

Learning Performance During COVID-19 Pandemic and Limited Face-to-Face Learning Modality

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Abstract- *The performance level of learners upon comparison of the aforementioned School Year 2022-2023 attained a higher performance level of 85.5 as compared to 82.80 for SY 2021-2022. It is worth noting that Filipino (86.00) surpassed Araling Panlipunan (84.50) for the SY 2022-2023 since Araling Panlipunan (84.75) in SY 2021-2022 ranked first against Filipino (84.25) total enumeration of 562 learners were assessed to determine their performance level. In terms of the domains that affect their learning performance, the Home-related domain (2.83) was the least domain that needs an intervention. A Handbook entitled “Tulong Dunong” was developed to guide parents on how they could be effective school partners in attaining higher performance levels of learners. A significant difference was established when comparing the learning performance during the pandemic and limited face-to-face learning modality with a t-value of 4.679 which is higher than the tabulated value of .00946 at a 5% level of significance.*

Indexed Terms- *Learning Performance, COVID-19 Pandemic, Limited Face-to-face Learning Modality*

I. INTRODUCTION

All levels of the educational system have been affected by the COVID-19 pandemic. Educational institutions have implemented localized closures in all public and private schools ever since the pandemic began. Schools have shifted away from face-to-face instruction in favor of using various technologies to provide synchronous and asynchronous communication between students and teachers. Numerous resources have been used, including social networks, educational platforms, and programs such as instant messaging and video conferencing (UNESCO, 2020).

In compliance with its legal mandate, DepEd has promulgated issues on flexible learning and materials, specifically, Order No. 21 of the DepEd, s. 2019 or the K–12 Basic Education Program Policy Guideline. It set forth Flexible Learning Options (FLOs), which include alternative delivery modes and corresponding learning resources that are responsive to learners’ needs, context, circumstances, and diversity. The Bureau of Curriculum Development ensures that educational standards are up to date and modified to address COVID-19’s complicated, disruptive, volatile, and ambiguous consequences, particularly in the area of basic education.

Based on the aforementioned tenet, the Department published the Most Essential Learning Competencies (MELCs), which field implementers applied across the country for SY 2020–2021. In addition to addressing the immediate issues posed by the pandemic, the Department’s long-term strategy for constructing resilient education systems, particularly during emergencies, includes the publication of the MELCs. The MELCs serve as one of the resources that instructors can employ as they meet the educational needs of students while ensuring that curriculum standards are kept and met, rather than reducing the criteria outlined in the comprehensive k–12 curriculum guidelines. (Most Essential Learning Competencies (MELCS) 2020 Guideline).

Depending on the COVID-19 limitations and the specific context of the students in the school or locality, schools adopted a combination of the following learning delivery modalities for the school year 2021–2022: traditional face-to-face learning, distance learning, blended learning, and homeschooling. In response to the president’s acceptance of the plan and the Interagency Task Force for Emerging and Infectious Diseases (IATF-EID)

modified alert level classifications, DepEd developed guidelines for the gradual expansion of face-to-face classes. The objectives of the recommendations are to ensure that face-to-face lessons are implemented in an effective, efficient, and safe manner in schools and to provide guidance on their methods and standards. (DepEd Order No. 17, s.2022).

DepEd has committed to resuming 5 days of in-person instruction for the 2022–2023 academic year and has therefore produced recommendations on the school calendar and extracurricular activities in conformity with that promise. On October 31, 2022, DepEd specified the alternatives of 5 days of in-person instruction, blended learning, and full remote learning. By November 2, 2022, all public and private schools must have switched to a five-day school week. Just schools using alternative delivery methods are permitted to use just blended or remote learning. (DepEd Order No. 34, s. 2022).

Although classes have not been interrupted, the researcher found motivation and interest to investigate how the contingency period has affected the learning performance of the learners during the pandemic (SY 2020-2021) and limited face-to-face learning modality (SY 2022-2023). The researcher would like to assess the level of performance during these periods and determine the domains affecting the learning performance to come up with an intervention that would address the gaps to increase learning performance. This study aimed to assess the learning performance of the learners during the COVID-19 pandemic and limited face-to-face learning modality for the 1st quarter of SY 2021-22 and SY 2022-23.

Research Questions

1. What is the performance level of the learners in core learning areas:
 - a. English;
 - b. Filipino;
 - c. Science;
 - d. Mathematics; and
 - e. Araling Panlipunan?
2. What is the perception of respondents on different domains that affect learning performance in terms of:
 - a. Personal Domain,
 - b. Home-Related Domain

- c. School-Related Domain, and
- d. Teacher-Related Domain?

3. Is there a significant difference in the learning performance during the COVID-19 pandemic and limited face-to-face modality?

4. What intervention can be developed to address the gaps in the learning performance of the respondents?

II. REVIEW OF RELATED LITERATURE

The engagement of parents, technology use, mental health, learner attitude and motivation, and teacher factor all have an impact on how well students learn during COVID-19 and face-to-face modality. Effective at-home learning strategies involve the cooperation of parents and other family members. Parent involvement and partnership are crucial.

The mentioned investigations were comparable to the current study in that it was found that parents and other home-based learning partners could not realistically be expected to give one-on-one support to encourage, engage, instruct, and supervise learning and academic work. Learners who are houseless or reside in communal areas lack the kinds of assistance required to effectively engage in online education.

Hamilton (2020), Deschene (2020), Dhawan (2020), and Perez (2021) cited that in pandemic situations, the capacity to use technology to instruct students remotely has proved crucial. It was widely reported in the media that there was a dearth of experience in teaching in a virtual setting, but during the pandemic, demand for these learning models rose. For many families, having access to modern technologies has been a major problem. Many families have struggled with access to modern tools. (Internet Society, 2019, p.7). Even though improvements in educational technology over the past few years were extremely helpful during this pandemic, teachers, students, parents, and other relevant educators confronted numerous difficulties that they were unprepared to handle. With access to technology, families may successfully navigate services, jobs, education, learning, and social networks for children (Canadian School Boards Association 2020). According to the current research, teachers who lack the necessary

skills to instruct using this type of technology must exert more effort while employing modular learning.

It was mentioned by Sick Kids (2021) that being physically present to the physicians and mental health professionals at school is important. Likewise, Hasan (2020) found out that failure to access technology or the internet, the inability of educational institutions to adopt this modality, and the worry that the school year will be lost have all been reported to generate a significant level of anxiety and tension in students. Aucejo (2020) and Garris (2020) also found that student performance strongly relates to the student's psychological welfare. The psychological health of the kids is closely related to their academic achievement. The current study also held that one of the crucial elements influencing how well students learn is their mental health. For teaching and learning during the COVID-19 pandemic, the usage of online platforms like Google Classroom, Zoom, virtual learning environments, social media, and various group forums are researched and tried, however, for some, it may not be helpful.

There were several factors identified aside from the above-mentioned, the study of Langat (2018) revealed that the most important elements influencing students' academic achievement are their interest in a subject, regular study habits, attendance in class, self-motivation, and attitude toward learning. It also entails that, all else being equal, if a student has a favorable attitude toward these circumstances, their academic achievement will improve. In the analysis of Adelantado-Renau (2019), several factors negatively affect the performance of the learners. Excessive internet use, depressed symptoms, a negative attitude toward the subject being studied, a lack of effective study techniques, a high level of anxiety, and other outside factors. However, the factors influencing learning performance in the current study may not be the same as those mentioned by other researchers.

Teacher factor is also one of the factors to be considered, Kara et al., (2018) mentioned that instructors' experience, age, gender, and professional credentials did not have a statistically significant association with students' academic success, according to research on the factors affecting instructors' academic achievement. However, they discovered that

there was a substantial correlation between students' academic achievement and performance goals, curriculum completion, paying attention to weak pupils, assignments, student evaluations, and teacher workload. Correspondingly, Rice and Deschaine (2020) believed that teachers need to create skills for forming relationships with students and catering to their social, emotional, and intellectual needs in addition to having technology expertise. As stated by Doucel (2020), because instructors, parents, and children have comparable experiences, there are unparalleled opportunities for collaboration, imaginative solutions, and a willingness to learn from others and try new techniques.

According to the current study, the teaching aspect is merely one of the factors influencing how well students learn. The current study, however, thought that there were other dimensions influencing learning performance. Janssen (2018) and Sintema (2020) discovered that students' attitudes regarding their learning had a strong association with academic success. It was discovered that academic achievement and students' attitudes about their learning have a statistically significant link. However, because they require little supervision and assistance, naturally driven learners are relatively unaffected in their learning, whereas pupils who are weak in learning are part of a susceptible group and struggle. To provide a thorough analysis and establish the relationship linking attitude to learning performance, the current study conducted interviews and focus groups.

The studies of Chadwick and McLoughlin (2020) emphasized learning loss, which confirms that kids were not learning while their schools were closed or when they were participating in distance learning. They held the opinion that academic achievement was the only true measure of learning. This study is comparable to the current study in that there is a significant likelihood that learning performance decreased because students prefer in-person classes. Additionally, learners demonstrated unfavorable views and low motivation toward modular remote education. However, not all students exhibit a decline in their learning performance. Contrary to the above-mentioned study and the present study, Deslades-Martineau (2020) cited that in light of recent research on the effects of COVID-19 on academic

performance, it is vital to avoid focusing too much on learning loss.

Other detrimental effects of the COVID-19 Pandemic were discovered in these studies: Gustafsson (2021) and UNESCO (2021) reported that the health crisis is soon becoming a child rights catastrophe, as access to quality schooling is hampered or just unavailable to many children around the world. Likewise, for students who live and learn in vulnerable situations, there may be an increase in absenteeism, low literacy, math performance, long-term educational disengagement, drop-out, and lifelong losses in educational and vocational accomplishment (Andrabi, 2020). Gordon, Goldstein, Heyne, Aucejo (2020), and Chadwick and McLoughlin (2021) stressed that vulnerable students' learning or academic performance is determined by how well they are supported and resourced during and after the pandemic.

Furthermore, regardless of learning mode, student absence and disengagement have increased in several jurisdictions during the pandemic.

Likewise, Heyne (2020) stated that the development of social, emotional, and academic skills as well as the acquisition of critical thinking abilities are all supported by attending school. On the other hand, persistent absence from school or attendance while experiencing severe stress can impair skill development. The current study provided evidence in favor of the idea that the COVID-19 pandemic's dramatic reduction in academic activities had an impact on students' social lives, which in turn caused students from less fortunate households to suffer a significant socioeconomic cost. However, the study by Adelantado-Renau (2019) found that the learners' performance is being negatively impacted by several factors. Academic achievement can be adversely impacted by a learner's perception and attitude.

The similarities and differences between this study and other studies were discussed. Several of the studies had some relevance to the current investigation, while others did not. The aforementioned investigation aided and assisted the researcher in arriving at a specific conclusion.

III. RESEARCH METHODOLOGY

This study utilized the quantitative method using descriptive-inferential design. Grades from the 1st quarter of SY 2021-2022 and SY 2022-2023 served as secondary data to determine learners' performance levels for the core learning areas using the simple arithmetic mean. A total enumeration of 562 grade 6 was the basis of the data gathered. In assessing the domain that affects learners' learning performance, a semi-structured survey instrument patterned from the study of Alos, Caranto, and David (2015) was utilized. The respondents composed of teachers (27), parents (226), and learners (450) are the primary sources of data. A 4-point Likert rating scale where 4 – is the highest, 1 being the lowest was utilized in determining the weighted mean of the different domains with an adjectival interpretation of 4 – Very High Effect, 3 – High Effect, 2 – Low Effect, and 1 – No Effect. Ethical consideration through the distribution of consent form which is properly explained was undertaken. In determining whether a significant difference does or does not exist t-test was used employing the SPSS v.20.

IV. RESEARCH FINDINGS AND DISCUSSION

Performance Level of the Learners in Core Learning Areas.

As shown in Table 1 for the School Year 2021-22, among the core learning areas, Araling Panlipunan earned the highest (84.75) performance level while Mathematics earned the lowest (80.75) performance level while Filipino (84.25), English (82.75), and Science (81.50) obtained an average performance level.

However, for School Year 2022-23, Filipino earned the highest (86.00) performance level while Mathematics earned the lowest (84.00) performance level with Araling Panlipunan (85.75), Science (85.00), and English (84.50).

It is worth noting that Filipino subjects top during the SY 2022-23. Overall, learners performed well during the School Year 2022-23 having an 85.05 weighted average as compared to School Year 2021-22 having an 82.80 weighted average, showing an increase in

averages of all the core learning areas being examined.

This could be implied that learners learned better when they are engaged in the actual face-to-face modality rather than any other learning modality which happened during the pandemic period. It could be presumed that teachers-learners' actual interaction aided the attainment of a high percentage of performance level.

This finding supported the study by Chadwick and McLoughlin (2020) who emphasized that learning loss for children when their schools were closed or while engaged in remote learning is a disadvantage. They believed that learning is equated solely with academic performance. Learners also showed negative attitudes and low motivation toward modular distance learning. Nevertheless, not all learners show a decrease in their learning performance. Corollary to the above-mentioned study and with the result of the present study, Deslandes-Martineau (2020) cited that through emerging findings on the impact of COVID-19 on academic performance, it is important to remain cautious about an overemphasis on learning loss.

outcomes. The teachers' related domains must be consistently revisited to ensure that the learning gaps could be addressed effectively and efficiently.

Although the teacher-related domain ranked first, the three (3) remaining domains all obtained an adjectival interpretation of High Effect as gleaned from Table 3. Thus, ranking them is necessary to determine the least positive effect among the four domains. Through ranking, it was revealed that the Home-related domain (2.83) was the domain that needs to be addressed.

Since Home-Related domains earned the lowest weighted mean, schools should implement necessary activities and interventions that would involve home learning partners (parents and guardians) must be actively engaged. Anent to this an intervention is needed to address such concerns by developing a handbook to serve as a guide and support to home-learning activities.

Table 2

Domains that Positively Affect the Learning Performance during the COVID-19 Pandemic and Limited Face-to-Face Modality

Table 1
Performance Level in the Core Learning Areas

	SY 2021-2022					SY 2022-2023					
	School A	School B	School C	School D	Ave	School A	School B	School C	School D	Ave	Increase
English	83	82	83	83	82.75	85	84	85	84	84.50	1.75
Filipino	84	85	84	84	84.25	87	86	86	85	86.00	1.75
Science	81	82	81	82	81.50	86	86	84	84	85.00	3.50
Mathematics	80	81	81	81	80.75	84	84	84	84	84.00	3.25
Araling Panlipunan	84	86	85	84	84.75	86	85	87	85	85.75	1.00
Average	82.40	83.20	82.80	82.80	82.80	85.60	85.00	85.20	84.40	85.05	

Perception of Domains Affecting the Learning Performance during the COVID-19 Pandemic and Limited Face-to-Face Modality

Based on the data reflected in Table 2, "Teacher-Related Domains (3.24) ranked first for having a positive effect on the learning performance with an interpretation of (High Effect). However, even though the said domain got a high effect, it is necessary that examine the teachers' competencies and attitudes towards positive learning, and other factors should be looked into to cope with all the expected learning

	Learners	Parents	Teachers	Weighted Mean	AI	
I. PERSONAL DOMAINS						
a. Personal Condition						
1	Feeling sleepy in class.	2.56	2.47	3.45	2.83	HE
2	Feeling hungry in class.	2.66	2.62	3.45	2.91	HE
3	Anxiety, pressure and stress.	2.63	2.45	3.75	2.94	HE
4	Frequent complaints of illness.	2.60	2.36	3.34	2.76	HE
5	Loneliness, lack of emotional control.	2.55	2.93	3.06	2.60	HE
6	Low self esteem	2.48	2.42	3.28	2.73	HE
	Weighted Mean	2.58	2.42	3.39	2.80	
b. Study Habits						
1	Only study when there is a quiz and test.	2.04	2.26	3.32	2.54	HE
2	Feel bored doing difficult assignments.	2.50	2.07	3.15	2.57	HE
3	Prefers to talk to friends, listen to music etc.	2.57	2.74	3.23	2.85	HE
4	Lazy to study.	2.30	2.03	3.49	2.81	HE
5	Disturbed when studying.	2.45	2.70	3.21	2.79	HE
6	Study only when I like.	2.32	2.07	3.40	2.60	HE
7	Do not have a comfortable place to study.	2.57	2.10	3.70	2.79	HE
8	Copy the assignments of my friends.	1.93	2.04	3.25	2.41	LE
9	Make certain that my extracurricular activities do not interfere with my education.	2.53	2.79	2.68	2.67	HE
	Weighted Mean	2.36	2.31	3.27	2.65	
c. Interest						
1	Listen attentively to the lecture of my teacher.	3.18	3.18	4.00	3.45	HE
2	Ward to get good grades on quizzes, tests, assignments and projects.	3.17	3.24	4.00	3.47	HE
3	Make myself prepared for the subject.	2.52	2.80	4.00	3.11	HE
4	Actively participate in the discussion and activities.	3.05	2.72	4.00	3.26	HE
5	Feel irritated when the conversation is cut short when the teacher is not present.	2.50	2.03	3.30	2.80	HE
	Weighted Mean	2.88	2.91	3.86	3.22	
	Grand Mean	2.61	2.55	3.51	2.89	
II. HOME-RELATED DOMAINS						
1	Live far away from school.	2.08	2.12	3.70	2.63	HE
2	Live near the school.	2.95	2.74	2.95	2.88	HE
3	Live with my parents.	2.95	2.79	3.32	3.02	HE
4	Live with my guardians.	2.12	2.40	2.87	2.46	LE
5	Both my parents are working.	2.42	2.54	3.47	2.81	HE
6	Have many brothers and sisters.	2.49	2.68	3.49	2.89	HE
7	Parents motivate me to go to school.	3.12	3.18	3.40	3.24	HE
8	Parents can sustain my financial needs.	2.71	2.85	3.25	2.94	HE
9	Parents are not working.	2.32	2.66	3.25	2.74	HE
10	Financially exhausted.	2.27	2.75	3.06	2.70	HE
	Grand Mean	2.54	2.67	3.28	2.83	
III. SCHOOL-RELATED DOMAINS						
1	The classroom time schedule is followed.	2.97	3.28	3.40	3.22	HE
2	The daily school routine is followed.	3.04	3.36	3.40	3.27	HE
3	There are school programs/activities.	2.19	2.36	3.40	2.65	HE
4	There are available library references accessible to learners.	2.59	2.31	3.40	2.76	HE
5	There is fast internet connection in the school.	2.48	2.88	3.55	2.97	HE
6	Classroom is comfortable and conducive.	3.29	3.21	3.85	3.45	HE
7	Laboratories are functional.	2.47	2.74	3.55	2.85	HE
8	Simulators are utilized.	3.15	2.35	3.55	3.02	HE
	Grand Mean	2.77	2.78	3.51	3.02	
IV. TEACHER-RELATED DOMAINS						
A. Personality Traits						
1	Has good relationship with learners.	3.03	2.94	3.77	3.24	HE
2	Imposes proper discipline in following the prescribed rules.	2.96	2.98	3.85	3.26	HE
3	Has a pleasant demeanor and a good sense of humour	3.01	2.90	3.66	3.19	HE
4	Is open to suggestion and opinions.	2.68	2.74	4.05	3.22	HE
5	Shows smartness and confidence.	3.17	2.83	3.85	3.28	HE
6	Always angry.	2.67	2.85	3.25	2.92	HE
	Weighted Mean	2.95	2.87	3.74	3.19	
B. Teaching Skills						
1	Has mastery of the subject matter.	3.04	3.10	3.85	3.33	HE
2	Provides varied activities and techniques.	2.99	3.26	4.00	3.42	HE
3	Is organized and systematically follows the curriculum.	3.14	3.35	3.85	3.45	HE
4	Makes realistic demands of learners.	2.97	3.13	3.65	3.32	HE
5	Stimulating, imaginative and challenging.	2.98	3.23	3.70	3.31	HE
6	Give too much memory work.	2.83	3.00	2.70	2.84	HE
7	Frequently outclass in class.	2.61	2.81	2.91	2.78	HE
8	Always late.	2.55	2.43	2.51	2.50	HE
	Weighted Mean	2.89	3.04	3.42	3.12	
C. Instructional Materials						
1	Use chalk and board in explaining the lesson.	2.85	3.34	3.85	3.35	HE
2	Use visual aids/point presentations.	3.04	3.45	3.85	3.45	HE
3	Use workbook/modules/supplementary materials.	3.01	3.41	3.85	3.42	HE
	Weighted Mean	2.86	3.40	3.85	3.41	
	Grand Mean	2.93	3.10	3.67	3.24	

Legend: AI – Adjectival Interpretation

3.51 – 4.00	Very High Effect (VHE)
2.51 – 3.50	High Effect (HE)
1.51 – 2.50	Low Effect (LE)
1.00 – 1.50	No Effect (NE)

Table 3

Summary of Domains that Positively Affect the Learning Performance during the COVID-19 Pandemic and Limited Face-to-Face Modality

DOMAINS	LEARNERS	PARENTS	TEACHERS	GRAND MEAN	RANK
Teacher-Related Domains	2.93	3.10	3.67	3.24	1
School-Related Domains	2.77	2.78	3.51	3.02	2
Personal Domains	2.61	2.55	3.51	2.89	3
Home-Related Domains	2.54	2.67	3.28	2.83	4

Significant Difference in the Learning Performance during COVID-19 Pandemic and Limited Face-to-Face Modality

As reflected in Table 4, by employing a t-test to determine whether or not a significant difference existed, a computed t-value of 4.67 was obtained which is greater than the tabulated value of .00946. Therefore, the hypothesis that there is no significant

difference in the learning performance of learners during the pandemic and limited face-to-face learning modality was rejected, hence a significant difference does exist.

Table 4

Significant Difference in the Learning Performance During COVID-19 Pandemic and Limited Face-to-Face Modality

	M	SD	t	df	P	Sig
English	1.75	0.25				
Filipino	1.75	0.25				
Science	3.50	1.56				
Mathematics	3.25	1.00				
Araling Panlipunan	1.00	1.56				
Difference in the Learning Performance During Covid-19 pandemic and Limited face-to-face modality	2.25	1.07529	-4.679	4	.00946	*.009

*The result is significant at p < .05.

Legend:

M=Mean
SD=Standard Deviation
t=computed value
df=degrees of freedom
p=p-value

Development of the “Tulong Dunong” handbook as an intervention to the Learning Performance of Learners

“Tulong Dunong” as “Gabay ng Magulang sa pagkatuto ng anak sa tahanan” represents an important aspect of school-home relationships that would cater to the needs of the learners especially those who are struggling with their learning performance. This is in addition to the major premise that parents must be appropriately engaged in the academic tasks and activities of their children to track their strengths and weaknesses, achievements and failures, and even accomplishments and frustrations.

The handbook was divided into four major sections which provide necessary concepts and ideals on how parents and teachers can assist the learners towards maximum development of skills and competencies at home. The first section discusses “Mga interbensyon na magagamit ng mga magulang”. As presented, there are various premises and reminders to follow in order to attain better academic performance of the learners. The second, third, and last section mentioned about “Mga paraan na maaring gawin ng mga mag-aaral”, “Mga paraan ng maaring makatulong ang mga guro”, and “Mga hakbangin na maaaring gawin ng paaralan.”

Development of this handbook as an intervention could fundamentally benefit the school partners in encouraging parental involvement not only in the academic aspects of learning of the children but also

in almost all activities necessary for the holistic development of all the learners.



Figure 1. Tulong Dunong Handbook

CONCLUSION

The following conclusions were made based on the result of this study:

1. There is an increase in the performance level of Grade 6 learners during limited face-to-face learning modality as compared to the modalities used during the pandemic.
2. Among the four domains, home-related domains appeared as the least positive domain that affects the learning performance of learners.
3. There is a significant difference in the performance of learners during the COVID-19 pandemic and limited face-to-face learning modalities.
4. The “Tulong Dunong” handbook was developed as an intervention towards higher level learning performance of learners.

From the findings and conclusions made, the study recommends the following:

1. Learners’ academic/learning experiences in the face-to-face classes must be continuously reinforced by appropriate activities, programs, enrichment, interventions, and learning opportunities.
2. The school administration, together with the teachers, parents, and other stakeholders, should

continue to embark on innovative ideas to sustain the high level of academic performance of the learners.

3. The developed “Handbook” must be utilized as an offshoot to enhance the learning performance of learners.
4. Evaluation of the outcome after the utilization of the Handbook should be undertaken to determine its effectiveness.

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