this study seeks to answer the following:

1. What is the demographic profile of the respondents regards to:
 - 1.1. age;
 - 1.2. gender;
 - 1.3. educational attainment; and
 - 1.4. year in teaching?
2. How do the following factors influence the creative teaching practices of selected schools in Camarines Norte Teachers:
 - 2.1. creative motivation;
 - 2.2. teaching and self efficacy beliefs; and
 - 2.3. learning attitude and teaching commitment?
3. To what extent are the following creative teaching practices utilized?
 - 3.1. divergent thinking and doing;
 - 3.2. general knowledge and thinking base;
 - 3.3. focusing and task commitment;
 - 3.4. motives and motivation; and
 - 3.5. openness and tolerance to ambiguity?
4. What are the restraining factors encountered by the respondents during the creative teaching process?
5. What creative teaching strategies and development program may be proposed to facilitate learning and values formation among students?

Methodology

Research Design

The study employed the descriptive method of research as it sought to investigate the factors influencing the teachers to promote creative teaching, the extent to which creative teaching practices were utilized in the classroom and the restraining factors encountered by the respondents during the creative teaching process. As a descriptive study, this research dwelt on what is and what prevails in teachers.

This study specifically utilized the correlation method to identify relationship of the study variables which includes the respondents' profile, factors influencing promotion of creative teaching and utilization of the creative teaching practices. The correlation method involves measuring two or more variables as they exist, its goal is to establish that a relationship exists between variables and to describe the nature or relationship as mentioned by Forzano and Grawitter (2003). The data of the study were gathered using the four (4) sets of survey questionnaires and was organized, analyzed and were presented through descriptive and statistical relationship.

Respondents

The respondents of this study were chosen using purposive sampling. Respondents in this study were teachers directly engaged in

classroom teaching with at least one year of teaching experience of selected schools in Camarines Norte. The researcher decided to consider those teachers with at least one year of teaching experience because of the following considerations: First, the study is about the creative teaching and creative teaching practices so this means that they have been engaged and has experienced classroom teaching where they use and apply these processes and practices. Second, the target conduct and distribution of the survey questionnaires to the respondents will be during the third quarter of the academic school year. There are 25 teachers with at least one year of teaching experience.

With this, the target respondents have gained enough time to evaluate their teaching and practices. Third, this will provide the respondents enough exposure to assess and re-assess their creative teaching practices in the classroom. Teachers who are de-loaded due to an administrative appointment and/or holding a non-academic position were not included as respondents of the study.

Instrument

The researcher used four (4) set of questionnaires as the primary source of gathering data. Interviews and focus group discussions were done to supplement and substantiate the data gathered from the survey questionnaires.

Construction of the Questionnaire. The survey questionnaire was developed based on the existing literature and studies gathered from different books, journals, and internet sources, published and unpublished dissertation.

This study utilized four sets of questionnaires to generate data for the study. The first part of the instrument is the socio-demographic profile of the respondents. Data such as age, gender, civil status, status of employment, highest educational attainment, area of specialization, subject/s taught, and teaching experience was sought.

The second part is the Creative Teaching Factors Questionnaire. This is a researcher-made instrument which measured the different factors influencing creative teaching practices of the respondents. The instrument enumerated the six (6) identified factors such as creative motivation, teaching and self-efficacy beliefs, learning attitudes and teaching commitment, school environment, personal qualities, and growing up experience. It has a total of sixty-eight (68) items. Items on the questionnaire utilized a Four-point Likert scale identifying agreement (Strongly Agree, Agree, Disagree and Strong Disagree) with the statement/descriptors.

The third part is the Creative Teaching Practices Questionnaire which measured the extent the teacher promoted students' creativity through teaching strategies/approaches and classroom practices. The items of the survey comprised of the following dimensions: Divergent thinking and doing, General Knowledge and Thinking base, Focusing and Task Commitment, Motives and Motivation and Openness and Tolerance for Ambiguity. The survey questionnaire is a researcher-made instrument consisting of 50 items. Dimensions and items of the scale were based on Urban's (2003) Componential Theory of Creativity. Likewise, principles in developing creativity in the classrooms proposed by creativity teachers like Sternberg (2003) and Cropley (2006) was utilized as basis for the survey item. Responses to each item are as follows: To a Very Great Extent, To a Great Extent, To a Moderate Extent and To a Least Extent.

The fourth part of the survey was the Restraining Factors Questionnaire. It provided list of factors which hinders/prevents the implementation of the creative teaching and creative teaching practices. The respondents will put a check before each restraining factors as encountered by them during the creative teaching process.

Validation of the Questionnaire. To establish the validity of three questionnaires: Creative Teaching Factors, Creative Teaching Practices Questionnaire and the Restraining Factors Questionnaires, the instruments were initially checked and evaluated by the adviser. Comments and suggestions were given which were then incorporated in the questionnaires. The instruments were further validated by six experts in the field of education, psychology and research. Comments and suggestions were collated to further improve the instruments to determine its clarity and readability.

Questionnaire. A researcher-made survey questionnaire was used by the researcher and was considered the major instrument in gathering data for the study.

Procedure

A written permit was sought from the Office of Principal for the conduct of the study. Upon approval, of the request, the researcher personally distributed the questionnaires to targeted respondents. The responses gathered were tallied and were given corresponding statistical treatment.

Data Analysis

Various statistical techniques were utilized to validate, analyze and interpret data:

Frequency, Percentage and Rank. This was used to compare a part of the frequency of responses to the total number of respondents and expressed in percent.

Weighted mean. This was used to describe the holistic view of the respondents per item.

Chi-square. This was used to measure the relationship among each respondent's profile and the factors influencing the creative teaching

and the extent of utilizing the creative teaching practices.

Ethical Considerations

The respondents of this study were chosen using purposive sampling. Respondents in this study were teachers directly engaged in classroom teaching with at least one year of teaching experience of selected schools in Camarines Norte. The researcher decided to consider those teachers with at least one year of teaching experience because of the following considerations: First, the study is about the creative teaching and creative teaching practices so this means that they have been engaged and has experienced classroom teaching where they use and apply these processes and practices. Second, the target conduct and distribution of the survey questionnaires to the respondents will be during the third quarter of the academic school year. There are 25 teachers with at least one year of teaching experience.

With this, the target respondents have gained enough time to evaluate their teaching and practices. Third, this will provide the respondents enough exposure to assess and re-assess their creative teaching practices in the classroom. Teachers who are de-loaded due to an administrative appointment and/or holding a non-academic position were not included as respondents of the study.

Results and Discussion

This section presents, interprets and analyzes the data gathered from the respondents through questionnaire and interviews. The data are presented in the sequence of the research questions raised in the study.

Demographic profile of the Respondents regards to Age, Gender, Educational attainment and Year in Service

Table 1. Demographic profile of the Respondents regards to Age, Gender, Educational attainment and Year in Service

<i>Age</i>	<i>Frequency</i>	<i>Percentage</i>
Below 29	7	28%
30-39	4	16%
40-49	6	24%
50-above	8	32%
Total	25	100%
<i>Gender</i>	<i>Frequency</i>	<i>Percentage</i>
Male	7	28%
Female	18	72%
Total	25	100%
<i>Educational Attainment</i>	<i>Frequency</i>	<i>Percentage</i>
Bachelor's Degree	18	72%
w/ Master's units	3	12%
Master's degree	2	8%
Doctoral degree	2	8%
Total	25	100%
<i>Length of Service</i>	<i>Frequency</i>	<i>Percentage</i>
Below 10 years	15	60%
10 years	4	16%
Above 10 years	6	24%
Total	25	100%

Table 1 present the demographic profile of the respondents of selected schools in Camarines Norte in terms of:

Age: 8 out of 25 teachers or 32 percent was in range of 50 and above. 7 or 28 percent was in below 29, 6 or 24 percent was in 40-49 and 4 or 16 percent was in 30-39.

Gender: male was 7 or 28 percent of respondents, female was 18 or 72 percent out of 25 respondents.

Educational Attainment: The frequency of bachelor's degree was 18 or 72%, with master's units was 3 or 12 percent, master's degree and doctoral degree same with 2 or 8 percent of respondents.

Length of year in service: 15 out of 25 or 60% was in below 10 years of service, 6 or 24 percent belong to above 10 years, and 4 or 16 percent was in 10 years of service.

Assessment of the Factors Influencing Creative Teaching Practices of:

Teacher-respondents assessed how the factors such as creative motivation, teaching and self-efficacy beliefs, learning attitude and teaching commitment, school environment, personal qualities and growing up experiences influence their creative teaching practices. Results are revealed in the succeeding tables.

Creative Motivation. The teacher-respondents rated how creative motivation influenced their creative teaching practices.

Table 2. *Creative Motivation that Influences Creative Teaching Practices Creative Motivation*

<i>Creative Motivation</i>	<i>WM</i>	<i>VI</i>	<i>Rank</i>
The teacher motivates students through...			
1. jigsaw puzzle and collage classroom activities to promote cooperative learning among students.	3.04	A	9.5
2. Think-Pair- Share technique to facilitate pair dialogue and to elicit responses from the students.	3.48	A	3
3. self-created games or play to encourage student's engagement to the topic being taught.	3.22	A	6
4. roles playing to provide concrete information and clear role descriptions to stimulate awareness of multiple perspectives.	3.10	A	7
5. story boarding sessions to allow students to see the interconnections and how one idea relates to another	3.04	A	9.5
6. audio-visual presentations to show their understanding and to relate it to current issues.	3.77	SA	1
7. questioning and problem-solving sessions for students to generate ideas and create possible solutions.	3.72	SA	2
8. debates and open forum which allow students to talk, listen, react and reflect.	3.34	A	5
9. reflective discussion and writing of case studies to stimulate students' analytical and critical thinking.	3.37	A	4
immersion activities to facilitate experiential learning.	3.09	A	8
Composite Mean	3.32	A	

Table 2 shows the items under creative motivation factor, ratings and their ranks that influence creative teaching practices of the respondent. It can be seen on the table that of the ten items under creative motivation two of which were rated high by the respondents having a verbal interpretation of strongly agree. The rest of the eight items had a verbal interpretation of agree.

Teacher-respondents ranked first the creative motivation of using audio-visual presentation and connecting it to current issues with the highest weighted mean of 3.77 having a verbal interpretation of strongly agree. Teacher-respondents shared that this is the most common method used during classroom creative discussions and activities because it catches students' attention as students enjoy information through visual means.

This finding conforms to the idea of Morais about audio-visual presentation and visual aids considering it as the best motivator. Students work with more interest and zeal. Students are more attentive. It was explained that seeing, hearing and feeling are experiences that are direct, concrete and more or less permanent. Learning through the senses becomes the most natural and consequently the easiest.

Employing questions and problem-solving activities for students' idea generation and making solutions was ranked second with a weighted mean of 3.72 and a verbal interpretation of strongly agree. This motivation technique is utilized by teachers to help students seek for more information, generate new knowledge/ideas and make decisions thus, providing students' opportunities to take responsibility for their own learning. Questioning and problem solving are used to promote students' conceptual understanding, foster their ability to reason and to communicate their views, and capture their interests and curiosity.

The said findings coincide with the idea of Sternberg and Williams claiming that questioning and problem-solving activities should be part of the daily exchanges.

Teachers should help students understand that what matters is their ability to use facts and manipulate them to answer questions and problem solving. Questions that require recall, analytic thinking and creative thinking should be asked. Moreover, the result supports that of Bartel that when teacher gives suggestions instead of asking questions and when teachers give answer instead of teaching problem solving are considered classroom creativity killers.

Respondents gave the Think-Pair-Share technique to facilitate conversation in order to draw out views and opinion a weighted mean of 3.48. Based on the weighted mean it ranked third and gave it a verbal interpretation of agree. This clearly indicates that increasing the amount of student's dialogue in class involves more than simply allowing them to express an opinion but also build their confidence and improve their communication skills. The aim of using dialogue in teaching is always to move the student's thinking from his or her own conceptions towards well-formed and mature understanding of and ways of thinking and talking about issues and ideas.

This is related to what Alexander had claimed that dialogue is most effective for the development of thinking skills: The argument is amply justified by research evidence -psychological, neurological, pedagogical, linguistic-which shows that talk of a genuinely dialogic kind is indispensable to the development of thinking and understanding.

Ranked fourth by the respondents is the reflective discussion and writing of case studies to stimulate student's analytical and critical thinking with a weighted mean of 3.37 and a verbal interpretation of agree. Having the same verbal interpretation of agree is debates and open forum which allows students to talk, listen, react and reflect in which 1 respondents gave a weighted mean of 3.34 and ranked fifth. According to the respondent-teachers, these two methods are very useful to them in extracting students' thoughts and feelings towards the topics being discussed, thereby developing their analytical and creative thinking skills.

Self-created games or play which increases student's engagement to the topic being discussed was ranked sixth given a weighted mean of 3.22 which is verbally interpreted as agree. Having a weighted mean of 3.10 gave the creative motivation role playing the seventh rank and verbally interpreted as agree. Both motivations self-created games and role playing allows the students to be directly involved in the activities thereby providing them opportunity to manipulate presented information and cases which is vital and important to the

topic/s being discussed. It also allows students' creative minds to play around the available facts. Further, it allows the teacher to explore students' standpoint and understanding of the lesson. This is how majority of the respondent teachers described the two teaching activities.

A weighted mean of 3.09 was given by the respondents to immersion activities which facilitates experiential learning. With this, it has a verbal interpretation of agree and was ranked eighth. Immersion activities provided students hands on experiences and learning. As shared by the respondents, students usually provided feedback of their realization making them more aware of the situations in life and increased their value of volunteerism.

On the other hand, the creative motivation which was rated with the lowest weighted mean of 3.04 and were ranked 9.5th are the motivational technique of using jigsaw puzzle and collage classroom activities to promote cooperative learning and using story boarding to allow students to make connections and relationships. As mentioned by the respondents, both motivation methods are not frequently employed by them that is why they rated it low. However, they explained that it is useful in making topical relationships. This finding affirms Craft and Jeffrey's claim saying that these methods allow students to see the interconnections, how one idea relates to another, and how pieces come together. Once the ideas flow, students become immersed in the problem and hitch-hike other ideas.

Creative motivation obtained a composite mean of 3.32 which the teachers agree that creative motivation factor influence their creative teaching practices. It can be deduced that employing creative motivation to utilize creative teaching practices helps and enriches the respondents' knowledge and skills in terms of facilitating diverse classroom activities. The findings matched with the idea of Mayesky explaining that teachers benefit from encouraging creativity among their students like being able to provide for more and greatly varied in the program; learning to recognize children for their unique skills; being able to develop closer relationships with the students; and having fewer behavioral problems.

Teaching and self-efficacy beliefs. The teacher-respondents rated how teaching and self-efficacy beliefs influence their creative teaching practices

Table 3. *Teaching and Self Efficacy Beliefs that Influence Creative Teaching Practices*

<i>Teaching and Self Efficacy Beliefs</i>	<i>WM</i>	<i>VI</i>	<i>Rank</i>
The teacher believes that...			
1 teaching as an activity aims at developing the skills, knowledge and attitude of the student.	3.85	SA	2
2 they should display enthusiasm and passion in what they teach to stimulate students' creative potential.	3.82	SA	3
3 they should act as resource persons by facilitating interactive teaching and learning activities.	3.94	SA	1
4 teaching facilitates self-expression which allows students to exert their imagination and creativity.	3.71	SA	4
5 cooperative learning facilitates academic and social learning experiences.	3.66	SA	5
6 students learn most effectively when learning tasks are broken down into small sequential steps.	3.57	SA	15
7 Aptitude-based learning relies on differentiated teaching which is based on students' abilities.	3.59	SA	13
8 teaching provides students opportunities to explore and manipulate ideas in order to come up with novel output.	3.64	SA	6.5
9 he/she is well trained and has the necessary skills to be an effective teacher.	3.60	SA	11.5
10 he/she tries hard to get through to even the most difficult or unmotivated students.	3.58	SA	14
11 he/she uses some techniques to redirect students' attention quickly when they become disruptive and noisy.	3.60	SA	11.5
12 he/she utilizes effective approaches to improve the grades of the students.	3.61	SA	10
13 he/she is usually able to adjust to students' level when they are having difficulty with an assignment.	3.55	SA	16
14 he/she applies necessary steps in teaching concepts to help student master a new concept quickly.	3.63	SA	8.5
15 he/she exerts extra effort many times for students to do better than usual.	3.63	SA	8.5
16 he/she motivates students when they show low interest in school work.	3.64	SA	6.5
Composite Mean	3.66	SA	

Table 3 presents the items under teaching and self-efficacy beliefs factor, ratings and their ranks that influence creative teaching practices of the teacher-respondents. Evidence showed that the teaching and self-efficacy beliefs factor earned a high weighted mean as teachers rated them high and responded that they strongly agree to the sixteen items.

Respondents strongly agreed that the belief which has the highest weighted mean of 3.94 and ranked first is the belief that teachers should act as resource persons by facilitating interactive teaching and learning activities. Teachers see themselves as the most important resource/person at school effecting/affecting learning. The teacher when it comes to learning is the most important person in the classroom since they provide substantial information and teaching and learning activities to enrich students' knowledge. Findings corresponded with the assertions of Hosseine and Watt that teachers act as resource person which aim to nurture and develop the creative potential of their learners through empowering them to make decisions for themselves about their own progress and learning directions. Teachers worked creatively and collaboratively designing creative teaching and learning activities.

The belief that teaching as an activity aims at developing the skills, knowledge and attitude of the student was ranked second with a weighted mean of 3.85 and the respondents strongly agreed to this belief. It has been the focus and emphasis of educators that teaching should develop the learners in all aspects. Instead of just lecturing in the classroom, teachers are facilitators of learning, providing

students with the information and tools they need to develop their skills, enrich knowledge and shape their attitudes. This is in consonance with Bloom's taxonomy of learning objectives as described by Armstrong since teaching targets to refurbish the three dimensions of learning such as cognitive (knowledge), affective (feelings and attitudes) and psychomotor (skills).

The teacher-respondents strongly agreed to the belief that teachers should display enthusiasm and passion in what they teach to stimulate students' creative potential was ranked third with a weighted mean of 3.82. It can be derived that the teacher respondents are enthusiastic and passionate for they rated high this belief. Teacher who is passionate, work with enthusiasm, their dedication and commitment increase and they believe in the importance of their job. Passionate teachers create an effective learning environment and increase learning potential of students. Passion leads to creativity; therefore, passionate teachers have the ability to think and produce new notions in an easy way. Students will believe them if they show their interest, zeal and love for what they do and speak. This finding affirms Hong's claims that almost all creative teachers show great passion toward the things they do, but at the same time not opposing to any additional monetary support or the fame attached to it. They would do whatever they could to develop novel and fun lesson plans and seek constant changes in teaching either to attract student's attention or to improve upon their teaching.

Respondents strongly agreed that teaching facilitates self-expression which allows students to exert their imagination and creativity. This has a weighted mean of 3.71 and ranked fourth. The classroom is an excellent place for students to practice positive self-expression through creative activities facilitated by teachers.

Self-expression provides students with an opportunity to demonstrate their individuality and gain self-confidence. Teachers must help students find what excites them to unleash their best creative output. The result conforms with Cropley's statements that the teacher must help his/her students uncover their true interest and to help express their selves. Teacher must help students feel joy in their creative productions and in working through a problem. Students should find that doing things and finding answers for themselves is fun.

Cooperative learning facilitates academic and social learning experiences was ranked 5th with a weighted mean of 3.66 wherein respondents strongly agreed. In reality, people often work in groups. Finding practical ways to encourage creative performance in groups of students is essential because one cannot work with students' one on one all the time. Because life involves working with others, it is worthwhile to give students the chance to work collaboratively and to make the process of collaboration more creative. This supports the idea of Morais and Azevedo, as they described cooperative learning as the instructional use of small groups so that students work together to maximize their own and each other's learning. It also demonstrates that cooperative learning produces higher achievement, more positive relationships among students, and healthier psychological adjustment than do competitive or individualistic experiences.

Moreover, the finding affirms Cropley's assertion that collaboration can spur creativity. Students need to collaborate with creative people because learning is effective by example. Students benefit from seeing the techniques, strategies, and approaches that others use in the creative process. Also, students absorb the enthusiasm and joy many creative people exude as they go about the business of making something new.

Sharing on rank 6.5 are the beliefs that teaching provides students opportunity to explore and manipulate ideas to come up with a creative output and teacher motivates students when they show low interest in school work. Both got a weighted mean of 3.64 and a verbal interpretation of strongly agree. Teaching gives students chance to play around with ideas and concepts to build a creative output. Teachers are very instrumental in guiding students as they go through this process of coming up with outputs which the students can own. The same is true with teachers helping students to see the value of school work. These findings were affirmed by the respondents as they have pointed out that it is their obligation to direct students learning and influence students to develop positive learning values.

Teachers strongly agreed to both beliefs that they do necessary steps to ease out students' mastery of new concept and exert extra efforts to reach out for the students. Both beliefs got a rank of 8.5th giving them a weighted mean of 3.63. Teachers have expressed their thoughts that they are always faced with challenges as they teach to their students. It demands patience, time and effort to overcome these challenges thus, achieving their goals as facilitators of learning.

The belief that teachers are well-trained and have the necessary skills to be an effective teacher and the belief that they use techniques to redirect students' attention have a weighted mean of 3.60 and were ranked 11.5th by the respondents. It was verbally interpreted as strongly agree. This infers that teachers were trained not only to have skills to teach so that students will be knowledgeable but to develop and acquire multi-faceted skills in handling everyday teaching and learning activities. This is to address concerns so as not to prevent them to become effective and efficient to their students.

A weighted mean of 3.59 was given to the belief that aptitude-based learning relies on differentiated teaching which is based on students' abilities. This belief was ranked 13th and gave a verbal interpretation of strongly agree. This affirms that the respondents take into consideration the level of abilities of students when preparing for their teaching and learning activities. According to them, this allows every student to be engaged in their learning since it eases out difficulty in understanding a complicated lesson.

Meanwhile, teachers strongly agreed to the belief that they try hard to get through even the most difficult or unmotivated students. It obtained a weighted mean of 3.58 and was ranked 14th. This clearly shows that teachers look at the students not only as learners but



students to be taken care of. This responsibility includes guidance and close supervision of those difficult and unmotivated students as teachers are considered as second parents in school. According to the respondents, teachers should be sensitive enough and be extra careful in handling this kind of students. Proper and appropriate intervention in coordination with a guidance counsellor should be done.

Ranked 15th is the belief that teacher believes that students learn most effectively when learning tasks are broken down into small sequential steps. This has a weighted mean of 3.57 and with a verbal interpretation of strongly agree. It is always a challenge among teachers of teaching a complex and technical learning task. Teachers need to design the learning task in its simplified form by breaking it down per concept or topic to ease out the teaching and learning process. Thus, students had a grasp of what they are learning. This is related to Opdenakker and Damme's contention that those teachers who provide simplified topical discussion alongside with effective classroom practices are those who adopt a learner-centered teaching style and good management skills in handling complex topics.

The belief which has the least weighted mean of 3.55 as rated by the respondents was ranked 16th which is the teacher is usually able to adjust to students' level when having difficulty with an assignment. It was ranked the lowest among the listed beliefs because it shows that the teachers have not maintained their efficacy skill in adjusting task assignments for the students. Part of what makes teaching a challenging career is the diversity within the students that they teach. Every student is unique having their own background, needs, and learning styles. They have to adapt their instruction to each individual student's strengths and weaknesses. Being adept at making these changes and adjustments is challenging to every teacher.

The results affirm Moran and Hoy's claim that it has something to do with self-perception of competence rather than actual level of competence. This is an important distinction because people regularly overestimate or underestimate their actual abilities and these estimations may have consequences for the course of action they choose to pursue or the effort they exert in those pursuits. Further, they mentioned that a capability is only as good as its execution.

Teaching and self-efficacy beliefs of the respondents obtained a composite mean of 3.66 which reveals that the respondents strongly agree that teaching and self-efficacy beliefs influence their creative teaching practices. This affirms the view point of Blase and Blase; they pointed out that teacher's belief is one of the biggest influential factor of students' learning effects. The reason that they could implement creative teaching is because they are directly guided by their teaching beliefs and to them creative teaching is a tool they selected to help realize their teaching ideals.

This also supports Warfield, Wood and Lehman's assumption that it has frequently been assumed the teachers' belief about content and learning and teaching have a direct impact on their practice.

Learning Attitude and Teaching Commitment.

Table 4. *Learning Attitude and Teaching Commitment that Influence Creative Teaching Practices*

<i>Learning Attitudes and Teaching Commitment</i>	<i>WM</i>	<i>IV</i>	<i>Rank</i>
The teacher.....			
1. likes to use different channels and sources of learning such as reading, travelling, surfing, watching educational film/ documentaries/ videos and volunteer work	3.55	SA	13
2. views formal ways such as attending seminars and in-service training program in order to grow professionally.	3.63	SA	10
3. enjoys learning through new technologies and equipment.	3.59	SA	11.5
4. explores general knowledge related to the area of teaching.	3.72	SA	1.5
5. enjoys learning through open discussions with professional/ experts to get novel and breakthrough ideas.	3.59	SA	11.5
6. actively involves himself/herself in curricular and non-curricular activities to learn new things.	3.48	A	14
7. functions as a learner and partner in learning with the students	3.66	SA	9
8. accepts comments and suggestions from superiors regarding teaching style/approach to improve it	3.71	SA	3
9. implements creative teaching with or without moral encouragement	3.69	SA	6
10. implements creative teaching with or without material encouragement (cash, reward).	3.67	SA	8
11. takes the responsibility to provide quality and effective teaching instruction even beyond official time	3.70	SA	4
12. passes on good knowledge and valuable academic experience to the next generation without reservation	3.69	SA	6
13. collaborates with other teachers to enrich existing knowledge and perspectives of the subject/s being taught.	3.72	SA	1.5
13. implements creative teaching even under resource (manpower, time, budget) constraints.	3.69	SA	6
Composite Mean	3.65	SA	

Table 4 presents the items under learning attitude and teaching commitment factor, ratings and their ranks which influence the creative teaching practices of the respondents.

Results revealed that respondents strongly agreed on the thirteen items out of fourteen items enumerated under the factor learning attitude and teaching commitment while only one item got a verbal interpretation of agree. The attitude which obtained the highest weighted mean of 3.72 as rated by the respondents were the teacher collaborates with other teachers to enrich existing knowledge and perspectives of the subject/s being taught and teacher explores general knowledge related to the area of teaching. They were ranked

1.5th with a verbal interpretation of strongly agree. Collaborative learning brings positive results such as deeper understanding of content, improved self-esteem, and higher motivation to remain on task. Collaboration helps teachers become actively and constructively involved in content, to take ownership of their own output, and to resolve group conflicts and improve teamwork skills.

On the other hand, the respondents showed initiative to enrich their knowledge and deepen their understanding on their area of teaching. The findings are related to Hong as he described that member interaction in the teaching group and its positive influence on brainstorming result creative idea generation, teaching strategy employment, and professional growth and stressed the importance of partnership and how discussion and feedback between one another helped them grow together.

The teachers accept comments and suggestions from superiors regarding teaching style/approach to improve it have a weighted mean of 3.71 which was ranked third with a verbal interpretation of strongly agree as assessed by the respondents. This clearly shows that mentors had a great influence on the creativity of teachers, as inspired by many good teachers throughout the process of school education. Classroom supporters like immediate superiors (department heads and area chairs) work inside classrooms to help teachers implement new ideas, often by demonstrating a lesson, co-teaching, or observing and giving feedback.

The result conforms with Blase and Blase saying that consultation with peers and heads enhanced teachers' self-efficacy (teachers' belief in their own abilities and capacity to successfully solve teaching and learning problems) as they reflected on practice and grew together, and it also encouraged a bias for action (improvement through collaboration) on the part of teachers. It also affirms Cropley's statement which emphasizes that guidance and support from well-experienced forerunner remains to exert significant influence on the lives of teachers.

Respondents strongly agreed that teacher takes the responsibility to provide quality and effective teaching instruction even beyond official time. This was ranked fourth among the fourteen items with a weighted mean of 3.70. This maintains the idea that teacher respondents have established commitment to their teaching job and to their students. A committed teacher has a strong desire to help students develop their full potential and recognizes professional responsibilities to his/her students, colleagues and administrators.

They accept the responsibility of advancing the cause of education, improving the quality of teaching, promoting the welfare of teachers and elevating the status of the profession. This is consistent with Razak et al.'s declaration stating that quality education cannot be achieved without the efforts of dedicated and highly committed teachers. Committed teachers inculcate and nurtures values that will guide the subsequent use of learning of both knowledge and skills in the wider world outside the classroom.

Sharing on the sixth rank based on the respondents rating are teacher implements creative teaching with or without moral encouragement, the teacher implements creative teaching even under resource (manpower, time, budget) constraints, and the teacher passes on good knowledge and valuable academic experience to the next generation without reservation with a weighted mean of 3.69. The respondents strongly agree to the three statements. This illustrates that the respondents had embraced their professional responsibility and obligation to their profession, students, colleagues and administrators. This is not anymore, the issue of how good the teacher teaches but what did the teacher does for his/her students to affect meaningful learning. This is where intrinsic motivation comes into play.

This finding affirms Hong's view point that intrinsic motivation is found to be the most important factor contributing to the teacher's implementation of the creative new ideas. He emphasized that almost all creative teachers showed great passion towards the things they do.

The teacher implements creative teaching with or without material encouragement was ranked 8th with a weighted mean of 3.67. It was verbally interpreted as strongly agree. This shows an established passion and commitment of teachers to their profession. This indicates that fulfilment in their job is intrinsically motivated. This is related to Park's findings saying that there is a force coming from within teachers themselves who had needs for greater responsibility, variety and challenge in their work as their level of participation had grown.

The teachers strongly agreed that attending seminars and in-service training program helps them to grow professionally. This has a weighted mean of 3.63 and was ranked 10th. It can be deduced that the respondents see the importance and value of attendance to training in the development of their own skills as teachers. This is related to Hosseine and Watt saying that training is related to the development of teacher proficiency and competence that would enable and empower the teacher to meet the requirements of the profession and face the challenges therein.

The same weighted mean of 3.59 which ranked 11.5th among teacher responses were teacher enjoys learning through new technologies and equipment and enjoys learning through open discussions with professional experts. It was verbally interpreted as strongly agree. Further, a weighted mean of 3.55 was given to the item saying that teacher uses different channels and sources of learning and was ranked 13th with a verbal interpretation of strongly agreed. This infers that the teachers use wide range of sources of learning where they can enrich their knowledge and skills which in return they can give to their students. As shared by the respondents, technology and experts have been very instrumental to supplement and deepen their skills and know-how.

The teacher actively involves himself/herself in curricular and non-curricular activities to learn new things gained the lowest weighted mean of 3.48 and was ranked 14th. It has a verbal interpretation of agree. Respondents narrated that they have not put much attention

to non-curricular activities because of workload/teaching assignment preparations and satisfying research requirements. Findings coincide with the result of the study by Whiteley and Richard stating that majority of their teacher respondents indicated that they found their workload unmanageable during the semester. A significant majority of teachers do not supervise extracurricular activities when they have no preparation time. Teachers need to prepare several teaching modules because of subject assignments wherein they need to do 3 to 5 preparations.

A high composite mean of 3.65 indicated that the respondents strongly agree that learning attitude and teaching commitment influences their creative teaching practices. This clearly shows that the teacher respondents have a positive learning attitude and are highly committed to their profession as reflected by their high ratings on this area. Commitment is an essential element of successful teaching. Showing commitment to students learning can be an important factor in motivating students to participate in creative activities. The outcome supports the idea of Vasudevan, according to him the intensity of teachers' attitude and commitment are considered key factors in the success of creative teaching as it heavily influences the teachers' willingness to engage cooperative, reflective and critical practice in teaching.

School Environment

Table 5. *School Environment that Influences Creative Teaching Practices*

<i>School Environment</i>	<i>WM</i>	<i>VI</i>	<i>Rank</i>
1 The school has the resources (materials, budget facilities) that facilitate creative teaching.	3.30	A	7
2 The school provides good administrative support (human, material, financial resources) for creative teaching.	3.31	A	6
3 The school's academic development program provides in-service trainings, workshops, seminars and formation program	3.41	A	1
4 Immediate superiors provide mentoring and coaching sessions to enhance teaching performance	3.22	A	9
5 Immediate superiors provide different academic venues to show creative skills like contests, clubs, professional organizations.	3.27	A	8
6 Teaching colleagues often share ideas and thoughts about creative teaching with each other.	3.33	A	5
7 Teaching colleagues share their teaching/instructional materials.	3.37	A	2.5
8 Teachers provide strong social support to colleagues through work collaboration	3.37	A	2.5
9 Students are open, cooperative and receptive to do interactive activities.	3.35	A	4
Composite Mean	3.33	A	

Table 5 presents the items under the school environment factor, ratings and their ranks which influence the respondents' creative teaching practices. Data shows that all the statements under school environment got a consistent agree responses from the respondents in all nine items.

The highest weighted mean under the factor school environment is 3.41 where it claims that the school's academic development program provides in-service trainings, workshops, seminars and formation programs was ranked first with a verbal interpretation of agree. It is a pre-requisite that all educational institutions whether private or public provides academic/professional development program. The academic program serves as the most important venue to develop and enhance creative teaching practices of teachers and provides a holistic approach of nurturing teachers' creative potential. This assertion affirms Ertmer's results saying that teacher who received training in creative methods and activities are more likely to show receptive attitude and behavior towards students' creativity.

Likewise, Horng et al. advocate that developing creative instructors should begin with their training. These teachers should be equipped with the knowledge and skills in giving creative instructions. Schools, colleges and institutions of higher learning should hold workshops of creative instruction, by inviting creative instructors and professional to share their experiences in developing creativity and improve teaching strategies.

Sharing the rank 2.5th with a weighted mean of 3.37 were teaching colleagues share their teaching/instructional materials and the other one is that teachers provide a strong social support to colleagues through work collaboration. Colleagues play an important role in the maturity of the teacher. They provide substantial, practical and true to life experiences which may be used as a basis for making decisions regarding teaching approaches and styles. This supports the claim of Cropley that creativity is largely a social phenomenon. It can be developed through groups, role models, mentors and classroom climate. When working together, people can contribute their unique skills for a better overall result. This is beneficial because the students ultimately get more out of their educational experiences.

Students are open, cooperative and receptive to do interactive activities has a weighted mean of 3.35 which has a verbal interpretation of agree and ranked 4th by the respondents. On the other hand, teaching colleagues shares ideas and thoughts about creative teaching was ranked 5th with a weighted mean of 3.33 and has a verbal interpretation of agree. This explains that having a strong support and cooperation coming from the students and colleagues are beneficial to motivate teachers to be creative with his/her teaching.

Ranked sixth is that the school provides good administrative support to do creative teaching got a weighted mean of 3.31 and a verbal interpretation of agree. Further, the respondents declared that the school has the resources to facilitate creative teaching was ranked 7th among the nine items with a weighted mean of 3.30 and has verbal interpretation. These findings evaluate that the teachers believe that they are motivated to do creative teaching because of good administrative support alongside with the availability of resources which

are necessary in facilitating creative activities.

Immediate superiors provide different academic venues to show creative skills like contests, clubs, professional organizations were ranked 8th with the weighted mean of 3.27 and a verbal interpretation of agree as assessed by the respondents. Immediate superiors have key role in preparing and directing their mentees. They provide opportunities and venues where teachers can showcase skills and knowledge of their mentees. They boost the moral and confidence of their mentees by providing a supportive atmosphere and well-guided work plan. This was emphasized by Aguilar who shares that coaching and mentoring is an essential component of an effective professional development program. Coaching and mentoring can build will, skill, knowledge, and capacity because it can go where no other professional development has gone before: into the intellect, behaviors, practices, beliefs, values, and feelings of an educator.

However, the lowest weighted mean of 3.22 was given by the respondents to the claim that immediate superiors provide mentoring and coaching sessions to enhance teaching performance. Based on the weighted mean it was ranked 9th with a verbal interpretation of agree. This concretizes the claim of the teacher-respondents that they had limited opportunities of doing this due to work load and task assignments. However, the respondent teachers fully understand that mentors and coaches play a very important part in the development of their skills, knowledge and attitudes as a teaching professional. Coaching and mentoring creates a relationship in which a teacher feels cared for and is therefore able to access and implement new knowledge. Valuable inputs from them serve as their guide and basis of doing things on their own.

In support of the result is Copley, he highlighted that creativity is largely a social phenomenon. Immediate superiors provide this to their subordinates but due to work overload this was not possible. Mentoring and coaching is more than simply telling and demonstrating by example, it also means being explicit about what one is doing and how it influences an individual to become skilled and knowledgeable.

School environment obtained a composite mean of 3.33 which reveals that the respondents agree that school environment influences their creative teaching practices. It can be derived that based on the responses given by the teachers, they felt that school environment is lacking in terms of providing support and purpose. Conversely, Horng et al. pointed out the benefits that can be received having a supportive school environment. He shared that administrative support greatly influenced teachers and teachers agreed that school leadership's ensuring of full empowerment and providing active support were what motivated teachers to engage in creative teaching and what guided them toward professional growth.

Ideally teachers seek for a stimulating environment. Environment provides teachers some things to explore and help them connect these environments with experiences, creative growth and accomplishment.

Personal Qualities

Table 6. *Personal Qualities that Influence Creative Teaching Practices*

<i>Personal Qualities</i>	<i>WM</i>	<i>VI</i>	<i>Rank</i>
The teacher...			
1 embarks on self-learning and exploration as stimulated by everyday classroom experiences.	3.61	SA	9
2 pays attention to academically struggling students and provides appropriate assistance.	3.74	SA	5.5
3 comes to class well-prepared (with content and materials) before teaching.	3.83	SA	1
4 is confident with his/her teaching skills and ability to solve problem.	3.78	SA	3
5 likes new things and would try out new practices	3.75	SA	4
6 develops his/her own instructional materials.	3.66	SA	8
7 is persistent and resourceful with his/her work.	3.74	SA	5.5
8 is imaginative, flexible and willing to take risks so that learning sessions will be useful, interactive and fun.	3.72	SA	7
9 is open-minded and easy to talk to.	3.82	SA	2
Composite Mean	3.74	SA	

Table 6 shows the items under personal qualities and their respective rank which influence the respondents 'creative teaching practices.

It can be observed on the table that respondents consistently rated high the nine items under personal qualities.

Results of the data gathered show that the teachers gave the highest weighted mean of 3.83 to teachers who come to class well-prepared (with content and materials before teaching). This is a clear manifestation that the respondent teachers ensure that they provide their students quality education by providing relevant teaching and learning activities and making learning more fun and interesting. This finding conforms to the report of Hong on the influential factors on creative teaching. He pointed out that teachers often felt that they owed their student's the best teaching and guidance. It is therefore not difficult to see why these teachers were so persistent in carrying out creative teaching and why they deemed it their inescapable mission.

The teacher is open-minded and easy to talk to which got a high weighted mean of 3.82 and ranked second. This was rated high by the respondents which gained a verbal interpretation of strongly agree. Teacher respondents described themselves as flexible and approachable to their students. With this, teacher-students relationship is in harmony and at the same time strengthened. This confirms the view of Craft that a teacher and student who have the qualities of a good communicator, has respect inside classroom, and show

interests in teaching from the point of view of the teacher and learning from a student will establish a positive relationship in the classroom.

Respondents ranked third the claim that teacher is confident with his/her teaching skills and ability to solve problem which gained a weighted mean of 3.78 which is interpreted as strongly agree. It can be traced that teacher-respondents are confident teaching professionals. They have an established competence in their teaching and very capable of handling problem solving activities. Having confidence will improve a teacher's worth and their overall effectiveness. It is a key component of being an effective and successful teacher. The result verifies the claims of Hosseine and Watt. They acknowledge that confidence is something that cannot be faked, but it is something that can be built. He claimed that building confidence is another responsibility of the head. There is no perfect formula because every person has their own unique level of confidence. Effective teachers teach with confidence.

Effective teachers teach with confidence. Deemer supports this statement saying that teachers with confidence in their teaching capabilities create classroom atmosphere focused on effort and student learning. Teachers like new things and would try out new practices was ranked fourth with a weighted mean of 3.75 and has a verbal interpretation of strongly agree. On the other hand, respondents ranked 5.5th to both items mentioning that teachers are persistent and resourceful with work and pays attention to academically struggling students and provides proper assistance. Both have a weighted mean of 3.74 and a verbal interpretation of agree. Results indicate that the respondents are eager to test new water when it comes to teaching techniques and have embraced their obligation to oversee student's welfare. Findings is related to the claim of Hong that it is important for teachers to explore and discover to give students fresh information and it is vital to encourage students to participate in class and show concerns for them.

A weighted mean of 3.66 was obtained by teacher designs his/her own instructional materials and was ranked 8th by the respondents therefore, they strongly agree to it. This implies that teachers use his/her creativity to make learning more fun and interesting. He/she manipulates the situation, information and materials to design his or her teaching plan to formulate teaching and learning objectives and activities. This supports the findings of Gutierrez in her case study which revealed that teacher's belief about subject content determined the materials they used and focus of their discussion in the classroom; their beliefs about learning dictated their methodology and their beliefs about teaching shaped their choice of classroom set-up and organization.

However, the lowest weighted mean of 3.61 and ranked 9th is the personal quality that teacher embarks on self-learning and exploration as stimulated by everyday classroom experiences. Based on the assessment of the respondents, everyday classroom experiences were the least considered factor which influences their creative teaching practices. Teacher's receptiveness to new experiences and willingness to grow based on their daily experiences inside the classrooms has always been part of their growth. It was considered just a part of the whole scenario to serve as basis for improvement.

Teachers' personal qualities obtained a high composite mean of 3.74 which reveals that the respondents strongly agree that personal qualities influence their creative teaching practices. It has long been a widely supported argument that personal qualities affect creativity development in individual person. Personal qualities served as driving forces to design, construct and pursue meaningful and worthwhile teaching and learning activities of teachers inside the classroom. This confirms by Hong, he further pointed out that people who enjoy learning are more likely to be creative. They show higher levels of personal strengths and capabilities as part of their personality traits, which included an acute instinct, a strong self-confidence, and a broad range of experience.

Growing Up Experience

Table 7. *Growing Up Experience that Influence Creative Teaching Practices*

<i>Growing Up Experience</i>		<i>WM</i>	<i>VI</i>	<i>Rank</i>
The teacher....				
1	has plenty of opportunities for self-exploration, discussion and idea sharing in her/his past learning experiences.	3.47	A	5
2	has undergone mentoring activities which further developed his/her creative teaching skills.	3.44	A	8
3	designs self-created games and play and uses them as a motivation activity for students.	3.25	A	10
4	has enough training to deal with almost any learning problem such as poor coping ability, difficulty in transferring ideas, slow reception to information, poor communication skills etc.	3.45	A	6.5
5	has friends and colleagues who provide guidance and share creative teaching materials.	3.42	A	9
6	inspires students to pursue their dreams as he/she was motivated by a good teacher during his/her training years.	3.71	SA	2
7	usually takes sensible risk in his/her approaches in designing classroom activities.	3.45	A	6.5
8	has a great sense of humor as widely considered by students as his/her language of teaching.	3.67	SA	3
9	always thinks about whether the teaching meets the students' learning needs and would always seek improvement.	3.58	SA	4
10	continuously strives hard to fulfil his/her goals as an educator.	3.80	SA	1
Composite Mean		3.52	SA	

Ranked second is the teacher inspires students to pursue their dreams as he/she were motivated by a good teacher during his/her training years with a verbal interpretation of strongly agree. It has a weighted mean of 3.71. Former teachers and mentors had a great impact on teacher aspirants' character building and moral ideal cultivation-one who cares for students and allows them to explore freely. This

was attributed greatly to the influence of teachers, whom is also the reason a student devote herself/himself to education. This result supports the view point of Hong where he asserted that being inspired by good teachers throughout the process of their school education, teachers' felt they owed the students the best teaching and guidance.

The teacher has a great sense of humor as widely considered by students as his/her language of teaching was ranked third with a weighted mean of 3.67 and a verbal interpretation of strongly agree. Teacher respondents shared that humor completes the ingredients of good classroom environment. This catches students 'attention and reaction. Humor can set a positive tone in classrooms of higher education, especially in classes where the material or course format is perceived to be difficult and/or sensitive. A light-hearted tone in the classroom reduces the students' anxieties and creates a comfortable, supportive environment.

On the same note, it supports and expresses its conformity to Hsiao that the humorous verbal expression is a good way to attract students' attention and conducive to the creation of a relaxed learning atmosphere in which the student can better appreciate the idea that learning is fun. Humor aids in the retention of information. Teachers should make sure the humor does not replace the learning, and should only use humor that is appropriate and positive, such as content-relevant humor, not self-deprecating humor, and anecdotes.

Teachers always thinks whether the teaching meets the students' learning needs and would always seek improvement was ranked fourth by the respondents out of the ten items. It gained a weighted mean of 3.55 and a verbal interpretation of strongly agree. One of the first tasks of a teacher is to identify, validate and classify the learning needs of the student. The needs of a learner represent the gap between what the learner wants to get out of the learning experience and his or her current state of knowledge, skill, and enthusiasm. This finding was explained by Schacter et al. saying that each learner is unique, and brings to the learning situation his or her own different learning style, knowledge set, pool of past experiences, and motivation. They said that in a learner-centered instruction, it is important for instructors to consider the level of knowledge and skill development attained by the learners prior to instruction.

Teachers had agreed that they had plenty of opportunities for self-exploration, discussion and idea sharing obtaining a 3.47 weighted mean placing it on the fifth rank. As shared by the respondents, they see to it that they will continue to develop their knowledge and skills through self-learning and from their colleagues. Conversely, the respondents agreed that they have enough training to deal with almost any learning problem and they usually take sensible risk in his/her approaches in designing classroom activities were ranked 6.5th with a weighted mean of 3.45. Teachers are required to undergo intensive series of training during their preparation stage in and continuous to submit themselves to faculty development program as designed by their chosen schools. This is to make sure that they become well-versed with the teaching profession. On the same vein, they are trained to take risks in their teaching for this will help them to discover new learning and for them to grow professionally by inputting creative and innovative outputs in their teaching job. Who in the end benefit from this are their students.

Part of the preparation and training of the teachers is mentoring. The respondents agreed that they had undergone mentoring activities to further develop their creative teaching skills. This was ranked 8th by the respondents with a weighted mean of 3.44. Mentoring is a nurturing process given by a skilled teacher, serving as a role model, teaches, sponsors, encourages, counsels and befriends a less skilled or less experienced teacher for the purpose of promoting the latter's professional development. This only means that this is part of the whole process of becoming an excellent creative teacher. Creativity is largely a social phenomenon. It can be developed through groups, role models and mentors and classroom climate -all of which are teachers' sources of skills development.

Respondents agreed that the teacher has friends and colleagues who provide guidance and share creative teaching materials was ranked 9th with a weighted mean of 3.42. Academic colleagues are an obvious source of support and feedback.

Teachers pointed out that they have limited time and venue to do this. Though there are few instances that they get to do this. Additionally, they are fully aware of the benefits they can gain from this practice. Cultivating and sharing experiences with colleagues will have a great deal to gain from such exchanges. Take opportunities to work with them and learn from them. This conforms to the assertion of Harrison and Killion, they said that teachers act as resource provider. They help their colleagues by sharing instructional resources. These might include Web sites, instructional materials, readings, or other resources to use with students. They might also share such professional resources as articles, books, lesson or unit plans, and assessment tools.

The lowest weighted mean of 3.25 was based on the ratings given by the respondents to teacher who designs self-created games and play and uses them as a motivation activity for students. This was ranked 10th with a verbal interpretation of agree. Respondents agree to the usefulness of employing games to motivate students however, they do not use this all the time. It can be construed that games create an active learning environment. Learning is more fun with games however; there are challenges of game-based learning such as: appropriateness of learning, finding the right game and ensuring engagement and motivation. This confirms the ideas explained by Harrison and Killion, they agree that an educational game is a game designed to teach humans about a specific subject and to teach them a skill.

As educators and parents realize the psychological need and benefits of gaming have on learning, this educational tool has become mainstream. Games are interactive play that teaches goals, rules, adaptation, problem solving, interaction, all represented as a story. They give students the fundamental needs of learning by providing - enjoyment, passionate involvement, structure, motivation, ego gratification, adrenaline, creativity, social interaction and emotion.

Growing up experiences obtained a composite mean of 3.52 which tells that the respondents strongly agree that growing up experiences influence their creative teaching practices. It can be noted that respondents value their growing up experiences since it provides a strong foundation in terms of increasing commitment to the teaching profession, establishment of their beliefs and personal qualities of becoming an excellent teacher. This finding upholds the views of Plucker, Beghetto & Dow explaining that creativity development involves more than one person and it happens when their abilities as part of a helpful process in a supportive environment resulted as generally healthy and well-adjusted both interpersonally and intrapersonal.

Extent of Utilization of Creative Teaching Practices

Divergent Thinking and Doing

Table 8. *Extent of Utilizing Divergent Thinking and Doing as Creative Teaching Practice*

<i>Divergent Thinking and Doing</i>		<i>WM</i>	<i>VI</i>	<i>Rank</i>
1	The teacher uses open-ended questions during recitations, quizzes and long examinations.	3.35	GE	9
2	The teacher challenges students to come up with new and novel ideas through feasibility studies, project/lesson/business plans.	3.58	VGE	5
3	The teacher allows students to do brainstorming activities during small group discussions.	3.61	VGE	4
4	The teacher requires collaborative project output or does cooperative learning activities.	3.62	VGE	3
5	The teacher helps students elaborate ideas by feeding them examples and adding details to the lessons.	3.76	VGE	1
6	The teacher facilitates model building activity to allow students to manipulate concepts and ideas.	3.22	GE	10
7	The teacher asks didactic and intriguing questions to elevate the student's interest, analytical and critical thinking.	3.42	GE	6
8	The teacher uses imaginative approaches such as essay writing and reflective journal writing to express their own ideas and to visualize actions on concepts	3.39	GE	7.5
9	The teacher facilitates focus group discussions to generate common and contrasting ideas.	3.39	GE	7.5
10	The teacher poses questions to help students combine ideas and create relationships.	3.68	VGE	2
Composite Mean		3.50	VGE	

Table 8 reflects the extent of utilization of the items under divergent thinking and doing, weighted mean and their respective rank. It can be seen on the table that there were five creative teaching practices which were utilized by the respondents to a very great extent and other five practices were utilized to a great extent.

The creative teaching practice under divergent thinking and doing which has the highest weighted mean of 3.76 and ranked first by the teachers is that the teacher helps students elaborate ideas by feeding them with examples and adding details to the lessons. This practice was utilized to a very great extent by the respondents. This is a frequently utilized practice under divergent thinking and doing as verbalized by the respondents. They said that the instruction should be organized in increasing order of complexity for optimal learning. A concrete example was shared, when teaching a procedural task, the simplest version of the task is presented first; subsequent lessons present additional versions until the full range of tasks are taught. In each lesson, the learner should be reminded of all versions taught so far (summary/synthesis). They said that the key idea of elaboration is that the learner needs to develop a meaningful context into which subsequent ideas and skills can be assimilated.

This is related to the views of Craft and Jeffrey which express that elaboration strategies connect information to be learned with information that students already know. This connecting takes stress off of working memory, because connections create efficiency of learning and memory. The confidence that students have in already knowing the connected information can support their learning of new information.

Ranked second with a weighted mean of 3.68 is the creative teaching practice that teacher poses questions to help students combine ideas and create relationships. Respondents utilize this creative teaching practice to a very great extent. This clearly shows that teacher respondents know the usefulness and effect of asking questions in order to combine ideas and make relationships. Questioning increases class participation and encourages active learning. This verifies the statements of Sternberg and Williams that teachers should make questioning a part of the daily classroom exchanges. Teachers are the role models for questioning for it helps the students understand that what matters is their ability to use facts. As expressed by John Dewey, recognizing how a person thinks is often more important than what we think. Teachers need to ask students good, thought provoking, and interesting ones and lessen the emphasis on rote learning.

The teacher requires collaborative project output or does cooperative learning activities was ranked third which gained a weighted mean of 3.62. This creative teaching practice was utilized by the respondents to a very great extent. Teachers believe that collaboration and cooperation help students in several ways such as students learn to work with all types of persons, acknowledgement of individual differences, interpersonal development, actively involving students in their learning and gaining opportunities for personal feedback. This describes and supports Sternberg's declaration that it is worthwhile to give students the chance to work collaboratively and to make the process of collaboration more creative. Morais and Azevedo likewise support this claim that cooperative learning is the instructional use of small groups so that students work together to maximize their own and each other's learning. It demonstrates that cooperative learning produces higher achievement, more positive relationships among students, and healthier psychological adjustment

than do competitive or individualistic experiences.

The respondents utilize to a very great extent brainstorming activities to their students during small group discussions. It obtained a weighted mean of 3.61 and was ranked fourth. However, respondents ranked fifth and gave a weighted mean of 3.58 to the teaching technique that they challenge students to come up with new and novel ideas through feasibility studies, project/lesson/business plans. They utilize it to a very great extent. Respondents shared that they use brainstorming as collective means for students to create an innovative output. Through its students are challenged and practically use their creative and critical thinking.

This was further explained by Sawyer, he said that brainstorming combines a relaxed, informal approach to problem solving with lateral thinking. It encourages students to come up with thoughts and ideas that can, at first, seem a bit crazy. Some of these ideas generated can be crafted into original, creative solutions to a problem, while others can spark even more ideas. This helps to get students unstuck by jolting them out of their normal ways of thinking.

The teacher asks didactic and intriguing questions to elevate the students' interest, analytical and critical thinking was utilized to a great extent by the respondents. It indicated a weighted mean of 3.42 which placed it to sixth rank. Teachers claim that instruction involving questioning is more effective than instruction without questioning. It helps students to be actively involved in the lesson, develop critical thinking skill, nurture their insights and stimulate independent learning. This was supported by the findings of the research conducted by Sawyer. One important finding in his study is that questions that focus student attention on important elements of a lesson result in better comprehension than those that focus on unusual or interesting elements. Questions should also be structured so that most elicit correct responses.

Sharing on rank 7.5th are teacher uses essay writing and reflective journal writing to express students' own ideas and to visualize actions on concepts and teacher facilitates focus group discussions to generate common and contrasting ideas. Both gained a weighted mean of 3.39 and were utilized to a great extent. Respondents explained that both techniques were used not too often since journal writing and essays are usually given as an assignment and focus group discussion is usually time-consuming. But they agree that both techniques develop students' cognitive thinking and creativity through idea generation and collective inputs.

Ranked 9th by the respondents under divergent thinking and doing is that teacher uses open-ended questions during recitations, quizzes and long examinations. This creative teaching practice was utilized to a great extent by the respondents and got a weighted mean of 3.35. One of the ways to develop divergent thinking is using open-ended questions for students to be able to generate ideas as explained by the respondents. This sustains the view of Cropley that teacher should instruct and assess for creativity. If teacher wants to encourage creativity, they need to include at least some opportunities for creative thought in assignments and tests. Questions that require factual recall, analytic thinking, and creative thinking should be asked.

The respondents utilized the creative teaching practice that teacher facilitates model building activity to allow students to manipulate concepts and ideas to a great extent which has the lowest weighted mean of 3.22 and ranked 10th under the divergent thinking and doing. This method is the least practiced by the respondents since according to them they have not explored fully its practical application to their respective areas. However, they believe and agree to the benefits that students can gain from the practice. This verifies Craft and Jeffrey's claim that this method facilitates experiential learning which is described as inductive, learner-centered, and activity oriented. Personalized reflection about an experience and the formulation of plans to apply learning to other contexts are critical factors in effective experiential learning. The emphasis is on the process of learning and not on the product.

Divergent thinking and doing obtained a composite mean of 3.50 which reveals that the respondents utilize divergent thinking and doing to a very great extent in their creative teaching and learning activities in the classroom. Divergent thinking is an approach to a situation or concept which focuses on exploring as many aspects of the concept as possible which allows students to wander off in many different directions, gathering numerous thoughts and ideas which relate to the concept until they come up with a novel idea or product. This confirms Urban's claim that divergent thinking involves originality which is the ability to see connections in things and ideas; flexibility is the ability to produce varied ideas, fluency which is the ability to produce many ideas and problem sensitivity or the ability to foresee inconsistencies or problems in things.

General knowledge and thinking base

Table 9 presents the extent of utilization of the items under general knowledge and thinking base, weighted mean and their respective rank.

As gleaned on the table, there were six creative teaching practices that were utilized to a very great extent while there were four creative teaching practices under general knowledge and thinking base were utilized to a great extent. Distinctively, the creative teaching practice that teacher helps student's link prior knowledge to new concepts through concept mapping and formulation got the highest weighted mean of 3.62 which was ranked first by the respondents. This was utilized to a very great extent by the respondents. This helps teachers to establish concepts for students to become familiar before they move on to the next topic.

This supports the idea of Sawyer that concept mapping is a great way to build upon previous knowledge by connecting new information back to it. When new knowledge is integrated with and connected to existing knowledge that new knowledge is easier to understand and to remember. A professor's job is to build scaffolding from existing knowledge on which to hang incoming new knowledge. Using



a concept map is one way to build that scaffolding.

Table 9. Extent of Utilizing General Knowledge and Thinking Base as Creative Teaching Practice

	<i>General Knowledge and Thinking Base</i>	<i>WM</i>	<i>VI</i>	<i>Rank</i>
1	The teacher invites resource person/s to share his/her expertise to students allowing them to learn something new.	2.79	GE	10
2	The teacher connects lessons to real world issues or to students' lives and experiences.	3.58	VGE	3
3	The teacher helps student's link prior knowledge to new concepts through concept mapping and formulation.	3.62	VGE	1
4	The teacher provides opportunities to explore through exposure/educational trips/on-site visits.	3.10	GE	7
5	The teacher conducts post conference discussions after demonstrations and practical exams.	3.05	GE	9
6	The teacher provides problem solving questions to encourage application of the learned concept and principles.	3.59	VGE	2
7	The teacher uses inquiry approach through research works and topic reporting for information processing and develops investigative skills.	3.43	GE	5
8	The teacher asks students thought-provoking questions to nurture insights and stimulate independent learning.	3.55	VGE	4
9	The teacher requires students to conduct case studies to draw out conclusion/s.	3.27	GE	6
10	The teacher allows students to conduct experiments or do field observation to facilitate experiential learning.	3.07	GE	8
<i>Composite Mean</i>		3.31	GE	

The creative teaching practice which was ranked second is the teacher that provides problem solving questions to encourage application of the learned concept and principles was utilized to a very great extent by the respondents having a weighted mean of 3.59. Teachers needs to create an atmosphere of creative exchanges of views and provoke thinking through questioning to decipher better alternatives and solutions in order to apply learned concepts and principles. This is in consonance with the idea of Sawyer describing that problem-based learning is one way of creative teaching. This involves the teacher coming up with a problem that has many potential solutions. The reason why it is so effective for creative learning is that different student groups may come up with different solutions.

Ranked third is the creative teaching practice wherein teacher connects lessons to real world issues or to students' lives and experiences is utilized to a very great extent by the teachers. This practice has a weighted mean of 3.58. Teacher respondents utilize this practice because meaningful learning happens when students see the relevance of topics being discussed which is related and connected to their personal lives and experiences.

This finding affirms Cropley's ideas in his Incubation Model design. According to this model, in order to heighten anticipation teachers, make connections between the classroom and student's real lives. Students tend to synthesize and analyze topics when connections were established in their personal experiences. It means initiating to create the desire to know about the topic to see its usefulness and relevance to their lives and experiences.

Teacher asks students thought-provoking questions to nurture insights and stimulate independent learning has a weighted mean of 3.55. This creative teaching practice was ranked fourth and utilized to a very great extent by the teachers. The art of questioning has remained one of the best tools in promoting effective learning as expressed by the teachers. In fact, questioning facilitates generation of ideas and views. There are even some teachers who believe that the effectiveness of a teacher can be measured by his ability to ask good questions. This may be subsumed under the broad category of teacher effectiveness to facilitate meaningful learning.

This finding supports that of Sawyer which emphasizes that it is vital that children obtain the disciplinary knowledge of the subject, in addition to being creative problem solvers. Accordingly, Questioning is the real challenge therefore lies on the part of the teacher, who must ensure that children are not only engaging in creative problem solving, but also learning the hard-core facts essential to understand a subject well.

Ranked fifth is the creative teaching practice that the teacher uses inquiry approach through research works and topic reporting for information processing and develops investigative skills. It has a weighted mean of 3.43 and was utilized to a great extent. Respondents use Inquiry-discovery approach, which is an indirect teaching method. They use this practice to develop the critical thinking skills of the learners. This method increases the general knowledge and thinking of educators and learners which is related to the discovery process. Discovery learning enhances creative skills by forcing the learner to manipulate the environment and produce new ideas.

This finding conforms to Cropley, claiming that the power of an inquiry-based approach to teaching and learning is its potential to increase intellectual engagement and foster deep understanding through the development of a hands-on, minds-on and research-based disposition towards teaching and learning. Inquiry honors the complex, interconnected nature of knowledge construction, striving to provide opportunities for both teachers and students to collaboratively build, test, and reflect on their learning.

The teachers require students to conduct case studies to draw out conclusions was utilized to a great extent. It was ranked sixth among the ten items with a weighted mean of 3.27. Respondent teachers appreciate the use this method since it allows their students to analyze and evaluate cases in order to come up with solutions and new ways to address different issues.

It can be noted that teachers provide student opportunities to explore through exposure trips which was utilized to a great extent. It indicated a weighted mean of 3.10 and was ranked 7th. On the contrary, ranked 8th is that the teachers allow students to do experiments or do field observation. This method was utilized to a great extent by the respondents and gained a weighted mean of 3.07. This indicates that teachers see the importance of being in the sites or location to appreciate the practicality and application of concepts and principles taught in the classroom. Further, both methods allow first hand or hands-on experience which makes learning more interesting thereby increasing student's engagement to creative learning.

Respondents utilize to a great extent the practice of teachers conducting post conference discussions after demonstration and practical exam. It was ranked 9th with a weighted mean of 3.05. This indicates that post conferences were the least approach utilized by the respondents. It was implemented in a very limited period because of time constraints and usually time consuming. Although respondent acknowledges that one-to-one conference with a student about her or his work in progress has long been recognized as one of the most effective ways of guiding students learning. This finding is related to Craft and Jeffrey explaining that ideal of this conference-instructor and student engaging in meaningful conversation about the student's work in progress--will not happen automatically. Instead, preparation before the conference, careful listening during conferences and a follow-up post-conference are all essential.

The lowest weighted mean of 2.79 and ranked 10th under the general knowledge and thinking base is the creative teaching practice that teacher invites resource person/s to share his/her expertise to students allowing them to learn something new which was utilized by the respondents to a great extent. Inviting expert professionals to discuss related topics enriches students' knowledge and appreciates learning based on real life experiences as shared by the respondents. But this practice was least employed due to the time constraints and availability of the target speaker. However, Horng et al. sees the value of this practice. Schools, colleges and institutions of learning should hold workshops of creative instructors and professionals to share their experiences in developing creativity and improving teaching strategies to facilitate better student learning.

General knowledge and thinking base obtained a composite mean of 3.31 which revealed that the respondents utilize general knowledge and thinking base to a great extent in their creative teaching and learning activities. This indicates that teachers continuously enrich themselves to be more equip, be well-versed and be ready to challenge existing knowledge to widen their know-how and expertise. This is in consonance with Urban, he asserts that quick perception and processing of information and data are presupposition for fluent, flexible and association thinking. This component highlights that fostering creativity is consistent with traditional school goals such as acquisition of knowledge and skills.

Focusing and task commitment

Table 10. *Extent of Utilizing Focusing and Task Commitment as Creative Teaching Practice*

<i>Focusing and Task Commitment</i>		<i>WM</i>	<i>VI</i>	<i>Rank</i>
1	The teacher teaches and encourages students to use GANTT chart.	2.46	ME	10
2	The teacher provides positive responses for students to analyze and discuss mistakes.	3.43	GE	7
3	The teacher writes personal notes of encouragement or concern on test papers and project papers offering support and guidance.	3.31	GE	9
4	The teacher maintains students' interest to do creative work by providing supportive responses and praises.	3.51	VGE	5
5	The teacher helps students believe in their own abilities by giving them the free hand in accomplishing their assignments and projects.	3.58	VGE	2
6	The teacher gives clear directions of the expected outcome by showing examples and telling them how it will be evaluated.	3.78	VGE	1
7	The teacher allots time for group planning and organizing ideas for group projects.	3.57	VGE	3
8	The teacher utilizes combination of instructional methods such as audiovisual presentations, debates, open forums and reflective discussions.	3.55	VGE	4
9	The teacher facilitates study groups and/or peer-tutoring.	3.38	GE	8
10	The teacher schedules students' consultation for help and guidance.	3.50	VGE	6
Composite Mean		3.41	GE	

Table 10 shows the extent of utilization of the items under focusing and task commitment, weighted mean and their respective rank.

The practice that teacher helps students believe in their own abilities by giving them the free hand in accomplishing their assignments and projects was utilized to a very great extent by the respondents. It was ranked second having a weighted mean of 3.58. Teachers are instrumental in building confidence and abilities of students through guidance and facilitation. They provide opportunities and venues to develop this aspect.

This supports Cropley claim saying that teachers should help students build self-efficacy. The main limitation on what students can do is what they think they can do. All students have the capacity to be creators and to experience the joy associated with making something new, but for it to be achieved teachers should provide them with strong base creativity.

Ranked third is the creative teaching practice that teacher allots time for group planning and organizing ideas for group projects. This practice has gained a weighted mean of 3.57 and was utilized to a very great extent. Immediacy is not imperative to creativity. Creativity

needs enough time in order to come up with novel and innovative outputs. The findings coincide with the claims of Cropley that teachers should allow time for creative thinking. Often, creativity requires time for incubation. Most creative insights do not happen in a rush. People need time to understand a problem and toss it around. It can be derived from the table that there were six creative teaching practices which were utilized to a very great extent, three items were utilized to great extent and one item was used to a moderate extent.

The teacher combines different instructional methods was utilized to a very great extent was ranked fourth with a weighted mean of 3.55. This shows that the respondent teachers vary their teaching methods to elevate student's interest and motivate them to be involved in their learning engagements. This supports Mayesky maintaining that being able to provide varying teaching methods is an indication that teachers learn to recognize students for their unique skills and different learning styles.

The practice of teachers of providing supportive responses and praises to their students was ranked fifth with a weighted mean of 3.51. The practice was utilized to a very great extent by the respondents. This indicates that teachers know the advantage effect of positive reinforcement which motivates students to work harder and excel in what they are doing. This sustains the idea of Sternberg based on his empirical studies, it has shown that giving supportive responses increase students focus and perseverance in every task they are required to do thereby, results to good performance and motivates students to produce novel outputs.

On rank sixth is the practice that teachers' schedule student's consultation to provide help and guidance with a weighted mean of 3.50 and was used to a very great extent. On the contrary, the practice that teachers provide positive responses for students to analyze and discuss mistakes was rank 7th having a weighted mean of 3.43 and was utilized by the respondents to a great extent. It can be inferred that teachers value their students by provide extra assistance and counselling. Providing extra time outside classroom reflects love and concern for their students thus, addressing needs that cannot be provided inside the classroom. This motivates students to work harder in class.

Teacher facilitates study groups and/or peer tutoring was ranked 8th obtaining a weighted mean of 3.38 while the practice that teachers afford personal notes of encouragement on test papers and projects has a weighted mean of 3.31 placing rank 9th. Both practices were utilized by the respondents to a great extent. It can be deduced that the teachers not just act as a teacher but also as a partner and friend in the learning process of their students. Their duties are not just confined in providing knowledge and skills but also looking after the student's welfare. This is part of the expansion work roles of teacher and multi-tasking. The caring behavior of teachers helped the students to be committed in their studies.

The practice that was utilized to a moderate extent by the respondents is that the teacher teaches and encourages students to use GANTT chart got the lowest weighted mean of 2.46 and ranked 10th. This was rated low by the respondents since they don't see the usefulness of the chart related to the academic discussions and activities. They see its usefulness in businesses and management projects.

Focusing and Task commitment obtained a composite mean of 3.41 which revealed that the respondents utilize it to a great extent in their creative teaching and learning activities. Teacher respondents use this practice to develop students 'persistence and commitment to accomplish tasks, assignments and projects. This was established by Urban, he described it as the acquisition of comprehensive and detailed area of specific knowledge and skills requires disciplined topic commitment and persistence on a high level. The problem in question and the connecting thematic field has to be kept in focus of attention over a longer period of time and with varying intensity. Concentration and selectivity are necessary for collecting, analyzing, evaluating, and elaborating information and data.

Motives and motivation

Table 11. *Extent of Utilizing Motives and Motivation as Creative Teaching Practice*

	<i>Motives and Motivation</i>	<i>WM</i>	<i>VI</i>	<i>Rank</i>
1	The teacher acknowledges and praises students for their creativity and creative works.	3.83	VGE	1
2	The teacher rewards participation to extracurricular activities such as extra credit in grade or points in assignments.	3.28	GE	10
3	The teacher shows enthusiasm by putting extra effort in making the lesson easier to understand by using concrete examples.	3.67	VGE	3.5
4	The teacher uses varying teaching methods in presenting the lesson/s.	3.66	VGE	5
5	The teacher provides varying motivational techniques like raising questions, self-created games and video presentation before starting the lesson.	3.60	VGE	8
6	The teacher provides constructive and timely feedback to acknowledge hard work while still encouraging them to strive to be better.	3.67	VGE	3.5
7	The teacher ensures use of eye contact, facial expressions, hand and body movements and appropriate voice tone during class discussions.	3.62	VGE	6.5
8	The teacher ensures to communicate expectations and give commendations when it is achieved.	3.69	VGE	2
9	The teacher facilitates friendly competition in the classroom through group games or group presentations.	3.62	VGE	6.5
10	The teacher gives academic incentives to students through exemption in taking long exams or submission of required project paper.	3.31	GE	9
Composite Mean		3.60	VGE	

Table 11 shows the extent of utilization of the items under focusing and task commitment, weighted mean and their respective rank. Table 11 presents that out of the ten practices under motives and motivation there were eight creative teaching practices that were utilized to a very great extent while two practices were utilized to a great extent.

Specifically, results revealed that under motives and motivation the highest weighted mean is 3.83 and ranked first is the creative teaching practice that teacher acknowledges and praises students for their creativity and creative works. This practice was utilized to a very great extent by the respondents. Teachers use this frequently because of its positive effect on students in motivating them to be active and be involved in their learning. Giving praises is a positive reinforcement which motivates students to work harder and excel in what they are doing. This confirms the analysis of Sternberg that teaching and learning methods that emphasize creativity have a beneficial effect on students' motivation. According to him, empirical studies have shown that giving positive feedbacks promotes good performance and motivates students to produce novel outputs.

Ranked second with a weighted mean of 3.69 is the creative teaching practice that the teacher ensures to communicate expectations and give commendations when it is achieved. This practice was utilized to a very great extent by the respondents. Teachers see to it that at the start of their classes they inform their students his/her expectations so that students will be able to adjust themselves in the class. Students need to know how they will be assessed or be evaluated by their teachers. Two-way communication is a must between the teacher and the student. This confirms the statement of Cropley that teacher should verbalize expected outputs and reward them for doing so. Use rewards particularly attractive to creative individuals like freedom to select future assignments.

With this method, Sternberg also claimed that it helps more creative students to capitalize on their strength and at the same time it helps the less creative children to compensate for or correct weaknesses. Contrary to this, Hennessey and Amabile maintained that telling students which activities they should engage in instead of letting them follow where their curiosity and passion lead, restricts active exploration and experimentation that might lead to creative discovery and production.

Sharing rank no. 3.5th with a weighted mean of 3.67 is the creative teaching practices that the teacher provides constructive and timely feedback to acknowledge hard work while still encouraging them to strive to be better and the teacher shows enthusiasm by putting extra effort in making the lesson easier to understand by using concrete examples. Respondents utilize this practice to a very great extent. Feedback and the effort exerted by the teachers to make lesson easier are important means to encourage students to be better and be involved in their own learning. This is in consonance to Sternberg's assertion that teachers should not just criticize but they should suggest new approaches. Teachers should praise students for generating many ideas regardless whether some are silly or unrelated, while encouraging them to identify and develop their best ideas into high-quality projects by imparting examples.

The teachers ranked fifth the practice that teachers use varying teaching methods in presenting the lessons. It is indicated by a weighted mean of 3.66 and was used to a very great extent by the respondents. This reveals that the respondent teacher's uses different teaching methods to elevate student's interest and motivate them to be involved in their learning engagements. This supports Mayesky's view that being able to provide varying teaching methods is an indication that teachers learn to recognize students for their unique skills and different learning styles.

The same weighted mean of 3.62 was given by the respondents on the practices that teacher ensures use of eye contact, facial expression and appropriate tone of voice and they facilitate friendly competition in the classroom. Both were utilized to a very great extent and were placed on rank 6.5th. This clearly indicates that the teachers use indirect communication with students as enumerated to make sure that they are in close association with their students and at the same time produces positive relationship between and among classmates. It also reflects the teacher's sincerity, integrity and comfort when communicating with student. Which is why having good eye contact while conversing is the indication that the communication has gone on well. This further establishes a harmonious relationship between teachers and students.

The use of varying motivational techniques before starting the lesson was ranked 8th by the teachers which obtained a weighted mean of 3.60 and was used to a very great extent. According to teachers, this method serves as their jumping board to their lessons. This helps the students to establish better understanding and make connections between concepts thereby challenging students to think creatively and critically.

Respondents rated the lowest the creative teaching practices that the teacher gives academic incentives to students through exemption in taking long exams or submission of required project paper and the practice that the teacher rewards participation to extracurricular activities such as extra credit in grade or points in assignments. They were both utilized to a great extent by the respondents. They ranked 9th and 10th respectively with a weighted mean of 3.31 and 3.28 respectively. These are the least practices that the respondents utilize to encourage motivation. As expressed by the respondents, students have the tendency to abuse this instead of giving priority to their classroom learning, they would focus on engaging more on extracurricular activities to get additional points. This coincides with Hennessey and Amabile, they agree to this assertion that excessive use of rewards like prizes and grades deprives a student of the intrinsic pleasure of creative activity related to their course. In situation, where only one person can come out on top, negates the process student progress at their own rates.

The extent of use of motives and motivation obtained a composite mean of 3.60 which revealed that the respondents utilize it to a very great extent in their creative teaching and learning activities. Awareness of motives and motivation has greatly influenced teachers'

facilitation of classroom teaching and learning activities. Processing, evaluating, acknowledging and appreciating students' output is part of the job teachers' play inside classroom. Conversely, Hennessey and Amabile emphasize the role of intrinsic motivation which emerges by the reaction of the individual to intrinsic traits of the task. Their research shows that relevance of social and contextual factors for creative productions which may become negatively influenced by external factors, like expectation of evaluation or even by reward or the lack of choice regarding own engagement. The need for novelty, curiosity, drive for exploration and knowledge is inborn to each child, but too often suppressed by parental or educational environment.

Openness and tolerance of ambiguity

Table 12. *Extent of Utilizing Openness and Tolerance of Ambiguity as Creative Teaching Practice*

<i>Openness and Tolerance of Ambiguity</i>	<i>WM</i>	<i>VI</i>	<i>Rank</i>
1. The teacher guides students to come up with a consensus and rewards efforts in this direction.	3.46	GE	5
2 The teacher asks students to listen to, think and understand about their classmates' opinions, and respect them even when they don't agree.	3.68	VGE	3
3 The teacher encourages students to think out of the box by not setting limitations in classroom tasks and projects.	3.72	VGE	1
4 The teacher allows students to use the trial-and-error method in testing hypotheses.	3.32	GE	8
5 The teacher encourages students to delay judgment during case study discussion until all possibilities have been considered.	2.60	GE	10
6 The teacher asks students to support and respect dissenting or nonconforming opinions or ways.	3.30	GE	9
7 The teacher motivates students' curiosity by asking questions that start with "why" and "Tell me more about that."	3.69	VGE	2
8 The teacher allows openness among students through open dialogues and discussions.	3.67	VGE	4
9 The teacher utilizes unconventional teaching methods such as debates, panel discussion, extemporaneous presentation and open forum.	3.41	GE	6
10 The teacher encourages risk- taking behaviors through cooperative learning activities.	3.39	GE	7
Composite Mean	3.42	GE	

Table 12 presents the extent of utilization of the items under openness and tolerance of ambiguity, weighted mean and their respective rank.

The table imparts that the top four practices under openness and tolerance of ambiguity were utilized to a very great extent while six practices were utilized to a great extent as assessed by the respondents' teachers. As explicitly rated by the respondents, the creative teaching practice under openness and tolerance of ambiguity which has the highest weighted mean of 3.72 and ranked first is that the teacher doesn't limit classroom tasks and projects by persuading students to think out of the box. This practice was utilized to a very great extent by the teachers. Teachers use this method because this creates the setting for students to look beyond their own viewpoint and circumstances of opening their minds to new ideas and different ways of doing things.

This finding acknowledges the assertions of Sternberg that this is the process of on-going social education where one can learn new things by allowing students to think outside the box. Further, Cropley explained that being creative means stepping outside the boxes that everybody has created for themselves to widen their perspectives and be open to other aspects.

The practice that was ranked second by the respondents with a weighted mean of 3.69 is that the teacher motivates students' curiosity by asking questions that start with why and tell me more about that. This was utilized by the respondents to a very great extent. Teacher respondents use this technique to encourage elaboration and explanation to encourage students to be open and to express themselves thereby exploring their feelings and views. This is in consonance to the idea of Cropley that this approach helps students become more aware of the relationship between textual information and prior knowledge and enable them to make appropriate decisions about which strategies to use as they seek answers to questions. These aid students for self-expression and exploration of feelings.

Respondents utilize the creative teaching practice of asking students to listen to, think and understand about their classmates' opinions, and respect them even when they don't agree to a very great extent. It was ranked third by the respondents with a weighted mean of 3.68. Respondents highly consider that creating an atmosphere of respect, openness and accepting environment where each student is free to experiment and take risks in order to grow, change and generate novel ideas. This finding corresponds to the idea of Cropley that individuals can broaden their perspective by learning to see the world from different point of view. Teachers should encourage their students to see the importance of understanding, respecting and responding to other people's point of view.

The respondents ranked fourth the practice that teachers allow open dialogues and discussions. It obtained a weighted mean of 3.67 and was utilized to a very great extent. It can be deduced that teachers wanted an atmosphere of openness inside the classroom. This is not to make discussions so stiff and limited but initiate a two-way communication. This coincides with Alexander's assertion that dialogue is most effective for the development of thinking skills: The argument is amply justified by research evidence -psychological, neurological, pedagogical, linguistic-which shows that talk of a genuinely dialogic kind is indispensable to the development of thinking and understanding. This implies that an opportunity for a discourse facilitates openness in communication between teachers and students.

A weighted mean of 3.46 was obtained with the practice that teacher guide students to come up with a consensus and reward efforts in this direction. It was ranked fifth and was utilized to a great extent. This shows that the teachers ensure that after a long discourse on the lesson, they would meet at a certain point of understanding considering all the points that was given by the students. Reconciling them facilitates acceptance and respect on others opinion.

Teachers utilize unconventional teaching methods was ranked sixth with a weighted mean of 3.41. Teachers utilize them to a great extent. It is asserted that teachers avoid routinely methods in teaching for this may lead to boredom. This is implemented to raise student's excitement and interest in the lesson. A teacher cited a quote by Albert Einstein which had been his guide in teaching. He said that the intuitive mind is a sacred gift and the rational mind is a faithful servant. This created a society that honors the servant and forgotten the gift. This explains that out of the box thinking teaching should not be taken for granted.

Ranked 7th is the creative teaching practice that the teacher encourages risk taking behaviors through cooperative learning activities. This practice was utilized to a great extent with a weighted mean of 3.39. Teachers fully understand that creative people take sensible risks and produce ideas that are novel that other ultimately admire and respect. Taking risks is easier if it will be done in groups because students work together as a team not only to learn the material but also help each other to succeed. This affirms the idea of Mamnoon that the first step towards instilling creativity in the classroom is to allow students to take risks. According to her, individuals are born with the ability to take risks, but they are educated of it. She compared it to a child learning how to walk. She says there is no way children would learn to walk if they didn't take risks. They fall a hundred times a day, yet they keep getting up and taking that chance.

The practice which teacher uses with regard to the trial-and-error method was ranked 8th by respondents. It indicated weighted mean of 3.32. On the other hand, the practice that teacher asks students to support and respect dissenting or nonconforming opinions and ways was ranked 9th with a weighted mean of 3.30. Both teaching practice was utilized to a great extent by the respondents. This indicated that teachers wanted their students to be open to alternatives and others' opinions. This is to widen their understanding and teaching them in reconciling their opinions with the others. This quest for learning provides the means to always be moving forward, to acquiring new knowledge and achieve new and exciting goals.

The practice which has the lowest weighted mean of 2.60 and ranked 10th is the creative teaching practice that the teacher encourages students to delay judgment during case study discussion until all possibilities have been considered. This practice was utilized by the respondents to a great extent. Teachers understand that delaying judgement permits the students to look for other possibilities and to explore for more information before finalizing all tasks or projects. This supports Mayesky's point that creating an environment where judgment is deferred and all ideas are respected, where discussion and debates are means of trying out ideas in nonthreatening atmosphere.

The same with Copley, he explained that teachers should teach students the importance of delaying gratification. It means that as part of being creative means being able to work on a project or task for a long time without immediate or interim rewards. Students must learn that rewards are not always immediate and that there are benefits to delaying gratification.

Openness and tolerance of ambiguity obtained a composite mean of 3.42 which revealed that the respondents utilize it to a great extent in their creative teaching and learning activities. Results clearly indicate that they use this practice not too often and sometimes they find difficulty of defying the norms of the majority. This is consistent with Urban's statement that this component tends to make creative idea to come in bits and pieces which develops overtime. The period in which the idea is developing tend to be uncomfortable. Without the ability to tolerate uncertainty, individuals jump into less-than-optimal solutions. An additional factor is the possibility to postpone quick solutions, to inhibit or stop quick execution of products and simply allow that less directed thinking is dominating by spreading pattern of activity.

Restraining Factors Encountered by Respondents

Table 13. Restraining Factors Encountered by the Respondents During the Creative Teaching Process (Multiple Response=584)

No.	Restraining Factors	Frequency	Percentage	Rank
1	Absence of feedback or post conference regarding performance by the immediate superior.	8	32	9
2	lack of motivation	18	72	4
3	lack of teaching experience	5	20	12
4	lack of support from the immediate superior	14	56	6
5	lack of training and exposure	4	16	13
6	work overload	22	88	2
7	inadequate time for preparing lessons	15	60	5
8	limited mentoring and coaching by immediate superiors	6	24	11
9	different learning styles and preferences of students	20	80	3
10	limited students' participation and cooperation	11	44	8
11	classroom is not conducive for creative activities (e.g. not well ventilated)	7	28	10
12	lack of resources (materials & equipment) to facilitate creative teaching activities	13	52	7
13	limited administrative support	3	12	14
14	insufficient class hours due to frequent class interruptions like pull outs, student activities	23	92	1

Table 13 displays the frequency, percentage and rank of the multiple responses of the restraining factors encountered by the teacher-respondents during the implementation of their creative teaching activities.

As shown in the table, of the 14 choices 23 or 92 percent teachers responded that the factor which restrained them from facilitating creative teaching is that there are insufficient class hours due to frequent class interruptions like pull outs and student-related activities. As shared by the respondents, this frequently happens in preparation for big institutional events and other departmental activities. The findings of the study are supported by the results of the study conducted by Jackson that at least half of teachers in most countries spend over 80% of their lesson time on teaching and learning.

However, one in four teachers in most countries lose at least 30 percent of their lesson time, and some lose more than half, through disruptions and administrative tasks.

Ranked second is work overload with 22 or 88 percent of the respondents considered it a restraining factor. Teaching profession is a challenging profession since one has to juggle around time to meet all the demands related to teaching assignments and the requirements of the position. In addition to that teachers assume many roles and they have to act on each role. With this, teachers' time for topic preparation and designing classroom activities is sacrificed. Teacher's overwork or work overload is, in part, a result of the expansion of teacher work roles and multi-tasking.

Different learning styles and preferences of students were considered by 20 or 80 percent of the teachers which ranked third among the fourteen choices. There is a vast and diverse learner in the school. It is a fact that each student is unique from others. With that, teachers find it difficult in some ways to match instructions to the different learning styles and preferences of students. Relative to this finding, Bartlett explained it that it is important that faculty know of the different learning styles and brain models of students to be able to adjust the teaching style and approach once students show signs of lack of understanding. It is as important for students to realize their learning styles to train themselves for better receiving of the information.

Lack of motivation was ranked fourth as chosen by 18 or 72 percent of the respondents. This implies that the respondents believe that motivation is extremely important in creativity because it drives an individual to persist at problem solving. This supports Runco's findings that creative potential is not fulfilled unless the individual (and his or her social support) is motivated to do so and creative solutions are not found unless the individual is motivated to apply his or her skills.

The restraining factor that was on ranked 13th is the lack of training and exposure as selected by 4 or 16 percent of the respondents. Conversely, teachers who receive training in creative methods and activities are more likely to show receptive attitude and behavior towards students' creativity. This affirms Hosseini and Watt's point that the professional development program influenced teachers 'capacity to apply new knowledge and skills within their classroom practices that facilitates the development of students' creativity.

Respondents included absence of feedback or post conference regarding performance by the immediate superior as a restraining factor and was ranked 19th with 8 or 32 percent of them picking it. Constructive feedback to teachers by immediate superiors is a vital ingredient in the mentoring process. Feedback allows teachers to reflect and improve teaching practices. This was established by Hosseini and Watt that the purpose of feedback is to provide suggestion on how to improve instruction, increase student learning and encourage teachers. Revisiting classrooms, seeing teachers in action and providing on-going feedback and support, mentors help classroom teachers grow professionally.

Ranked 12 of the fourteen restraining factors is the lack of teaching experience as identified by 5 or 20 percent of the teacher respondents. It can be extracted that a teacher who has more experience in the classroom is more effective because he/she has had extended time to test procedures and lessons on several cohorts of students. This trial and error have led the teachers to find the most effective techniques that she uses and perfects over time. So, it can be considered that experience and effectiveness are linear.

The restraining factor that was ranked the lowest by the respondents is the limited administrative support with 3 or 12 percent of the teacher-respondents chooses it. This implies that majority of the respondents feel that they are being supported by the administration since only a few chose it as a restraining factor. As administration relinquishes control to the teacher and shows trust, teachers become more creative and willing to take risks. School heads should allow teachers to have the freedom to be creative and supports them when take risks. Thus, classroom teachers will try out new approaches to instruction, provides more assistance to their students and be more flexible.

These various restraining factors are brought about by different situations or circumstances that happen due to the existing operations and demands of requirement of the school. This conforms to Jackson's assertion that these conditions affect the set up and schedules which are key elements that interplay surrounding the implementation of the creative teaching process of the teachers.

These situations or circumstances may be physical (classroom not conducive for creative activities, lack of resources, lack of motivation, work overload); institutional (limited administrative support, insufficient class hours due to frequent class interruptions), psychological (lack of motivation, limited students 'participation and cooperation, work overload, inadequate time for preparing lessons); cultural (different learning styles and student preferences) and professional (lack of teaching experience, absence of feedback or post conference, lack of training and exposure, limited mentoring and coaching by immediate superiors) in nature. The 14 restraining factors may fall in either one or two of the forms depending on the causative nature of the situation.

Conclusions

Teaching and self-efficacy beliefs, learning attitude and commitment, personal qualities, growing up experience influence teachers' creative teaching practices.

Creative teaching practices of divergent thinking and doing and motives and motivation are used to a very great extent while general knowledge and thinking base, focusing and task commitment and openness and tolerance to ambiguity are used to a great extent only.

Most frequent restraining factor encountered by the respondents during the creative teaching process is having insufficient class hours due to frequent class interruptions like pull outs and student related activities.

A proposed training and development program focused on enhancing the teacher's creative teaching practice is created and designed as an output of this study.

The following are the recommendations of the study:

The proposed training and development program for teachers may be subjected for further review for enhancement prior to its implementation.

Consultations with other stakeholders may be done to address problems on utilization of strategies and methods for enhancement with interests and needs of learners.

Similar studies may be conducted working on other criteria to determine the effectiveness of creative teaching.

References

- Adeyemi, B.A. (2008). Effects of cooperative learning and problem-solving strategies on junior secondary school students' achievement in social studies. *Journal of Research in Education Psychology*, 16(3), 691-708.
- Adler, S.A., & Sim, J.B.-Y. (2008). In D.L. Grossman & J. Tin-Yau Lo (Eds.), *Social education in Asia: Critical issues and multiple perspectives*, 138-163. Charlotte: Information Age Publishing.
- Adunola, O. (2011). The impact of teachers' teaching methods on the academic performance of primary school pupils in Ijebu-Ode Local Area of Ogun State. Ego Booster Books. Ogun State, Nigeria.
- Ahmad, F., & Aziz, J. (2009). Students' perceptions of the teachers' teaching of literature: Communicating and understanding through the eyes of the audience. *European Journal of Social Sciences*, 7(3), 17-39.
- Al-Hebaishi, S.M. (2012). Investigating the relationship between learning styles, strategies, and academic performance of Saudi English Majors. Taibah University. *International Interdisciplinary Journal of Education*, 1(8).
- Ali, R. (2010). Effect of using problem-solving method in teaching mathematics on the achievement of mathematics students. *Asian Social Science*, 6(2).
- Ameh, P.O., & Datani, Y.S. (2012). Effects of lecture and demonstration methods on the academic achievement of students in chemistry in Nasarawa Local Government Area of Kano State. *International Journal of Modern Social Sciences*.
- Ayeni, A.J. (2011). Teachers' professional development and quality assurance in Nigerian secondary schools. *World Journal of Education*, 1(2), 143-149.
- Boit, M., Njok, A., & Chang'ach, J.K. (2012). The influence of examination on stated curriculum goals. *American International Journal of Contemporary Research*, 2(2), 179-182.
- Brophy, J. (Ed.). (2001). *Subject-specific instructional methods and activities*. Oxford, UK: Elsevier Science Ltd.
- Bush, G. (2006). Learning about learning: From theories to trends. *Teacher Librarian*, 34(2), 14-19.
- Chang. (2010). Interactive teaching approach in year one university physics in Taiwan: Implementation and evaluation. *Asia-Pacific Forum on Science Learning and Teaching*, 3. Available at <http://www.ied.edu.hk/apfslt/v3issuel/changwj/index.htm>
- Chika, P.O. (2012). The extent of students' responses in the classroom. *International Journal of Academic Research in Business and Social Sciences*, 2(1), 22-37.
- Clark, J. (2009). What use is SoTL? Using the scholarship of teaching and learning to develop a curriculum for first-year university history classes. *Journal of University Teaching & Learning Practice*, 6(2). Retrieved from <http://ro.uow.edu.au/jutlp/vol6/iss2/3>
- Costa, M.B.C. (2014). Science and mathematics instructional strategies, teaching performance and academic achievement in selected secondary schools in Upland Cavite. Unpublished Master's Thesis. Cavite State University.
- Cummins. (2007). *Pedagogies for the poor: Realigning reading instruction for low-income students with scientifically based reading*

research. *Educational Researcher*, 36(9), 564-573.

Curtin, E. (2005). Instructional styles used by regular classroom teachers while teaching recently mainstreamed ESL students: Six urban middle school teachers in Texas share their experiences and perceptions. *Multicultural Education*, 12(4), 36-42.

Damodharan, V.S., & Rengarajan, V. (1999). Innovative methods of teaching. National Research Council Educational Journal Publication.

Dufresne, J.R., Gerace, J.W., Leonard, W.J., Mestre, J.P., & Wenk, L. (2010). Classroom talk: A classroom communication system for active learning. *Journal of Learning Sciences*, 7(2), 3-27.

Evasco, K.E. (2015). The integration of values in the teaching of social sciences. *International Journal of Education and Social Science*, 2(6), 22-31.

Fajemidagba, M., Salman, M., & Ayinla, O. (2012). Effect of teacher's instructional strategy pattern on senior secondary school students' performance in mathematics word problems in Ondo, Nigeria. *Journal of Education and Practice*, 3(7).

Froyd, J.E. (2007). Evidence for the efficacy of student-active learning pedagogies. Retrieved from <http://cte.tamu.edu/programs/flc.php> on 22/9/2012.

Gabalton, V. (2010). Doing history in the classroom: A student teacher's perspective and suggestions to improve preparation. *International Journal of Social Education*, 5(1), 7-18.

Ganyaupfu, E.M. (2013). Teaching methods and students' academic performance. *International Journal of Humanities and Social Science Invention*, 2(9), 29-35.

Greitzer, F.A. (2002). Cognitive approach to student-centered e-learning. 46th Annual Meeting of the Human Factors Society, Sept 30-Oct 4.

Hesson, M., & Shad, K.F. (2007). A student-centered learning model. *American Journal of Applied Sciences*, 628-636.

Hiebert, J., & Grouws, D.A. (2007). The effect of classroom mathematics teaching on students' learning. In F.K.J. Lester (Ed.), *Second Handbook of Research on Mathematics Teaching and Learning*.

Kimani, G.N., Kara, A.M., & Njagi, L.W. (2013). Teacher factors in influencing students' academic achievement in secondary schools in Kenya. *International Journal of Education and Research*, 1(3).

Minotti, J.L. (2005). Effects of learning style-based homework prescriptions on the achievement and attitudes of middle school students. *NASSP Bulletin*, 89(642).

Tebabal, A., & Kahssay, G. (2011). The effects of student-centered approach in improving students' graphical interpretation skills and conceptual understanding of kinematical motion. *Lat. Am. J. Phy. Edu*, 5(2), 374-381.

Yuzhi, W. (2003). Using problem-based learning and teaching analytical chemistry. *The China Papers*, July, 28-33.

Zeeb, M.S. (2004). Improving student success through matching learning and teaching styles.

Affiliations and Corresponding Information

Rosabel R. Pobre

Lipa City Colleges – Philippines

Dr. Decimo L. Espiritu

Lipa City Colleges – Philippines