

# Perception on Lesson Study of Junior High School Teachers in the New Normal Education

Joel C. Canceran

Manuel Roxas High School  
Quezon City, Philippines  
joelcanceran35@gmail.com

**Abstract:** *The author-initiated lesson study with twelve teachers consisting of four from the Science department, four from English department and four from math department at Manuel Roxas High School. The implementation of Lesson Study during the school year 2021-2022 involves four stages: planning, lesson implementation, discussion, and reflection. This presentation discusses the results of a survey and interviews conducted to determine the perception of the 12 teachers involved in lesson study as well as to inform planning of future school-based professional development programs. The survey questionnaire was made by the researcher and was validated. The survey questionnaire included issues regarding the degree of information received by the teachers about lesson study, the extent of the implementation, benefits gained from lesson study, difficulties encountered and recommendation of lesson study to other teachers. The survey and interview results showed that teachers who have played a vital role in the implementation are well informed about lesson study. The survey showed that the basic steps in the implementations were accomplished and worked favorably. The maximum benefit of the Lesson Study Program is yet to be achieved but positive signs are encouraging. The teachers are committed to work together to ensure that the program is sustained. Teachers having encountered difficulties on more work and no common vacant time for the observation of lesson implementation and lack of familiarity with the Lesson Study during the preliminary implementation.*

**Keywords—** *lesson study, planning, lesson implementation, discussion and reflection, collaboration, professional development, Manuel A. Roxas High School*

## 1. INTRODUCTION

### 1.1. Research Background

Pandemic has brought changes in the education sector which gave birth to a new normal of education (Childhope, 2021) in the global arena. To deliver effective instructions, teachers should be well-inclined and must possess the competence in the teaching profession.

Teaching is an art, and is the oldest and noblest (Assignment point, 2022) profession among others in the world. A teacher engaged in this occupation needs creativity, resourcefulness, and patience to be able to meet the students' needs at a certain point of the teaching-learning situation. On the other hand, students' behavior towards learning is a crucial factor in achieving high performance in the different learning areas. Thus, improving students' academic achievement has remained a challenge to educators safeguarding the development of an equitable, inclusive, and quality education that stimulates lifelong learning opportunities for learners (Sanchez and Ruiz, 2020).

Looking at the nutshell, reports on Filipino students show that they lagged behind other countries in the international assessment for mathematics and Science based on the Trends in International Mathematics and Science Study 2019 (TIMSS). Results revealed that the Philippines gained a significantly lower scores-297 in mathematics and 249 in Science than any other participating country. The

country also scored the lowest among all 58 participating countries for both tests (Magsambol, 2020).

Whereas in Science, authorities say that 13% of Filipino students were on the low benchmark tantamount to having limited understanding of scientific concepts and lack knowledge on foundational Science while the remaining 87% did not even reach any level.

This prevents all parts of the brain from becoming depleted, allowing information to be kept and maintained. Brain breaks are deliberate learning shifts that allow the brain to rejuvenate itself. It's a chance to reestablish the flow of traffic, or in this case, information, in order to reach its ultimate destination.

Meanwhile, it has been observed that for the last school year, 2020-2021, students in Manuel Roxas High School have a low achievement across learning areas. To troubleshoot the continues decline of education, school authorities targeted programs to bring all children and youth back in school where they can access tailored services to meet their learning, health, psychosocial well-being, and other needs, conducted effective remedial learning to help students catch up on lost learning, and showed support for teachers to address learning losses and incorporate digital technology into their teaching.

Considering the situation above, the researcher opted to address the frustrating result in academic performance of the students across learning areas. In this context, the researcher thought of an out of the box strategy to address the problem using a Lesson Study as a tool for Teachers Professional

Development vis-a-viz response to the need to elevate students' performance.

According to Baba (2007), Lesson Study refers to a process in which teachers progressively strive to improve their teaching methods by working with other teachers to examine and critique one another's teaching techniques. Another study by Yoshida, describes Lesson Study as a form of long-term teacher-led professional learning developed in Japan where teachers work collaboratively and systematically to conduct research on teaching and learning processes in the classroom with one goal in mind to enrich and improve students' learning experiences and teaching methods

Moreover, as Lawrence and Chong (2010) emphasized, Lesson Study provides numerous opportunities to help teachers develop and shape the skills of critical thinking and good questioning. related success metrics is an important area of study (Draus, Curran and Trempus, 2014).

## 1.2. Research Objectives

This study aimed to find out the perception of teachers involved in the implementation of lesson study. Specifically it sought to answer the following questions:

1. How sufficient is the information received by the teachers about lesson Study in terms of ?
2. What is the extent of implementation of the lesson study process done by the teachers?
3. What are the benefits gained by the teachers about lesson study?
4. What are the difficulties encountered by the teachers in the implementation of lesson study?
5. What are the recommendations of teachers involved in the implementation of lesson study to other teachers?

## 2. METHODOLOGIES AND RESEARCH DESIGN

### 2.1 Sampling

The respondents of the study were the 12 teachers consisting of four teachers from the Science department, four teachers from the Math department, and four teachers from the English department in Manuel Roxas High School. They were chosen on purposive sampling technique.

### 2.2 Data Collection

The research approach employed was descriptive. It described the perceptions of Science, Math and English teachers involved in the implementation of lesson study. This study employed multiple methods of data collections such as written survey questionnaires, interviews, and document analysis. This research engaged the researcher in their natural setting, the school campus, where the lesson study took place.

The researcher adapted and modified the questionnaire from the Lesson study: Planning Together, Learning Together by Ulep, S.A. Punzalan, A.E., Reyes, R.L., & Ferido, M.B. (2013) and was validated by one of the

Science education specialists from UP NISMED. The questionnaire was divided into two sections and had ten items which used Likert-type items. Five items addressed teachers' perception in the degree of information received by Science teachers about lesson study. This followed by another five items collecting data on the extent of the implementation in the lesson study process. For each statement, teachers were asked to rate based on their perception on a 4-point scale which are (1) strongly agree, (2) agree, (3) disagree and (4) strongly disagree.

The researcher prepared an interview questionnaire used to conduct an interview to obtain information that cannot be readily observed such as feelings, thoughts, and intentions. For the interview, four questions were prepared including relevant probes to be used if necessary. The structured interviews used a series of three open-ended questions focusing on teachers' perceptions on the benefits gained from lesson study and difficulties encountered in the implementation of lesson study.

## 2.3 DATA ANALYSIS

The data gathered from the questionnaire was tallied, tabulated, and subjected to statistical treatment to formulate consistency and understanding of the data. The following statistical tools were employed in the study:

**2. Weighted Mean.** The weighted mean score will be obtained using this formula:

$$X = \frac{EX}{n}$$

where X = mean

EX= sum of score

n = number of cases

The questionnaire consists of ten statements wherein the respondents will check four options in each item which they think represent their own perceptions in the lesson study implementation. The following scale was used in the study: 4 Strong Agree; 3 Agree; 2 Strongly Disagree; and 1 Disagree.

3. **Frequency and the percentage** are used for counting the responses on questions number 3, 4, and 5.

## 3. DISCUSSION OF RESULTS AND REFLECTION

*1. How sufficient is the information received by the Science, Math and English teachers about lesson study?*

**Table 1: Degree of Information Received by Science, Math and English Teachers about Lesson Study**

INDICATORS	Mean	Verbal Interpretation
1. I understand the concept of Lesson Study.	3.83	Strongly Agree
2. Aware of Lesson Study goals and objectives.	3.83	Strongly Agree
3. Understood benefits of Lesson Study to instructional tasks	3.83	Strongly Agree
4. Learned the process of implementing Lesson Study.	3.58	Strongly Agree
5. Develop proper conviction toward the program.	3.75	Strongly Agree

Note- 4 Strongly Agree (3.1-4.0); 3 Agree (2.1-3.0); 2 Strong Disagree (1.1-2.0); 1 Disagree (0.1-1)

Probing the degree of information acquired by the Science, Math and English teachers about Lesson Study, Table 1 provides clear assertion on the query. Respondents confirmed understanding the benefits of lesson study to instructional tasks; they claimed to have acquired substantial information about the concept of lesson study; and were aware of lesson study goals and objectives; whose weighted averages were 3.83, and 3.75 in that order.

Though the table reflects relatively high weighted average on indicators 4 and 5, the truth indicates that Science teachers should further learn the process of the implementation of lesson study, in the same way; they need to further develop their personal commitment to the program.

## 2. What extent is the implementation of the lesson study process done by the teachers?

**Table 2: Extent of the Implementation in the Lesson Study Process**

Extent of the Implementation	Mean	Verbal Interpretation
1. Planned and designed a collaborative lesson plan.	3.83	Strongly Agree
2. Implemented a lesson in the class and documented observations on lesson implementation.	3.92	Strongly Agree
3. Discussed the pieces of evidence gathered during the lesson implementation and used them to improve the lesson.	3.83	Strongly Agree
4. Taught the revised lesson plan and studied the lesson again to further improve it.	3.75	Strongly Agree
5. Shared reflections on the improvement of	3.83	Strongly Agree

lesson plans.

Note- 4 Strongly Agree (3.1-4.0); 3 Agree (2.1-3.0); 2 Strong Disagree (1.1-2.0); 1 Disagree (0.1-1)

Respondents clearly implied that they planned and designed a collaborative lesson plan; they implemented the lesson in the class and documented observations on lesson implementation; they confirmed discussing the pieces of evidence gathered during the lesson implementation and used them to improve the lesson; they affirmed that teaching the revised lesson plan and studying the lesson to further improve it. Lastly, they shared reflections on the improvement of lesson plans.

## 3. What are the benefits gained by the Science teachers about lesson study?

**Table 3: Benefits Gained from Lesson Study**

Benefits gained	f	Percentage
Reflecting and evaluating	2	11
Improvement of teaching and learning process	7	28
Collaboration	3	16
Innovation	1	6
Teamwork	2	11
Improved lesson plan	1	6
Improvement of lesson	1	6
Help personal improvement and professional growth	1	6
Total	18	100

Realizing the essence of collaboration and collegiality led to the enthusiastic participation of each member which, in turn, uncovered the benefits that were not apparent during the first cycle of the lesson study. It became clearer what lesson study also offered for the teachers. They recognized several benefits pertaining to their professional growth, such as: (a) pedagogical knowledge, (b) content knowledge, and (c) striving for excellence. This section expounds on these teacher-recognized benefits from the lesson study sessions which are shown in Table 3.

Three themes were created using Lesson Study which includes Pedagogical Knowledge. The teachers in this study indicated that their pedagogical knowledge has increased because of participating in the Lesson Study Process. Specifically, they indicated that their ability to plan lessons more effectively increased by planning lessons better

situated within the compressive curriculum, by learning more effective ways of planning with the use of manipulative skills in their classrooms, by planning lessons which are relevant to their students 'daily lives thereby increasing their interest in the subject. Teachers also reported that the collaborative aspect of the Lesson Study Process increased their pedagogical knowledge as they planned lessons with other teachers. These teachers included the importance of collaborating with teachers between and other grade levels to best enhance their learning and student achievement. (Teacher 1, 4, 6, 7, 9, 10 & 11)

Meyer (2006) found that teachers felt that their pedagogical knowledge improved because of increased self-reflection, planning, and collaboration inherent in the Lesson Study Process. Sitton (2006) concluded that the teachers in her study were pleased with the effectiveness that Lesson Study has as a form of teacher professional development. Finally, Mitcheltree (2006) reported that the teachers in her study believed that their pedagogical knowledge was increasing because of better planning, assessment, and collaboration.

Second theme that was created is content knowledge. Through lesson study, teachers became aware that they must continue to master their subject matter to correctly address the needs of their students. They must be equipped with the correct information so that, in return, they could share it to their students. Usually, students have some misconceptions about the lessons discussed in the classroom. In this case, it is the role of the teacher to correct those misconceptions and to give their students correct information. It became a habit for the teachers to check if all the information in the lesson were correct before delivering them to the class. Research participants in this study indicated that they have gained a deeper understanding of Science content by learning new methods of working problems and that through working with teachers from their own and other grade levels, their confidence in their knowledge of Science has increased (T2, T8)

This is like the findings of research done by Meyer (2006) that two out of three case studies conducted found that the middle school teachers believed that their content knowledge increased from collaborating with other teachers participating in the Lesson Study Process.

The third theme which was created is striving for excellence. Untiring passion and dedication to teach are some qualities of a good teacher. It is worth noting that the teachers of the lesson study group possess these qualities. All of them were not content with just teaching the subject area but they kept on seeking the latest trends on Science teaching and learning outcomes. They were open to adopting new teaching strategies for the improvement of education (Teacher 5).

**4. What are the difficulties encountered in the implementation of lesson study?**

Challenges encountered	F	Percentage
More work and no common vacant time for the observation of lesson implementation	5	83.33
Lack of familiarity with the Lesson Study process	1	1.67
Total	6	100%

Part of what lesson study requires from the teachers was to devote some time for it. In case of the teachers involved in the implementation of lesson study, the agreed time was before the regulars' working hours. However, this also meant that they must render more hours with no additional compensation. They felt like they were being burdened with so many things to do and think about. Moreover, their personal schedules were affected. This was a big adjustment on their normal routine. In addition to this, no common time to observe their colleagues since teachers were required to observe the lesson implementation by other teachers. As a result, they must leave their class with activity. Being so they initially are reluctant to participate in the lesson study (Teacher 2,4, 8 and 9).

Through continuous informal discussions, meetings, the teachers were oriented about the process of the lesson study, which is to work together to think of ways of improving students' achievement. There were still questions that bothered them (Teacher 12). Feeling intimidated, the teachers left these questions unexpressed, consequently affecting their extent of participation. Their desire to contribute seemed to be outweighed by the anxiety to express their concerns. In effect, they decided to be mere followers which was in great contrast to what the lesson study expected them to be-collaborators. Thus, being unfamiliar with the lesson study process served as another challenge that almost hindered its employment and success.

**5. What are the recommendations of teachers involved in the implementation of lesson study to other teachers?**

Respondents having the desire to recommend lesson study to other teachers claimed that lesson study helps them in the development of content and pedagogical knowledge, teaching strategies, lesson planning, striving for excellence, and enhancing collaboration among teachers. (Teacher 1-12).

**4. DISSEMINATION AND ADVOCACY**

The researcher plans to implement the Lesson Study for the School Year 2022-2023 in Manuel Roxas High School through In-Service Trainings (INSET) and Learning Action Cell (LAC) sessions in all subject areas. Specifically, revisiting Lesson Study through a mini-seminar workshop on the topics of formulating goal, process of Lesson Study, and

writing on Lesson Study, forming a Lesson Study group per level. Identifying lessons based on the least mastered skills per quarter and per level.

Implementation Lesson Study process per level thru a) Formulating goal b) Planning a research collaborative lesson c) Implementation of the collaborative/research lesson d) post-Lesson reflection and discussion e) Revision of the collaborative/research plan (2nd version).

Also evaluate students' performance based on the result of their quizzes, long test, and Periodical Test through checking of papers, item analysis and comparing results. Consolidation and compilation of collaborative final revised lesson plans per topic and per quarter from Grade 7 to Grade 12 containing all the strategies, approaches, and insights of teachers. The final revised and systematically developed lesson plan will be the product which can be published or shared to all teachers.

Continuous monitoring and evaluation of the progress on the implementation of the Lesson Study Program will be conducted to ensure the success implementation of the program. Sharing of this research in the Division wide seminars can be implemented across disciplines with the full support of the Superintendent, Assistant Superintendent, Subject Supervisors and Principals to generate wide-ranging promising results.

The researcher also intends to present in the various conferences specifically in national and international conference to underline the advantage of using Lesson Study as a tool for professional development of teacher

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