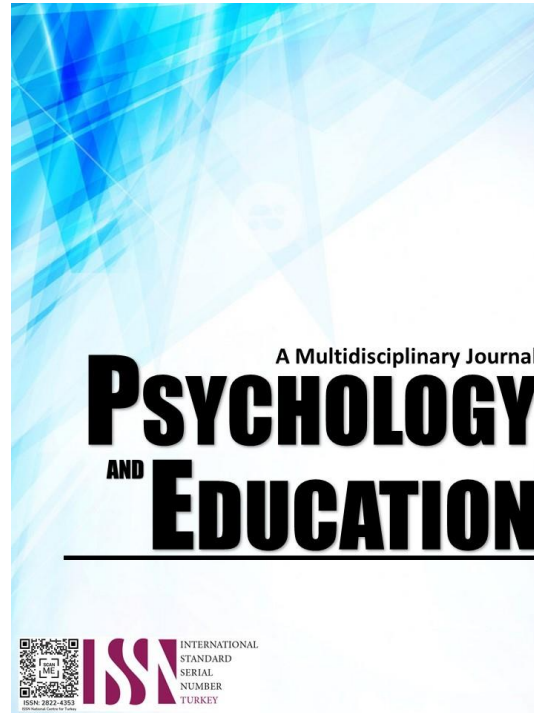


**PRINT AND NON-PRINT MODULAR DISTANCE
LEARNING MODALITY AND STUDENTS'
WORK PERFORMANCE**



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Print and Non-Print Modular Distance Learning Modality and Students' Work Performance

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Abstract

This study aimed to determine the extent of implementation of print and non-print modular distance learning modality and its correlation on the work performance of Grade VII students at Bagong Silangan High School during the first quarter of school year 2021-2022. The descriptive research method was employed in the study. The three groups of respondents were the 45 Grade 7 teachers, 255 students using printed modules, 264 students using non-print modules, 255 parents or guardian of students using printed modules and 264 parent or guardian of students using non-print modules. The statistical tools used in the study were weighted mean, one-way ANOVA, Mann Whitney U test, Pearson's r, t-test, and Tukey Pairwise comparison. It was found out that the teachers perceived the implementation of print modular distance learning modality to a Very High Extent, while the parents and student respondents perceived its implementation to a High Extent. For the implementation of non-print modular distance learning modality, students and parents perceived the implementation to a High Extent, while the teachers perceived its implementation to a Very High Extent. In addition, the work performance of Grade VII students using print modular distance learning modality during the first quarter of school year 2021-2022 was Satisfactory, and Fairly Satisfactory for non-print.

Keywords: *modular distance learning, student performance, learning modality*

Introduction

The influence of COVID-19 on the global economy is only beginning to be understood, but many additional difficulties, such as school closures and their impact on learning, as well as the burden of education on students, parents, and instructors, have surfaced and must be addressed as soon as possible (Bhamani et al., 2020). As a response to the looming global health crisis, the Department of Education (DepEd) introduced the Learning Continuity Plan (DO No. 012, s. 2020), wherein different learning modalities were provided. DepEd then presents distance learning, a style of instruction in which lessons and learning take place between a teacher and students who are geographically apart from one another. This approach includes Modular Distance Learning (MDL), Online Distance Learning (ODL), and TV/Radio-Based Instructions, which are the three forms of this modality (Quinones, 2020). Distance learning is the best solution as a means to continue the education of the young amidst the pandemic.

The modular distance learning modality is further categorized into two types, which are modular print and digital. For Modular Print, parents are given a schedule for the distribution of the Self-Learning Modules (SLM). For digitized modules or non-print, students and parents are advised to download electronic copies of modules using a laptop, desktop,

or smartphone through their DepEd e-mail account using the provided link by the learning portal adviser. Both students from modular print and non-print are expected to submit on time according to the set schedule of retrieval of Self-Learning Modules and answer sheets. Parents and guardians are expected to come to school for the distribution and retrieval every two weeks.

Learners benefit from printed modules in a variety of ways (Lesson 1, Part 3, n.d). It is lightweight, inexpensive, readily available, and convenient to use. Print materials may be utilized everywhere and at any time with appropriate lighting, and students don't need any special equipment to use them. The information can be reviewed at the student's leisure. Printed materials, too, have their disadvantages. Because text resources are static, they can't be used to teach languages or visual ideas. If teachers simply use textual materials, they may find it difficult to connect with students and convey some concepts, such as those that need movement. When choosing resources, it is essential to keep in mind the learners' reading and linguistic abilities. It may take days or weeks to prepare for printed materials. Additionally, learners with visual impairments may require information in a different format.

The teacher is responsible for keeping track of the student's progress. Students can reach out to the teacher through e-mail, phone calls, text messages, or

instant messaging, among other methods. If at all feasible, the teacher may visit students at home who require remediation or support (Llego, 2020). A Self-Learning Module is a type of customized teaching that allows students to use both printed and digital self-learning modules in their context, as well as other learning resources such as textbooks, worksheets, study guides, and other study tools. Various downloadable videos are also available on YouTube that students can readily use as an additional learning resource.

In the first year of distance learning implementation, Bagong Silangan High School opted to employ solely Modular Print Distance Learning as a learning modality for the students. Taking into account the financial ability of some of the students' families to provide their educational demands, such as internet access, a smartphone, or a computer needed for their studies during this pandemic, they will be able to cope with the changes. In the community itself, there is a specific area of the barangay where electricity is not yet available. They depend only on the availability of a generator in their neighborhood to use their gadgets so that they can communicate with their teachers and classmates.

The rapid transition from conventional, or face-to-face, learning to distance learning created a lot of uncertainty in the community about how the system would function. Parents' concerns about their children's performance are increasing. Because students will not be physically directed toward their learning by their teachers regularly the lessons will not be thoroughly discussed. As a response, the school head tasked the teachers with meeting the students once a week with a specific schedule through online consultation via Facebook Live. But students are not compelled to take part in the online consultation, considering the difficulties it poses not only to the students but also to parents as they strive to look after the welfare of their families and provide for their needs in this time of the pandemic. As per Inter-Agency Task Force (IATF) and Department of Health (DOH) guidelines, the effective implementation of digital modular learning has been designed to better safeguard the protection of the public health of everyone.

However, parents and students in the community began to question how enormous distances were affecting their children's lives. Although almost everyone is endangered by the virus outdoors, and conformity in a crisis such as this plague might be a challenge, learning modalities will be adopted and

materialized. Bagong Silangan High School then strictly implemented the guidelines by IATF on the health and safety protocols to which parents and guardians who have worked to attend experienced inconvenience in coming to school during the scheduled distribution and retrieval of modules and answer sheets. Based on the guidelines, students or minors were not allowed to go out of their respective houses and so delays in the submission of answer sheets were rampant among all levels. Parents have a critical role in their children's educational achievement as a result of these changes. Without any formal training, they act as facilitators, guidance counselors, and technologists. They must ensure that their children obtain a good education without jeopardizing their safety. Students are in the same boat. They are both excited and perplexed by the rapid shift in learning methods.

It is for these reasons that the researcher was motivated to undertake this study to determine the perceptions of parents, students, and teachers on the implementation of the print and non-print modular distance learning modality. To find out if there is a difference between the work performance of students using print and non-print modular distance learning modalities. Lastly, to propose an intervention that would help the school in the delivery of learning even after the pandemic period using the print and non-print modular distance learning modality.

Research Questions

This study sought to determine the extent of the implementation of print and non-print modular distance learning modality and the work performance of Grade VII students at Bagong Silangan High School during the first quarter of the school year 2021-2022. Most specifically, it sought answers to the following questions:

1. How do the parents, teachers, and students perceive the extent of the implementation of print and non-print modular distance learning modality in the following aspects?
 - 1.1 Content of the Module;
 - 1.2 Time Element for the Module;
 - 1.3 Students Engagement;
 - 1.4 Monitoring of the Students/Home Visitation; and
 - 1.5 Submission of the Performance Output?
2. Are there significant differences among the perceptions of the three groups of respondents in the implementation of the print and non-print modular distance learning modality in terms of the above-cited aspects?

3. What is the work performance of Grade VII students using print and non-print modular distance learning modality during the first quarter of the school year 2021-2022?
4. Is there a significant difference in the work performance of students using print and non-print modular distance learning modality?
5. Is there a significant relationship between the implementation of the print and non-print modular distance learning modality and the student's work performance?
6. Based on the findings, what intervention program may be developed to improve the school's implementation of modular distance learning modality and work performance?

Literature Review

The COVID-19 pandemic resulted in a tremendous challenge to the education system, not only in our country but in the world. It did not only affect the learners, teachers, and school administrators but also the parents and guardians of the students. Encouraging students and parents to continue education despite the pandemic is a vital element of institutional response (Daniel, 2020). That's why constructing curricula and designing student assessments and teaching should include varied activities, tasks, and assignments that include COVID-19 in a global and historical context.

In 2020, the consequences of the pandemic and other situations may have a substantial impact on pupils' transition to early adulthood. Due to social distance restrictions and the fear of being judged, conventional youth-related experiences such as going to school in physical classrooms, socializing with friends, participating in pleasurable social activities, and planning future vacations have been disrupted or modified (Farris et al., 2021). For junior high school students, it is much more difficult for them to cope with the changes, especially for the grade 7 students who come from the transition from being elementary pupils to high school learners. Those young minds were used to galivanting with their friends; being playful was still with them, and unfortunately, they were restricted from doing all of the things they were used to.

As prescribed in Department Order No. 12 series of 2020, the adoption of the Basic Education Learning Continuity Plan for School Year 2020-2021 in light of the COVID-19 Public Health Emergency. This is the instant response of the Department of Education so that basic education will not be impeded as the Inter-

Agency Task Force for the Management of Emerging Infectious Diseases (IATF) advised the closure of schools. Face-to-face learning styles are not allowed by the government, so students are not at risk. Though it caused a lot of trouble in society, the government's action of giving the highest priority to the safety of students is well-valued by various stakeholders in education.

Distance learning has become more adaptable in the twenty-first century, thanks to advances in technology (Alzahrani and Ali, 2019). In several other nations, this is particularly true. However, just a few schools in the Philippines provide basic education via e-learning or distance learning. This is most likely done in higher education by some universities and colleges, but not in basic education as basic skills need to be taught physically. Schools nationwide at all levels, be it in public or in private, on the other hand, are suddenly required to adjust to the changes. Distance learning is considered a very beneficial educational modality that contributes to expanding access to education for students (Manuel, 2021).

The learners are interested in the issues presented in the module. As they accomplish the module's assignments, they develop a sense of responsibility. Learners make their progress with little or no assistance from others. They have gained confidence and are learning how to learn (Nardo, 2017). Other difficulties associated with remote learning might be attributed to students' psychological states. This can include, among other things, (a) problems caused by a lack of direct contact between student and teacher; (b) problems caused by a sense of alienation and isolation from the student community; and (c) problems caused by anxiety and concerns about the education process and learning outcomes (Mahlangu, 2018). Self-learning is a component of modular print and non-print distance learning. Because learners are allowed to learn at their own speed, it encourages them to regulate their learning styles. The use of modules motivates students to study by generating curiosity and a positive attitude, as well as increasing their confidence while studying. Idealism, concepts, and topics in the module are thought to be well-articulated. Lessons are also grammatically correct, with clear and detailed instructions for learning activities.

Parents, on the other hand, have faced a variety of difficulties. Parents should cast their children's concerns about the circumstances, according to Rich (2020). There are certain theories, principles, and concepts worth considering in order to encourage parents to actively participate in their children's

education. Parental involvement is associated with various benefits for students of all ages (Delgado, 2019). The degree to which a student's family participates in their education is, without a doubt, the best indicator of their success. Students who perceive their parents' support become more motivated and develop a passion for studying. When parents participate in the educational process, teachers and parents share the responsibility for educating children and raising together them to achieve educational goals.

Canonizado (2021) explained that one of the challenges of modular learning to students and teachers is the inability of students to submit their output on time. Proposed solutions where teachers must give students who undoubtedly can't instantly comply with the prescribed period a sufficient extension, especially during these pandemic times. Articles about students regarding their experiences in relation to their work performance using the print and non-print modules shows that of great impact. The study by Olivo (2021), on parents' opinions of printed modular distance learning at Canarem Elementary School served as the foundation for a proposed action plan. The research was a descriptive study that investigated and assessed how parents felt about a school's printed modular distance learning. The way modules were distributed and retrieved, the time allotted for learning activities, the learning activities in the module, and the assessment and adherence to safety and health procedures in the distribution and retrieval of modules were all factors that parents considered.

Another reviewed study by Vargas et.al (2021) aimed to identify teachers' and students' experiences by both students and teachers in using Printed Modules in Distance Learning Modality. The study showed that majority (86%) of the students, said that they are having difficulty in answering their modules. One factor is that they do not have enough time to answer such modules (69%). Majority of respondents (72%) believed that they can answer their modules on their own. Besides, 88% of students responded that they can easily approach their teachers and ask them whenever they have questions. From the teachers' perspective, the problem is about some errors that can be found in the module, wherein 67% of the respondents have noticed it. The problem that teachers have encountered in printed modular distance learning is the ability of students to follow instructions. Most of the teachers (92%) said that their students are having difficulty following the instruction in their modules. Finally, the big struggle according to the teacher-respondents in the said modality is the communication problem 100%

said that they are having difficulty contacting both the parents and the students.

Santillan and Labaria's (2021) study sought to investigate student experiences in modular learning in the midst of a pandemic at Western Philippines University's external campuses. Their research suggests that, regardless of how modular learning is used, the professor in their class continually provides support, inspiration, and a desire to continue their career, resulting in a better future for them. The study entitled, "Challenges and mechanisms of teachers in the implementation of modular distance learning in the Philippines: A phenomenological study" by Cabardo et al. (2022) showed that time-consuming, incomplete, and unanswered modules, a lack of parental support, and insufficient teacher training are among the issues faced by teachers and students in modular distance learning. Time management, constant communication with parents and students, retraining and upskilling of instructors, and the use of blended learning are some of the strategies used by teachers to overcome obstacles. In light of this, it is advised that DepEd continue monitoring and evaluating the implemented modular distance learning in order to determine its caliber and applicability to the state of education in the nation today. Without sacrificing the work performance of the students.

Methodology

The researcher utilized the descriptive survey method as a means of gathering and interpreting the data findings. According to McCombes (2019), descriptive research aims to accurately and systematically describe a population, situation, or phenomenon similar to the idea of Nassaji (2015) that descriptive research's main goal is to describe a phenomenon and its characteristics. This method describes the perceptions of parents, teachers, and students about the extent of the implementation of print and non-print modular distance learning modalities and the students' work performance in Bagong Silangan High School for the school year 2021-2022.

Participants of the Study

Primary data was taken from the responses provided by the selected parents, Grade 7 teachers, and students of Grade 7 from Bagong Silangan High School. The respondents of the study comprised of 255 Grade VII students using print distance learning modality, 264 Grade VII students using non-print modular distance learning modality, 255 parents or guardians of enrolled



students using printed modular distance learning modality, 264 parents or guardians

Table 1. *Distribution of Respondents*

Respondents	Group A (Print)	Sample	Group B (Non-print)	Sample
Teachers	45	45	45	45
Students	700	255	773	264
Parents	700	255	773	264

Instruments of the Study

The data-gathering instrument used in this study was the survey questionnaire. The questionnaire is divided into two parts for the teachers and parents/guardian respondents while there are three parts for the students' respondents. The personal information of the respondents is covered in the first part which is optional. The second part focused on the perceptions of the extent of the implementation of print and non-print modular distance learning modality, while the third part for student respondents highlighted the first grading period average of the learners. The researcher used a four-point Likert scale ranging from "Strongly Agree " to " Strongly Disagree". The survey questionnaire consists of five variables with five statements for each variable.

The survey questionnaire was prepared by the researcher, checked by her adviser, and validated by experts. It was sent through messenger and e-mail. Those respondents who were unable to access the questionnaires used a hard copy. The survey questionnaire form was developed based on the possible challenges and barriers a learner may be experiencing or has experienced from the past grading period. The questionnaire included five (5) statements per aspect that focused on the issues that parents, teachers, and students observations and experienced during the implementation of print and non-print modular distance learning.

Procedure

Prior to the administration of the survey questionnaire to the respondents, the researcher first sought permission from the Principal and Grade Level Head of the respondents. Afterward, the survey questionnaire was prepared in Google form and sent through Messenger and e-mailed to the parents and students using a non-print modular distance learning modality and the Grade 7 teachers. On the other hand, hard copies of the questionnaires were given to

students and parents who used a print-based modular distance learning modality during the distribution and retrieval of modules at Bagong Silangan High School. The researcher personally administered and retrieved the questionnaires. The data were tallied, treated statistically, analyzed, and interpreted.

Ethical Considerations

The researcher herself explained and gave the informed consent to each participant before the conduct of the study. She ensured them that the information would be used with utmost confidentiality and within the purpose of the study only.

Results and Discussion

Perception of Parents, Teachers and Students on the Extent of the Implementation of Print and Non-Print Modular Distance Learning Modality Print Modular Distance Learning Modality

Table 2. *Respondents' Perceptions on the Extent of the Implementation of Print Modular Distance Learning Modality as Regards Content of the Module*

As a teacher, I observe that...	Respondents					
	Teachers		Students		Parents	
	WM	VI	WM	VI	WM	VI
the activities/tasks in the modules are appropriate to the level of understanding of the students.	2.91	HE	2.82	HE	3.35	HE
there were 7-10 types of activities/tasks in the modules per subject.	3.24	HE	3.30	HE	3.28	HE
the activities/tasks in the modules are too easy for students to accomplish.	2.78	HE	2.81	HE	2.67	HE
the activity/task instructions are clear and with specific examples.	3.31	HE	3.18	HE	3.26	HE
there were 5-8 volumes in the modules per subject.	3.09	HE	3.29	HE	3.23	HE
Overall Weighted Mean	3.07	HE	3.08	HE	3.16	HE
Standard Deviation	0.43		0.50		0.51	

The table shows the respondents' opinions on the degree to which the print modular distant learning modality has been implemented in terms of the module's content. According to the table, the overall weighted mean of the responses from teachers was 3.07, students were 3.08, and that from parents was 3.16. The perceptions with a verbal interpretation of a High Extent (HE) were the same for all three groups of respondents. This indicates that the opinions of the entire group of respondents are in agreement regarding the suitability of the set of activities to the learners' level of understanding as provided in the modules, the clarity of the instructions, the simplicity of the tasks, and the average number of eight volumes per subject.



Table 3. Respondents' Perceptions on the Extent of the Implementation of Print Modular Distance Learning Modality as Regards Time Element for the Module

As a teacher, I ...	Respondents					
	Teachers		Students		Parents	
	WM	VI	WM	VI	WM	VI
1. always inform my students that they have two weeks to complete all the activities/tasks in the modules. prepare a specific schedule for the students to accomplish each activity in the module per week.	3.82	VHE	2.75	HE	3.43	HE
2. encourage my students to manage their own time in answering their modules.	3.78	VHE	2.78	HE	3.43	HE
3. prepare a weekly home learning plan that the students may follow in answering their module.	3.64	VHE	3.26	HE	3.41	HE
4. allow my students to extend their number of days to answer their modules with a valid reason.	3.60	VHE	3.05	HE	3.37	HE
5. allow my students to extend their number of days to answer their modules with a valid reason.	3.76	VHE	3.35	HE	3.29	HE
Overall Weighted Mean	3.72	VHE	3.04	HE	3.39	HE
Standard Deviation	0.21		0.47		0.58	

The table shows that each of the three groups of respondents had a different opinion of how far print modular distance learning has been adopted in terms of the module's time element. With an aggregate weighted mean of 3.04 and 3.39, respectively, a High Extent (HE) is the verbal interpretation of the students and parent respondents' perceptions. In contrast, the teachers' responses were verbally interpreted to a Very High Extent (VHE) and had a weighted mean of 3.72 overall. This shows that those who responded and identified themselves as teachers are knowledgeable about modular print learning modality.

Table 4. Respondents' Perceptions on the Extent of the Implementation of Print Modular Distance Learning Modality as Regards Students Engagement

As a teacher, I ...	Respondents					
	Teachers		Students		Parents	
	WM	VI	WM	VI	WM	VI
encourage my students to attend the online consultation	3.80	VHE	2.75	HE	2.93	HE
always motivate my students to participate in the virtual meetings and discussions	3.76	VHE	3.34	HE	2.91	HE
make sure that my students learn a lot and can be able to answer the activities/tasks in their modules if they attend the online consultation.	3.69	VHE	3.31	HE	3.38	HE
diligently explain to my students whenever they have query or clarification about their modules that they raise in our group chat and during the online consultation.	3.71	VHE	3.51	HE	3.37	HE
check the attendance of the students joining the online consultation and other virtual meetings.	3.64	VHE	3.28	HE	3.37	HE
Overall Weighted Mean	3.72	VHE	3.24	HE	3.19	HE
Standard Deviation	0.24		0.40		0.51	

The table reveals that the responses from teachers received an overall weighted mean of 3.72, which can be interpreted to a Very High Extent (VHE) as opposed to the responses of the students and parents, which received overall weighted mean ratings of 3.24 and 3.19, respectively, which are equivalent to the interpretation of High Extent (HE) response. This shows that parents' and students' perspectives about the extent of the print modular distance learning modality's implementation and how that connected to students' participation were consistent across all three groups of respondents. Teachers, who were instrumental in the creation and use of the learning modality, have various viewpoints.

Table 5. Respondents' Perceptions on the Extent of the Implementation of Print Modular Distance Learning Modality as Regards Monitoring of the Students/Home Visitation

As a teacher, I ...	Respondents					
	Teachers		Students		Parents	
	WM	VI	WM	VI	WM	VI
communicate with my students through calls, text messaging, chats via messenger, and video call.	3.71	VHE	3.33	HE	3.32	HE
allow parents or guardians and my students to participate in simple discussions or clarifications of our modules through group chat.	3.64	VHE	3.27	HE	3.34	HE
always do a follow-up on the activities/tasks that my students must accomplish in the modules.	3.78	VHE	3.31	HE	2.89	HE
always notify my students when their answer sheets have been received, checked, and recorded per volume.	3.47	HE	3.32	HE	2.87	HE
conduct a home visitation/parent-teacher conference and online "kamustahan".	3.40	HE	3.39	HE	3.37	HE
Overall Weighted Mean	3.60	VHE	3.32	HE	3.16	HE
Standard Deviation	0.24		0.43		0.50	

The table displays that in statements 4 and 5 on the perceptions of the extent of the implementation of print modular distance learning modality as regards to monitoring the students/home visitation, all the respondents' verbal interpretation was High Extent (HE). Meanwhile, the overall weighted mean ratings of students and parent respondents are 3.32 and 3.16, respectively, and the verbal interpretation is High Extent (HE). On the contrary, teacher respondents got 3.60 as their overall weighted mean, with Very High Extent (VHE) as their verbal interpretation. Therefore, this showed that teachers, who conduct the monitoring and home visitation, have higher perceptions on the implementation of the print modular distance learning modality as compared to the students and parent respondents. Nevertheless, for the remaining statements, both the students and the parents rated them to a High Extent (HE) as their response.



Table 6. Respondents' Perceptions on the Extent of the Implementation of Print Modular Distance Learning Modality as Regards Submission of the Performance Output

As a teacher, I ...	Respondents					
	Teachers		Students		Parents	
	WM	VI	WM	VI	WM	VI
always announce ahead of time the schedule for the submission of answer sheets.	3.71	VHE	3.43	HE	3.41	HE
always assist my students and parents during the submission of answer sheets.	3.58	VHE	3.33	HE	3.35	HE
notice that parents/students regularly submit their answer sheets during the scheduled day of submission.	2.69	HE	2.73	HE	2.87	HE
always remind my students and their parents to follow the correct arrangement of the submitted answer sheet so that it will not be misplaced.	3.69	VHE	2.66	HE	2.92	HE
allow my students to submit photos of their answer sheets via messenger only if they can present a valid reason for their failure to submit their answer sheets on the scheduled day.	3.36	HE	3.31	HE	3.31	HE
Overall Weighted Mean	3.40	HE	3.09	HE	3.17	HE
Standard Deviation	0.26		0.42		0.50	

The table shows that the weighted average for parents was 3.17, while it was 3.09 for students and 3.40 for teachers. It is very clear in statement 3 and 5 which states that parents/students regularly submit their answer sheets during the scheduled day of submission and allow students to submit photos of their answer sheets via messenger only if they can present a valid reason for their failure to submit their answer sheets on the scheduled day. The three groups of respondents shared the same perceptions with a verbal interpretation of High Extent (HE) with regard to the submission of performance output of the learners. However, despite this, statements 1, 2, and 4 made it very apparent that the teachers who responded have a verbal meaning of Very High Extent (VHE) for the statements in which they are specifically involved.

Table 7. Respondents' Perceptions on the Extent of the Implementation of Non-Print Modular Distance Learning Modality as Regards Content of the Module

As a teacher, I observe that...	Respondents					
	Teachers		Students		Parents	
	WM	VI	WM	VI	WM	VI
the activities/tasks in the modules are appropriate to the level of understanding of the students.	2.91	HE	3.05	HE	2.71	HE
there were 7-10 types of activities/tasks in the modules per subject.	3.24	HE	3.13	HE	3.47	HE
the activities/tasks in the modules are too easy for students to accomplish.	2.78	HE	2.90	HE	2.52	HE
the activity/task instructions are clear and with specific examples.	3.31	HE	3.23	HE	3.33	HE
there were 5-8 volumes in the modules per subject.	3.09	HE	3.25	HE	3.32	HE
Overall Weighted Mean	3.07	HE	3.11	HE	3.07	HE
Standard Deviation	0.43		0.51		0.42	

The table displays that among the three groups of respondents, the teachers and parents share exactly the same overall weighted mean, which was 3.07. On the other hand, the students' overall weighted mean was 3.11, a little bit higher as compared to the two other groups. The verbal interpretation for the three groups of respondents was High Extent (HE). This means that all three groups of respondents have very similar perceptions regarding the content of the non-print modular distance learning.

Table 8. Respondents' Perceptions on the Extent of the Implementation of Non-Print Modular Distance Learning Modality as Regards Time Element for the Module

As a teacher, I ...	Respondents					
	Teachers		Students		Parents	
	WM	VI	WM	VI	WM	VI
always inform my students that they have two weeks to complete all the activities/tasks in the modules.	3.82	VHE	3.40	HE	3.57	VHE
prepare a specific schedule for the students to accomplish each activity in the module per week.	3.78	VHE	3.09	HE	3.38	HE
encourage my students to manage their own time in answering their modules.	3.64	VHE	3.41	HE	3.49	HE
prepare a weekly home learning plan that the students may follow in answering their module.	3.60	VHE	2.97	HE	3.49	HE
allow my students to extend their number of days to answer their modules with a valid reason.	3.76	VHE	3.23	HE	3.44	HE
Overall Weighted Mean	3.72	VHE	3.22	HE	3.47	HE
Standard Deviation	0.21		0.46		0.45	

The table demonstrates that with an overall weighted mean ratings of 3.22 and 3.47, respectively, the parents' and students' perceptions of the module's time element are comparatively similar. High Extent (HE) was used in both verbal interpretations. This shows that the responding groups are aware of the deadlines for and when students should finish their modules based on the weekly home learning plan. They are also aware that they were given an extension if necessary for a number of days. The data also show that the teacher respondents significantly evaluate all of the indicated sentences as Very High Extent (VHE), with an overall weighted mean of 3.72. This shows how teachers served as considerate and dependable information sources and learning facilitators.



Table 9. Respondents' Perceptions on the Extent of the Implementation of Non-Print Modular Distance Learning Modality as Regards Students Engagement

As a teacher, I ...	Respondents					
	Teachers		Students		Parents	
	WM	VI	WM	VI	WM	VI
encourage my students to attend the online consultation	3.80	VHE	3.23	HE	3.52	VHE
always motivate my students to participate in virtual meetings and discussions	3.76	VHE	3.21	HE	3.51	VHE
make sure that my students learn a lot and can be able to answer the activities/tasks in their modules if they attend the online consultation.	3.69	VHE	3.44	HE	3.48	HE
diligently explain to my students whenever they have query or clarification about their modules that they raise in our group chat and during the online consultation.	3.71	VHE	3.40	HE	3.48	HE
check the attendance of the students joining the online consultation and other virtual meetings.	3.64	VHE	3.35	HE	3.50	VHE
Overall Weighted Mean	3.72	VHE	3.33	HE	3.50	VHE
Standard Deviation	0.24		0.46		0.56	

The table displays that parents and teacher respondents have similar perceptions on statements 1, 2 and 5 which states that there is an encouragement for the students to attend the online consultation, that students are motivated to participate in the virtual meetings and discussions and the attendance of students who attended the online consultation and other virtual meetings were recorded with a verbal interpretation of Very High Extent (VHE). This means that parents support the claim of the teachers that they encourage their students to attend the online consultation, that teachers do motivate their students to participate in the virtual meetings and discussions, and that teachers check the attendance of the students joining the virtual meetings. This is supported by their overall weighted mean ratings of 3.72 and 3.50 with a verbal interpretation of Very High Extent (VHE).

Meanwhile, the table also shows that parents and students both have a verbal interpretation of High Extent (HE) on statements 3 and 4. This means that the two groups of respondents have a similar perception that students learn a lot and can be able to answer the activities/tasks in their modules if they attend the online consultation, and the teachers diligently explain whenever students have a query or need clarification about their modules. Although the overall weighted mean of students is 3.33 with a verbal interpretation of High Extent (HE).

The table 10 indicates that parents and students respondents have similar perceptions of statements 1, 2, and 3 only but their overall weighted mean is verbally interpreted as High Extent (HE) which are 3.34 and 3.47 while teachers have an overall weighted mean of 3.60.

Table 10. Respondents' Perceptions on the Extent of the Implementation of Non-Print Modular Distance Learning Modality as Regards Monitoring of the Students/Home Visitation

As a teacher, I ...	Respondents					
	Teachers		Students		Parents	
	WM	VI	WM	VI	WM	VI
communicate with my students through calls, text messaging, chats via messenger, and video call.	3.71	VHE	3.46	HE	3.44	HE
allow parents or guardians and my students to participate in simple discussions or clarifications of our modules through group chat.	3.64	VHE	3.46	HE	3.45	HE
always do a follow-up on the activities/tasks that my students must accomplish in the modules.	3.78	VHE	3.22	HE	3.48	HE
always notify my students when their answer sheets have been received, checked, and recorded per volume.	3.47	HE	3.09	HE	3.50	VH E
conduct a home visitation/parent-teacher conference and online "kamustahan".	3.40	HE	3.47	HE	3.50	VH E
Overall Weighted Mean	3.60	VHE	3.34	HE	3.47	HE
Standard Deviation	0.24		0.45		0.57	

This shows that teachers communicate with the students through calls, text messaging, chats via Messenger, and video calls. This means that the two groups of respondents are aware that communication between teachers and students was available during the implementation of the non-print modular distance learning modality. It also shows that they are allowed to ask clarifications or questions from the teacher and that the teacher does some follow-up on the student's activities if these were accomplished. Parents are also allowed to participate in simple online discussions regarding the modules and other matter. It is clear that in statements 4 and 5, parents have a Very High Extent (VHE) of verbal interpretation. This would mean that parents who are most of the time submitting their students' modules and other output and who also receive the teacher in time for home visitation or join the PTC are fully aware of this aspect.

The table 11 shows that in statements 3 and 5, all three groups of respondents have a High Extent (HE) verbal interpretation. This shows that they have similar perceptions about the fact that parents/students regularly submit their answer sheets on the scheduled day of submission. That students are allowed to submit photos of their answer sheets via Messenger only if they can present a valid reason for their failure to submit their answer sheets on the scheduled day. Meanwhile, in the first statement parents and teachers share Very High Extent (VHE) as verbal interpretation. This means that they are well aware of the schedule for the submission of answer sheets. Thus, in the perceptions on the extent of the implementation of non-print modular distance learning



modality as regards submission of the performance output all of the respondents have a very relative overall weighted mean which is 3.40, 3.21 and 3.25 which have a High Extent (HE) as verbal interpretation.

Table 11. Respondents' Perceptions on the Extent of the Implementation of Non-Print Modular Distance Learning Modality as Regards Submission of the Performance Output

As a teacher, I ...	Respondents					
	Teachers		Students		Parents	
	WM	VI	WM	VI	WM	VI
always announce ahead of time the schedule for the submission of answer sheets.	3.71	VHE	3.33	HE	3.51	VHE
always assist my students and parents during the submission of answer sheets.	3.58	VHE	3.33	HE	3.48	HE
notice that parents/students regularly submit their answer sheets during the scheduled day of submission.	2.69	HE	2.87	HE	2.90	HE
always remind my students and their parents to follow the correct arrangement of the submitted answer sheet so that it will not be misplaced.	3.69	VHE	3.23	HE	2.90	HE
allow my students to submit photos of their answer sheets via messenger only if they can present a valid reason for their failure to submit their answer sheets on the scheduled day.	3.36	HE	3.30	HE	3.45	HE
Overall Weighted Mean	3.40	HE	3.21	HE	3.25	HE
Standard Deviation	0.26		0.46		0.55	

Test of Significant Differences Among the Perceptions of the Three Groups of Respondents in the Implementation of the Print and Non-Print Modular Distance Learning Modality

The next table presents a comparison of perceptions regarding the extent of implementation of print modular distance learning among different participant groups, using the Analysis of Variance (ANOVA) method. The computed F-values for each aspect were evaluated against the critical value of 3.714 with a significance level of 0.05 and degrees of freedom (df) of 554.

Table 12. Comparison of Perceptions on the Extent of Print Modular Distance Learning Implementation among Different Participant Groups

Extent of the Implementation	F _{co}	df	F _{cr}	Decision	Interpretation
Content of the Module	1.862	554	3.714	Fail to Reject Ho	No Significance
Time Element for the Modules	49.569	554	3.714	Reject Ho	Significant
Student Engagement	26.944	554	3.714	Reject Ho	Significant
Monitoring of Student/Home Visitation	21.317	554	3.714	Reject Ho	Significant
Submission of Performance Output	9.570	554	3.714	Reject Ho	Significant

For the content of the module, the computed F-value was found to be 1.862, which is lower than the critical value of 3.71. This suggests that there is insufficient evidence to reject the null hypothesis and conclude that there is no significant difference between the perceptions of the three groups of respondents. In other words, the perceptions regarding the content of the module do not significantly vary among the different participant groups.

However, for the time element of modules the computed (F_c=49.569), student engagement (F_c=26.944), monitoring of student/home visitation (F_c=21.317), and submission of performance output (F_c=9.570), the computed F-values (F_c) were all greater than the critical value of 3.71. These indicate that there is enough evidence to reject the null hypothesis, thus there are significant differences in the perceptions among the participant groups. It implies that the perceptions of respondents within at least one pair of participant groups differ from each other.

Table 13. Post Hoc Analysis Results using Tukey Honestly Significant Difference (HSD) Test for Comparisons of Participant Groups: Extent of Print Modular Distance as to Time Element for the Modules

Comparison	Mean	MD	CI	Decision	Interpretation
Student	3.22	-0.25	-0.454 to -0.241	Reject Ho	Significant
Parent	3.47				
Student	3.22	-0.5	-0.876 to -0.487	Reject Ho	Significant
Teacher	3.72				
Parent	3.47	-0.25	-0.529 to -0.139	Reject Ho	Significant
Teacher	3.72				

Overall, these findings highlight the variations in perceptions among students, parents, and teachers regarding the Time Element for the Modules. Students tend to have poor awareness, while parents and teachers view the modules more positively. These differences underscore the importance of addressing the specific concerns and needs of each participant group to improve their perceptions and enhance the



effectiveness of the Time Element of the Modules in the context of print modular distance learning implementation.

Table 14. *Post Hoc Analysis Results using Tukey Honestly Significant Difference (HSD) Test for Comparisons of Participant Groups: Extent of Print Modular Distance Student Engagement*

Comparison	Mean	MD	CI	Decision	Interpretation
Student	3.33	-0.17	-0.051 to 0.135	Fail to	No
Parent	3.50			Reject Ho	Significance
Student	3.33	-0.39	-0.654 to -0.314	Reject Ho	Significant
Teacher	3.72				
Parent	3.50	-0.22	-0.696 to -0.356	Reject Ho	Significant
Teacher	3.72				

In summary, the post hoc analysis reveals that students have a significantly poor awareness of Student Engagement compared to both parents and teachers. Additionally, parents also have a significantly poor awareness of Student Engagement compared to teachers. These findings emphasize the variations in perceptions among the participant groups and suggest the need for targeted interventions and strategies to improve Student Engagement across all groups.

Table 15. *Post Hoc Analysis Results using Tukey Honestly Significant Difference (HSD) Test for Comparisons of Participant Groups: Extent of Print Modular Distance as Monitoring of Student/Home Visitation*

Comparison	Mean	MD	CI	Decision	Interpretation
Student	3.34	-0.13	-0.259 to -0.07	Reject Ho	Significant
Parent	3.47				
Student	3.34	-0.28	-0.451 to -0.106	Reject Ho	Significant
Teacher	3.60				
Parent	3.47	-0.13	-0.615 to -0.270	Reject Ho	Significant
Teacher	3.60				

In summary, the post hoc analysis reveals that students have a significantly poor awareness of Monitoring of Student/Home Visitation compared to both parents and teachers. Additionally, parents also have significantly poor awareness compared to teachers. These findings highlight the variations in perceptions among the participant groups and suggest the need for targeted interventions and strategies to improve the Monitoring of Student/Home Visitation across all groups.

Table 16. *Post Hoc Analysis Results using Tukey Honestly Significant Difference (HSD) Test for Comparisons of Participant Groups: Extent of Print Modular Distance as to the Submission of Performance Output*

Comparison	Mean	MD	CI	Decision	Interpretation
Student	3.21	-0.04	-0.174 to 0.014	Fail to	No
Parent	3.25			Reject Ho	Significance
Student	3.21	-0.19	-0.484 to -0.141	Reject Ho	Significant
Teacher	3.40				
Parent	3.25	-0.15	-0.404 to -0.061	Reject Ho	Significant
Teacher	3.40				

In summary, the post hoc analysis reveals that students have significantly poor awareness of the Submission of Performance Output compared to teachers. However, there is no significant difference in perceptions between students and parents, as well as between parents and teachers. These findings suggest that students may have different perceptions regarding the Submission of Performance Output compared to both parents and teachers. Further investigation and targeted interventions may be needed to understand and address these differences.

Table 17. *Comparison of Perceptions on the Extent of Non-Print Modular Distance Learning Implementation among Different Participant Groups*

Extent of the Implementation	F _{co}	df	F _{cr}	Decision	Interpretation
Content of the Module	0.603	572	3.713	Fail to Reject Ho	No Significance
Time Element of the Modules	36.227	572	3.713	Reject Ho	Significant
Student Engagement	15.889	572	3.713	Reject Ho	Significant
Monitoring of Student/Home Visitation	7.760	572	3.713	Reject Ho	Significant
Submission of Performance Output	2.939	572	3.713	Fail to Reject Ho	No Significance

The table shows the results of the analysis comparing the perceptions on the extent of non-print modular distance learning modality implementation among different participant groups. For the aspect of "Content of the Module," the computed F ratio is 0.603, which is lower than the critical F value of 3.713 at df = 572.

This indicates that there is no significant difference in perceptions regarding the content of the module among different participant groups. The decision is to fail to reject the null hypothesis, suggesting no significance.

In summary, while there is no significant difference in perceptions regarding the content of the module, there are significant differences in perceptions related to the time element of modules, student engagement, and



monitoring of student/home visitation among different participant groups. Conducting the HSD test will allow for a more in-depth understanding of these differences and facilitate the development of targeted interventions.

Table 18. *Post Hoc Analysis Results using Tukey Honestly Significant Difference (HSD) Test for Comparisons of Participant Groups: Extent of Non-Print Modular as to Content of the Module*

Comparison	Mean	MD	CI	Decision	Interpretation
Student	3.47	-0.25	0.163 to 0.345	Reject	Significant
Parent	3.22			Ho	
Student	3.47	-0.25	-0.345 to -0.163	Reject	Significant
Teacher	3.72			Ho	
Parent	3.22	-0.50	-0.668 to -0.331	Reject	Significant
Teacher	3.72			Ho	

In summary, the post hoc analysis using the Tukey HSD test reveals significant differences in perceptions among the participant groups for the content of the module in the context of non-print modular distance learning implementation. Students differ significantly from both parents and teachers, while parents differ significantly from teachers. These findings underscore the variations in perceptions across different participant groups and suggest the need for targeted interventions and strategies to address these differences.

Table 19. *Post Hoc Analysis Results using Tukey Honestly Significant Difference (HSD) Test for Comparisons of Participant Groups: Extent of Non-Print Modular as to Student Engagement*

Comparison	Mean	MD	CI	Decision	Interpretation
Student	3.24	0.17	0.071 to 0.275	Reject	Significant
Parent	3.19			Ho	
Student	3.24	-2.22	-0.410 to -0.329	Reject	Significant
Teacher	3.72			Ho	
Parent	3.19	-0.39	-0.583 to -0.206	Reject	Significant
Teacher	3.72			Ho	

In summary, the post hoc analysis using the Tukey HSD test reveals significant differences in perceptions among the participant groups for student engagement in the context of non-print modular distance learning implementation. Students differ significantly from both parents and teachers, while parents differ significantly from teachers. These findings highlight the disparities in perceptions among the participant groups and emphasize the importance of addressing and improving student engagement in non-print modular distance learning.

Work Performance of Grade VII Students

Table 20. *Grade VII Students' Work Performances Using Print and Non-Print Modular Distance Learning Modality*

Descriptor	Grading Scale	Student - Print		Student - Non-Print	
		Frequency	Percentage	Frequency	Percentage
Outstanding	90 - 100	9	3.53	15	5.68
Very Satisfactory	85 - 89	22	8.63	49	18.56
Satisfactory	80 - 84	88	34.51	92	34.85
Fairly Satisfactory	75 - 79	110	43.14	82	31.06
Did Not Meet Expectations	Below 75	26	10.20	26	9.85
Total		255	100.00	264	100.00
Mean			81.02		79.06
Description		Satisfactory		Fairly Satisfactory	

The table shows that the academic performance of students using print modular distance learning modality got a mean of 81.02 with the description being "Satisfactory". While the students using non-print modular distance learning modality had mean grade of 79.06 with "Fairly Satisfactory" as a description. This would mean that students using the print modular distance learning modality have higher work performance as compared to the students using the non-print modular distance learning modality.

Test of Significant Difference in the Work Performance of Students Using Print and Non-Print Modular Distance Learning Modality

Table 21. *Test of Difference Between Work Performance of Students Using Print and Non-Print Modular Distance Learning Modality*

Learning Modality	N	Mean	t-value	Decision	Interpretation
Print	255	81.02	2.64	Reject	Significant
Non-Print	264	79.06		Ho	

The first comparison is between students (mean = 3.24) and parents (mean = 3.19). The mean difference is 0.17, indicating that students have a significantly higher awareness compared to parents. The confidence interval (0.071 to 0.275) does not include zero, further supporting the significant difference. Therefore, the null hypothesis is rejected, and it can be concluded that there is a significant difference in perceptions between students and parents regarding student engagement.



Table 22. *Test of Relationship Between the Implementation of the Print Modular Distance Learning Modality and the Students' Work Performance*

Variables	r-value	Strength of relationship	Decision	Interpretation
Content of the Module	0.080	Negligible	Fail to Reject Ho	No Significance
Time Element of the Modules	0.116	Very Low Positive Correlation	Reject Ho	Significant
Student Engagement	0.222	Very Low Positive Correlation	Reject Ho	Significant
Monitoring of Student/Home Visitation	0.081	Negligible	Fail to Reject Ho	No Significance
Submission of Performance Output	0.237	Very Low Positive Correlation	Reject Ho	Significant

In summary, the analysis reveals that while the content of the module and monitoring of student/home visitation do not show a significant relationship with work performance, the time element for the modules, student engagement, and submission of performance output are significantly associated with students' work performance, although the strength of the relationships is very weak.

Table 23. *Test of Relationship Between the Implementation of the Non-Print Modular Distance Learning Modality and the Students' Work Performance*

Variables	r-value	Strength of relationship	Decision	Interpretation
Content of the Module	0.098	Negligible	Fail to Reject Ho	No Significance
Time Element for the Modules	0.160	Very Low Positive Correlation	Reject Ho	Significant
Student Engagement	0.262	Very Low Positive Correlation	Reject Ho	Significant
Monitoring of Student/Home Visitation	0.056	Negligible	Fail to Reject Ho	No Significance
Submission of Performance Output	0.237	Very Low Positive Correlation	Reject Ho	Significant

In summary, the analysis reveals that while the content of the module and monitoring of student/home visitation do not show a significant relationship with work performance, the time element for the modules, student engagement, and submission of performance

output is significantly associated with students' work performance, although the strength of the relationships is very weak.

Intervention Program to Improve Work Performance of Students Both of Print and Non-Print Modular Distance Learning Modality

Rationale

Modular distance learning modality is one of the best options presented by the Department of Education as the primordial solution for the continuity of education amidst the outbreak of covid-19. One of the formats is the printed and non-printed modules. Based on the results on the online registration, most of the students at Bagong Silangan High School have selected this as their preferred mode of learning. Undoubtedly, the switch to Modular Distance Learning (MDL) made the process of teaching and learning in schools more challenging and fulfilling.

Bagong Silangan High School is the only school in the Schools Division of Quezon City District II who is using modular print and non-print as learning modality due to many factors. Because of the abrupt changes in the sector of education due to the covid-19 it is then that the implementation of the learning modality is for trial and error. Various factors must be considered such as the content of the modules provided by the division office, time element of the modules, students engagement, monitoring of the students or home visitation and submission of the performance output. Different situations and problems arise as the implementation of the learning modality was going through that affects the work performance of the students.

The stated problems made the researchers to think of a way to help and guide the teachers, students, and parents on providing possible solutions that would help increase the work performance of the students to a higher level both for print and non-print modular distance learning modality.

Objectives

This proposed intervention program will be a year-round activity that aims to accomplish the following: (a) To enhance students' work performance in the utilization of print and non-print modular distance learning modalities provided by the school. (b) To strengthen the collaboration among parent-teachers and the community. (c) To enhance the skills of teachers in preparing video-lesson and guide on how to accomplish the activities in the modules accessible offline.



Discussion

Based on the results of the study, the following conclusions are drawn: (1) The parents and students shared similar views on the extent of the implementation of the print and non-print modular distance learning modalities, while teachers responded very positively since they played a vital role in the implementation and have full knowledge about the learning modality. (2) Students who used print modular distance learning modality had better work performance than students who used non-printed modules. (3) The academic performance of the students is dependent on the type of learning modality that they choose. (4) Based on the results of the study, an intervention program was deemed necessary.

Based on the conclusions of the study, the following recommendations are hereby proposed: (1) The proposed intervention program to improve students' work performance using print and non-print modular distance learning modality may be implemented to determine its effectiveness. (2) The school administrators may coordinate closely with the QC-LGU and other concerned organizations to help students who encountered difficulties in their studies. (3) Future researchers may conduct similar studies on the factors affecting the academic performance of students using printed modules. (4) Other researchers should conduct a similar study in schools of other cities/ locale to determine if similar results will occur.

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