

# **The Evidence-Informed Learning Cycle of Experiential Learning in the Core Subjects and its Relationship to Academic Performance of Grade 10 Students in Manila Ecclesiastical Province School Association (MaPSA), NCR**

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## **Abstract**

The aim of the study titled: The Evidence-Informed Experiential Learning Cycle in Building Knowledge and Skills in the Core Subjects and its Relationship to Student Academic Performance of Manila Ecclesiastical Province School Association (MAPSA) generally aims to review the evidence-informed experiential learning cycle as perceived by teacher-respondents teaching the core subjects: Math, Science and English in Grade 10 level of MAPSA) NCR. The primary objective of the study is to establish evidence of students' ability to build knowledge and skills through DepEd's learning competencies of the core subjects: Math, Science, and English in Grade 10 level. The basis of the study was the experiential learning theoretical model of David Kolb which advocates that the success of students' learning depends on the four elements of the experiential learning cycles namely: concrete experience (doing), reflective observation (reflection), abstract conceptualization (thinking), and active experimentation (application). Quantitative in nature, the study employed statistical tools such as weighted mean and Spearman Rank Correlation. The findings of the study revealed that the elements of experiential learning is evident in the core subjects, with active experimentation and reflective observation as the most evident. Concrete experience and abstract conceptualization on the other hand, are the least evident. The study likewise suggested that the academic performance rating of students in the core subjects is very satisfactory. The study also revealed that experiential learning is not correlated with the students' academic performance in the core subjects. As a result, the possibility of including experiential learning in the basic education curriculum can be considered, with the hope of providing effective teaching learning experience to both students and teachers.

**Keywords:** Abstract Conceptualization, active experimentation, concrete experience, Experiential Learning, reflective observation

## INTRODUCTION

The desire of various educational sectors to deliver quality education that will equip its learners to life-long learning skills have propelled numerous theorists and educators to introduce and test innovative teaching methodologies, strategies and frameworks that are dynamic, student-centered, engaging, and reflective in nature. Hence, concerted efforts among educational institutions to gauge and come up with tangible evidence that students indeed are learning through various learning frameworks have been designed, implemented, and assessed.

This study focuses on one of the teaching-learning strategies which highlights the learners' experience as the foundation of learning that will eventually promote more meaningful, relevant, and effective learning. The experiential learning is a student-centered approach where learners are given the opportunity to discover. The study generally aims to assess the effectiveness of experiential learning as implemented in the core subjects in Math, Science and English in Grade 10 level, junior high among Catholic schools of the Manila Ecclesiastical Province School Association (MAPSA) in the National Capital Region (NCR). The association is composed of seven (7) dioceses where Catholic schools are clustered and operated under the auspices of the Catholic Church, spearheaded by Catholic priest superintendents through the overall leadership of His Excellency, Archbishop Cardinal Antonio G. Tagle

The basis of effectiveness, using the theoretical model of David Kolb - centering on concrete experience, reflective observation, abstract conceptualization, and active experimentation, likewise is grounded on the competencies set by the Department of Education (DepEd) respective in the three core subjects as stipulated in the curriculum guide. The competencies indicate the minimum knowledge and skills that learners need to acquire and be equipped with and are expected to be attained within the school year. In this study, the learning competencies which are geared towards developing the students' ability to think critically, reflect on their acquired experience and apply to real-life situations which will eventually lead to life-long learning skills have been categorized based on each learning cycle of the experiential learning namely: concrete experience, reflective observation, abstract conceptualization, and active application.

Kolb's core of experiential learning is the expression of "*learning by doing.*" According to Kolb, this type of learning can be defined as "*the process whereby knowledge is created through the transformation of experience.*" Knowledge results from the combinations of grasping and transforming the experience. Learners, if they are to be effective, they need four different kinds of abilities—concrete

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[36] Sandoval, Ma. Teresa H.

experience abilities, reflective observation abilities, abstract conceptualization abilities and active experimentation abilities. That is, they must be able to involve themselves fully, openly, and without bias in new experiences. They must be able to reflect on and observe their experiences from many perspectives. They must be able to create concepts that integrate their observations into logically sound theories, and they must be able to use these theories to make decisions and solve problems” (Kolb, 1984).

In the experiential model, Kolb described two different ways of grasping experience. Concrete Experience and Abstract Conceptualization. He also identified two ways of transforming experience: Reflective Observation and Active Experimentation. These four modes of learning are often portrayed as a cycle. Kolb’s research shows mastering expertise is a continuous process of experience, reflection, conceptualization, and experimentation. These elements make up the experiential learning cycle which shows the relationship between each phase. The experiential learning cycle is the most widely recognized and used concept in Experiential Learning Theory (ELT) (Kolb, 2015; Kolb & Kolb, 2017). The first stage of experiential learning is concrete experience, or the “feeling stage”. This is when the person first connects with the material through experience. The learner encounters a new experience or reinterprets an existing experience. Also known as the ‘feeling’ stage, it begins with a student engaging in a hands-on learning activity for the first time. Here they are introduced to new information and an experience that is new to the learner. The setting for this activity is unrestricted and could take place inside or outside the classroom, on or off campus. The second component of the experiential learning cycle is reflective observation, or the “watching stage” which naturally occurs after having new experiences. The learner reflects on the new or reinterpreted experience. While reflective observation focuses on contemplating previous experiences and developing observations about these experiences, abstract conceptualization takes the reflective process a step further by focusing on channeling those observations into a set game plan or theoretical approach. Abstract conceptualization – the ‘thinking’ stage. This is when the real learning happens. Following the period of reflection, this is when a student conceptualizes the information that they experienced and discussed. The student then begins to think about the hands-on experience in a more personalized, theoretical way. This ‘thinking’ phase of learning is where students start to apply analytic skills to conceptualize the experience – posing questions and constructing meaning. This phase prepares them for future learning experiences, inside or outside the classroom. The learner comes up with a new idea, based on reflection.

The last and final of the cycle is active experimentation (doing). This fourth component of experiential learning deals with the process of testing existing ideas by creating new experiences. Hence, real-life experience applied. This is the 'doing' phase of learning where the development of abstract thinking helps students apply the lessons learned in real life situations. Students will experiment, problem-solve, and make decisions based on their personal theories and experience. An understanding of their own interpersonal skills also come into play across the broader aspects of life. Abstract Conceptualization (thinking) kind of people or learners try to break down given ideas or situations using logical reasoning and evaluate them and will be very rational and they will only act on the intellectual perspective of a situation. In the abstract conceptualization, the learner implements the new idea and monitors the results. This group of learners have great capability or skill to get things done by others by influencing people and they will also be ready to take risks to achieve what they need and will be dynamic.

The Philippine education likewise through the Department of Education (DepEd) has been exerting its effort to make learning more meaningful and relevant not only in terms of providing guidelines that will lead learners meet the minimum learning competencies and standards, but in assessment as well. DepEd advocates experiential learning in providing meaningful and relevant learning to the learners as shown in the learning competencies. The fact that Dep Ed has provided a grading system that gives a bigger weight to application to what they have learned is in itself an indication of experiential learning, especially that of the Kolb's four learning cycle, active experimentation, or application. Thus, assessment has been specifically designed for teachers' guidelines. Classroom assessment is a process of identifying, gathering, organizing, and interpreting quantitative and qualitative information about what learners know and can do. It is used to track learner progress in relation to learning standards and development of 21st-century skills provides bases for the profiling of student performance on the learning competencies and standards of the curriculum, promotes self-reflection and personal accountability among students about their own learning. DepEd is clear on its proposition that classroom assessment methods should be consistent with curriculum standards. It measures achievement of competencies by the learners.

## **OBJECTIVES OF THE STUDY**

The study sought four specific objectives which include first, the gathering of the teacher respondents' profile in terms of age, sex, teaching status, and

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[38] Sandoval, Ma. Teresa H.

highest educational attainment completed when they are grouped according to the core subject they are teaching namely: Math, Science and English. Secondly, it assesses the degree of evidence of elements of experiential learning cycle which include concrete experience (doing); reflective observation (reflection); abstract conceptualization (thinking); and experimentation (application) in building knowledge and skills of students in the core subjects. Third, the study determines the academic performance rating of students in the core subject and fourth, it sought to find out if there is a significant relationship between the evidence-informed four (4) elements of learning cycle of experiential learning in building relevant skills and knowledge and academic performance of Grade 10 students when grouped according to the teacher-respondents profile.

## **METHODOLOGY**

The study generally aimed to examine the teachers' assessment on the effectiveness of experiential learning to students' academic performance in the core subjects – Math, Science and English. The Quantitative method is employed. Teachers in the Junior High School, Grade 10 level teaching the core subjects namely: Math, Science and English in the member schools of the Manila Ecclesiastical Province School Association (MaPSA), National Capital Region (NCR) are the respondents of the study. Among the sixty-eight (68) MaPSA schools with Junior High School, forty-eight (48) schools were taken as samples in the study using the proportion or percentage method. From among the 108 total schools of Manila Ecclesiastical Province School Association (MaPSA) in the NCR, there are only 68 schools with junior high schools -which are the target respondents of the study. Using the proportion or percentage method, the seventy (70) percent total from each diocese was computed from where the desired number of respondents was derived. There are three (3) teacher respondents per school – one for each core subject in the forty-eight (48) schools totaling to one-hundred-forty-four (144) samples. The Frequency and Percentage distribution of the respondents was likewise employed.

The respondents included only those who are employed in member schools of the Manila Ecclesiastical Province School Association (MaPSA), National Capital Region, comprising seven (7) dioceses composed of Roman Catholic Archdiocese of Manila Educational System (RCAM-ES), MAPSA Antipolo., Diocese of Paranaque Parochial Schools (DOPPSA), Roman Catholic Bishop of Novaliches Educational System (RCBN ES), Kalookan Diocese Schools Association (KADSA), Diocese of Cubao Educational System (DOCES) and Pasig Diocesan Schools System (PADSS). The instrument used in this study is

a teacher-made questionnaire based on the curriculum guide mandated by the Department of Education (DepEd) in Math, Science and English. Questions in each assessment instrument are derived from the learning competencies, both of content and performance standards distinctive of each subject. The formulated question is likewise in congruence with the variables of the learning cycle based on the theoretical framework used in the study namely: concrete experience, reflective observation, abstract conceptualization, and active experimentation.

The instrument is composed of three (3) parts. The first section deals with the profile of the respondents. This is shown in terms of their gender, age, teaching status, and highest educational attainment completed. The second segment of the instrument focuses on the teachers' assessment of the effectiveness of experiential learning in each subject with regard the learning cycle which includes concrete experience (feeling), reflective observation (reflecting), abstract conceptualization (thinking), and active experimentation (doing). The third part includes the general academic performance rating of Grade 10 students in Math, Science and English, SY 2018-2019.

The instrument, using a five (5) rating scale of 5 (Extremely Evident), 4 (Very Evident), 3 (Moderately Evident) 2, (Slightly Evident) and 1 (Not at All Evident) gives a glimpse on how teachers assess the effectiveness of the experiential learning and its relation to the academic performance of their students. The Mean was obtained to describe the respondents' assessment of experiential learning with regard to concrete experience, reflective observation, abstract conceptualization, and active application in their respective subjects. Other statistical treatment used include weighted mean, frequency and percentage, and Spearman's rank coefficient of correlation.

## **RESULTS AND DISCUSSION**

Majority of the teachers teaching the core subjects: Math, Science and English in MaPSA were female, aged between 20-25 years old and were holding a permanent teaching status. The highest educational degree attained by the teachers is undergraduate degree.

In terms of evidence of experiential learning cycle elements in building knowledge and skills of students under concrete experience (doing), Math generated the highest weighted mean of 4.08 translated to "very evident" on the element "generate arithmetic and a geometric sequence." The lowest element with 3.73 or "evident" is associated to the element demonstrate understanding that the measure of position of a group of data can be determined by using quartile, decile

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[40] Sandoval, Ma. Teresa H.

and or percentile”, and “counting occurrences of an event and arrangements using the fundamental counting principle, permutations and combinations”. In relation to Reflective Observation, the highest weighted mean “stimulated with their own learning through feedback” garnered 4.0 translated to “very evident”. The lowest is linked to the element “utilize information learned in the subject as basis for reflection and acquiring reflection from the concepts learned” with a weighted mean of 3.71 or “very evident”. For Abstract Conceptualization (thinking), the highest weighted mean with 3.83 or “very evident” is connected to “building connections to establish relationship between concepts”. On the other hand, the lowest element with 3.60 weighted mean or “very evident” is identified with “show capacity to assess responsibility and show creativity in constructing meaning” in terms of active experimentation (application), the highest weighted mean of 3.92 or “very evident” was identified to the ability “actively participating to learning tasks that deal with real life problems”. The lowest on the other hand, garnering a weighted mean of 3.60 or “very evident” is identified with the element “use acquired learning and skills to solve problems encountered in daily life”. Generally, students’ learning in Math based on experiential learning is “very evident” with a general average weighted mean of 3.78. In terms of concrete experience (doing) in Science subject, the highest weighted mean of 4.33, or “extremely evident” has been associated to the competency “ability to work on concepts on ways to ensure disaster preparedness during earthquakes, tsunamis, and volcanic eruptions and suggest ways by which he/she can contribute to government efforts in reducing damage due to earthquakes, tsunamis, and volcanic eruptions” and “engagement in learning concepts in science intellectually, emotionally, socially and physically”. The lowest weighted mean with 3.88 weighted mean or “very evident” was identified with the competency understand structure of biomolecules which are made up of mostly limited number of elements, such as carbon, hydrogen, oxygen, and nitrogen” and “remember what they learn for a longer time than what they learnt in the traditional way”. In terms of reflective observation (thinking), the competency “exhibit the ability to show involvement to challenging situations while discovering” has the highest weighted mean of 4.29 or “extremely evident”. The lowest competency is identified with the competency “show ability to explore and examine their own values and to assume responsibility of their own learning” with weighted mean of 4.02 or “very evident”. In terms of abstract conceptualization (thinking), students exhibit the highest competency of “to show active involvement to challenging situations while discovering with the highest rating of 4.31 or “extremely evident”. The lowest on the other hand is associated with the element “show initiative in taking and making decisions” with 4.08 or “very evident”. In terms of active participation (application), the highest weighted mean is attributed to the competency “are able to become more responsible and health-conscious

individuals that advocate preservation of life” and “show ability to exhibit disaster preparedness during earthquakes, tsunamis, and volcanic eruptions” with 4.42 or “extremely evident”. The lowest competency was identified to the ability “to become analytical and logical in making predictions” with 4.08 translated to “very evident”. Generally, students’ learning in Science based on experiential learning is “very evident” with a general average weighted mean of 4.18. For English subject, the competency “students have to demonstrate competence in conveying information” yielded the highest weighted mean of 4.06 or “very evident”. The lowest weighted mean with 3.67 with “very evident” is associated to the competency “to explain the nature of shift in structure and meaning of a word or expression as used in a specific discipline, situation, or context”. In relation to reflective observation (reflection) the competency “to reflect on and observe their experiences” had the highest weighted mean of 4.25 or “extremely evident”. The lowest competency is the element “assume responsibility of their own learning” with 3.94 or “very evident”. In terms of abstract conceptualization (thinking), the highest weighted mean with 4.00 or “very evident” is linked to the competency “show active involvement in challenging situations”. The lowest is rated at 3.71 or “very evident” on the competency “to be self-reliant to the teacher, thereby promoting independent learning”. As to active experimentation (application), the highest weighted mean is associated with the competency “compose an argumentative essay or present a debate using affirmation/negation markers and appropriate prosodic features, stance, and behavior with a weighted mean of 4.83, translated to “extremely evident”, while the lowest is attributed to the competency “to organize an independent and systematic approach to critiquing an elected reading or viewing selection” with a weighted mean of 3.71 or “very evident”. Overall, students’ learning in English based on Experiential Learning is “very evident” with a general average weighted mean of 3.94.

The findings further show that among the elements of the learning cycle – those of reflective observation (reflection) and active experimentation (application) were the most evident elements in the students’ acquisition of knowledge and skills in the core subjects. On the other hand, the concrete experience (doing) and abstract conceptualization (thinking) were the least evident.



Table 1: Evidence of Experiential Learning in the Core Subjects

Core Subject	Doing	Reflection	Thinking			Verbal Interpretation
				Application	Weighted Mean	
<b>Math</b>	3.83	3.82	3.74	3.76	3.78	Very Evident
<b>Science</b>	4.09	4.14	4.19	4.28	4.18	Very Evident
<b>English</b>	3.88	4.01	3.86	3.99	3.94	Very Evident

The Students' Academic Performance Rating in the Core Subjects namely: Math, Science and English is 85.74, 86.32, and 89.70 respectively. Ratings are "Very Satisfactory" based on the existing grading system of the Philippines, as mandated by Department of Education Department Order 8, series of 2015. A grade of *Very Satisfactory* indicates that learners' performance exceeds expectations, and that all goals and targets were achieved above the established standards.

Teachers teaching Math considered the concrete experience (doing) element of experiential learning as the most evident element in the acquisition of students' knowledge and skills. This was followed by reflective observation (reflection). Abstract conceptualization (thinking) and active experimentation (application) were considered the least evident elements in experiential learning in Math. This goes to show that students' skill on the subject in terms of analysis and application would need to be enhanced as these are the critical skills needed in the 21<sup>st</sup> century learning. At the teachers' end an extensive training on pedagogy using evidence informed cycle of experiential learning specifically on learning techniques that will promote life-long learning skills to improve the teachers' ability to enrich abstract conceptualization (thinking), making learning more relevant and meaningful to the students. A skill on transforming learning outcomes to authentic application to real life situations for application to be more relevant as they see the importance of each learning to their own lives. Science teachers considered the first two elements of the learning cycle, active experimentation (application) and abstract conceptualization (thinking) to be the most evident indicators in the students' acquisition of knowledge and skills in science subject. Conversely, the elements - reflective observation (reflection) and concrete experience (doing) was the least evident. The result emphasizes the need to enrich students' ability to assess their own learning through reflection and

contemplation to develop the teachers' skills in reflective observation (reflection). This implies that the opportunity for reflection on how students learn and providing meaningful activities that will lead and motivate them to learn can be considered for better learning. Among the elements of the experiential learning cycle – those of reflective observation (reflection) and active experimentation (application) were the most evident elements in the students' acquisition of knowledge and skills in the English subject. On the other hand, the concrete experience (doing) and abstract conceptualization (thinking) were the least evident. Incorporating teaching techniques as part of the English teachers' professional development program specifically on the provision of meaningful and relevant experiences and activities to the students that will enhance concrete experience of students can make learning more meaningful. Students' ability to assess their own learning through reflection and contemplation to develop the teachers' skills in reflective observation (reflection) is likewise recommended.

A statistically insignificant correlation was found between the evidence-informed elements of experiential learning cycle and students' academic performance in the core subjects namely: Math, Science and English among Grade 10 students at Manila Ecclesiastical Province School Association, (MaPSA) NCR. This goes to show that teachers of the MAPSA have been diligent in carrying out their responsibility, specifically in terms of delivery of instruction using experiential learning in teaching the core subjects. Students' academic performance translated into numerical grades in this study is not the sole indicator of the teachers' ability in delivering a meaningful and authentic teaching learning experience specifically for basic education under the Manila Ecclesiastical Province School Association of the National Capital Region (NCR). While the traditional numerical grades are used by the majority of the school institutions to measure the students' academic performance, students' authentic learning in terms of the acquisition of knowledge and skills may also be assessed using the descriptive grading system, specifically the competency- based and standards-based assessment. Indicated below is the result showing the insignificant correlation between the evidenced-informed elements of experiential learning cycle and students' academic performance in Math, Science, and English as core subjects in the basic education of MaPSA.

**Spearman's Correlation: Relationship between Experiential Learning in terms of the Learning Cycle and Students' Academic Performance Rating in Math Subject**

LEARNING CYCLES	Performance Rating in Math			
	Correlation Coefficient	p-value	Decision	Remarks
Concrete Experience (Doing)	0.133	0.368	Retain Ho	Not Significant
Reflective Observation (Reflecting)	0.107	0.468	Retain Ho	Not Significant
Abstract Conceptualization (Thinking)	0.049	0.741	Retain Ho	Not Significant
Active Experimentation (Application)	0.148	0.315	Retain Ho	Not Significant

**Spearman's Correlation: Relationship between Experiential Learning in terms of the Learning Cycles and Students' Academic Performance Rating in Science Subject**

Experiential Learning	Performance Rating in Science			
	Correlation Coefficient	p-value	Decision	Remarks
Concrete Experience (Doing)	0.118	0.422	Retain Ho	Not Significant
Reflective Observation (Reflecting)	-0.041	0.784	Retain Ho	Not Significant
Abstract Conceptualization (Thinking)	0.023	0.875	Retain Ho	Not Significant
Active Experimentation (Application)	0.035	0.811	Retain Ho	Not Significant

**Spearman's Correlation: Relationship between the Evidence-Informed Experiential Learning and Students' Academic in English Subject**

Experiential Learning	Performance Rating in English			
	Correlation Coefficient	p-value	Decision	Remarks
Concrete Experience	0.070	0.638	Retain Ho	Not Significant
Reflective Observation (Reflecting)	0.139	0.346	Retain Ho	Not Significant
Abstract Conceptualization (Thinking)	0.145	0.327	Retain Ho	Not Significant
Active Experimentation (Application)	0.178	0.226	Retain Ho	Not Significant

## **CONCLUSIONS AND RECOMMENDATIONS**

Majority of the teachers teaching the core subjects – Math, Science, and English, Grade 10 level in Manila Ecclesiastical Province School Association (MaPSA) are female, aged twenty (20) to twenty-five (25) years old and with permanent teaching status. Most of the teachers teaching the core subjects are undergraduate, (Baccalaureate degree) in terms of highest education completed.

Over-all, Science subject has the highest indicator of evidence of experiential learning, followed by English subject, and Math as the least. Among the four (4) elements of the learning cycles of experiential learning, majority of the teacher respondents agreed that the provision of active experimentation (application) and reflective observation (reflection) were very much evident from their students based on the competencies across the core subjects, while those of concrete experience (doing) and abstract conceptualization (thinking) were assessed to be the least evident. In terms of the students' academic performance, the learners have achieved a very satisfactory performance across the core subjects.

There was no significant relationship found between the evidence-informed experiential learning in terms of the four (4) elements of learning cycle namely: concrete experience (doing), reflective observation (reflection), abstract conceptualization (thinking), and active experimentation (application) with the students' academic performance as perceived by teachers teaching the core subjects –Math, Science and English in the Grade 10 level.

The results and conclusions derived can enhance the teaching learning process with the following recommendations. The DepEd executives can consider the inclusion of experiential learning as one of the teaching pedagogies to classroom instruction to basic education (BED), in both public and private institutions in building the students' knowledge and skills. Second, the inclusion of experiential learning in building learners' knowledge and skills as one major topic for the in-service trainings of teachers in basic education institutions with the emphasis on the following concerns: Teaching techniques on the provision of meaningful and relevant experiences and activities to the students to enhance the teachers' skills in line with the provision of concrete experiences (doing), enriching students' ability to assess their own learning through reflection and contemplation to develop the teachers' skills in reflective observation (reflection), learning techniques that will promote life-long learning skills to improve the teachers' ability to enrich abstract conceptualization (thinking), making the learning more relevant to the students, and transforming students' learning output, making them

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[46] Sandoval, Ma. Teresa H.

more meaningful and authentic to enhance the teachers' skills in providing active experimentation (application) to their students.

Having deduced the benefit of experiential learning, such teaching pedagogy can likewise be incorporated in the basic education (BED) not only in the core subjects of Math, Science, and English but across subjects and grade levels as well. Administrators of MaPSA schools can provide the needed support for the teachers in terms of the needed skills and competencies in the provision of learning using experiential learning through relevant training and workshops. Each school can come up with a monitoring or evaluation scheme that will assess their students' acquisition of learning competencies and skills based on the DepEd's prescribed curriculum guide, on a quarterly visit. Thereby, ensuring that the minimum standards and learning competencies of what the students should know and perform, are delivered. A closer look at descriptive grading system using the competencies and standards to assess students' academic performance may likewise be considered.

For future researchers to explore the evidence, implementation and evaluation of students' academic performance based on the students' acquisition of knowledge and skills using experiential learning as a teaching-learning pedagogy.

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**Dr. Ma. Teresa H. Sandoval** earned her Bachelor in Secondary Education, Major in History Degree in St. Louis University Baguio City. Both her graduate and post-graduate studies in Educational Management were earned at the Polytechnic University of the Philippines (PUP), Sta. Mesa Manila in 2015 and 2019 respectively. Dr. Sandoval is the current Basic Education Principal (BED) of Immaculate Conception Cathedral School Inc. in Quezon City. She has been part of the Diocese of Educational System Inc., (DOCES) as an active member of the Teaching, Learning, and Assessment (TLA) group. Having introduced several academic innovations in the school, Dr. Sandoval has likewise spearheaded various academic research that became bases for curricular improvement. True to her commitment to be part of the classroom, she continues to teach in the Junior High School Level, training, and coaching teachers as she manages to oversee the curriculum and instruction of the school.