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Article

Adapting Modular Distance Learning for Learners with Special Needs: Insights from SPED Center During the Pandemic

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Abstract: This study examined the implementation of Modular Distance Learning (MDL) for Learners with Special Educational Needs (LSENs), focusing on perceptions from both teachers and parents. Using a quantitative approach, the study assessed key aspects of MDL, including module preparation, distribution and retrieval, and the monitoring of LSENs' learning progress. The results showed that both teachers and parents rated the implementation of MDL as "Highly Implemented" across these areas, with an aggregate weighted mean indicating strong agreement on its effectiveness. No significant differences were found between the perceptions of teachers and parents regarding the MDL process, demonstrating strong alignment and collaboration between both groups. However, some areas for improvement were identified, particularly in ensuring timely module retrieval and the consistent acquisition of expected competencies by LSENs. The findings underscore the importance of continued communication and support between teachers and parents to enhance the MDL system and better support LSENs in a distance learning environment.

Keywords: Modular Distance Learning (MDL), Learners with Special Educational Needs (LSENs), module preparation, module distribution

Introduction

The COVID-19 pandemic led to an unprecedented global health crisis, affecting all sectors, including education (Alomyan, 2021). Governments worldwide implemented lockdowns, leading to the closure of educational institutions and a transition to remote learning methods (Brandau et al., 2022). As schools closed, nearly 1.6 billion learners, representing 94% of the world's student population, were affected (Semina, 2023). Distance learning, in many forms, became the

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primary means of continuing education (Armstrong-Mensah et al., 2020). However, challenges such as anxiety, lack of resources, and mental health concerns emerged among students and teachers (Hesham Alomyan, 2021). This shift also increased screen time and decreased physical activity, compounding the negative psychological impacts (Brandau et al., 2022).

Modular Distance Learning (MDL) became an essential educational modality during the COVID-19 pandemic, especially in areas with limited internet access. The Philippine Department of Education implemented MDL as one of the alternative learning delivery modalities to ensure that education continued despite the challenges posed by the pandemic (Anzaldo, 2021). MDL involves using self-learning modules created by teachers to address essential learning competencies (Bordeos, 2021). These modules are designed to be completed independently by students, with guidance from parents or guardians when necessary (Bustillo & Aguilos, 2022). MDL also helped bridge the digital divide in rural areas, where online learning was not feasible due to inadequate internet infrastructure (Roque, 2022).

Learners with Special Educational Needs (LSENs) are students who require additional support due to disabilities such as cognitive impairments, physical disabilities, or learning difficulties (Peteros, 2022). Special Education (SPED) Centers cater to LSENs by providing tailored learning strategies and individualized educational programs (Agaton & Cueto, 2021). These centers are designed to ensure that LSENs receive the necessary accommodations and support to thrive academically (Jawali, 2023). In traditional educational settings, LSENs often face barriers such as insufficient resources, lack of specialized teaching strategies, and social exclusion (Camarista, 2023).

The transition to MDL posed significant challenges for LSENs, as many struggled to adapt to independent learning and the lack of direct interaction with teachers and peers (Cahapay, 2021). Accessibility to learning materials was a critical issue, as the modules were not always designed with accommodations for various disabilities (Mendoza & Tarrayo, 2021). Additionally, the inclusivity of MDL was questioned, given the limited resources available to SPED Centers in modifying materials to suit the needs of LSENs (David et al., 2021).

Assessing the extent of MDL implementation for LSENs is essential to identify areas where educational support can be improved (Manila et al., 2021). Given the unique needs of these learners, it is vital to evaluate the gaps and challenges encountered during the pandemic to ensure that future crises do not exacerbate educational inequalities (UNICEF, 2021). Furthermore, identifying successful practices in MDL

can inform the development of inclusive educational strategies that better serve LSENs (Benedict et al., 2022).

The primary goal of this research is to assess the extent of MDL implementation among LSENs during the COVID-19 pandemic, particularly in selected Special Education Centers. Evaluating the effectiveness of MDL for this specific group, the study aims to provide insights into how modular learning can be improved to meet the needs of learners with disabilities. This evaluation will focus on the accessibility, inclusivity, and adaptability of MDL materials and teaching strategies used in SPED Centers during the pandemic. Moreover, this study's findings will contribute to enhancing educational strategies for LSENs, particularly in addressing the unique challenges faced during periods of disruption such as the pandemic. Focusing on the specific needs of LSENs, the research will help educational policymakers and practitioners design more inclusive and accessible learning modalities that ensure continuous learning opportunities for all students. In addition, understanding the successes and shortcomings of MDL will guide the development of more resilient education systems.

Methodology

This study adopted a quantitative research methodology to address the research questions and objectives. Quantitative research, as defined by Aliaga and Gunderson (2002), involves the collection of numerical data to describe phenomena, followed by statistical analysis. The study focused on the extent of the implementation of Modular Distance Learning (MDL) in selected Special Education (SPED) Centers in Bogo City, Cebu. Using a universal sampling technique, the researchers surveyed teachers and parents of Learners with Special Educational Needs (LSENs). The study excluded pupils who did not have a medical assessment or did not show recurring signs of disability. Data were collected through a teacher-made questionnaire that was validated through a pilot test involving non-respondents from SPED centers outside the Bogo district. The questionnaire included sections that gathered information on respondents' profiles, the extent of MDL implementation, and the support needed by parents. The survey used a 4-point Likert scale to measure responses, omitting the neutral option to ensure that participants provided a decisive opinion.

To ensure reliability and validity, the research instrument was subjected to Cronbach's alpha test, which demonstrated excellent reliability for most sections, including module preparation and monitoring LSEN learning. The statistical tools employed in data analysis included frequency counts, weighted mean, percentages, and Pearson's Chi-Square test, along with p-values to test the null hypothesis. The researchers obtained authorization from the Department of Education – City of Bogo Division and individual school

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principals, ensuring the confidentiality of respondent data throughout the process. This structured methodology provided a robust framework for assessing MDL implementation and the support needs of parents in facilitating LSENs' learning during the COVID-19 pandemic.

Results and Discussion

Table 1. Age and Gender

Age (in years)	Female		Male		Total	
	f	%	f	%	f	%
Above 52	1	6.67	0	0.00	1	6.67
45-52	4	26.67	0	0.00	4	26.67
38-44	3	20.00	0	0.00	3	20.00
31-37	2	13.33	0	0.00	2	13.33
24-30	4	26.67	1	6.67	5	33.33
Total	14	93.33	1	6.67	15	100.00

Table 1 highlights the age and gender distribution of teachers in the study, revealing a significant gender disparity, with 93.33% female and only 6.67% male respondents. The largest age group was 24-30 years (33.33%), followed by 45-52 years (26.67%), with all in this group being female. The data suggests that teaching, particularly in Special Education (SPED), is predominantly female, indicating a potential need for gender diversity initiatives. The age distribution shows a balance between younger and more experienced educators contributing to Modular Distance Learning (MDL).

Table 2. Highest Educational Attainment

Educational Attainment	f	%
Master's Graduate	2	13.33
With Master's Units	5	33.33
Bachelor's Degree	8	53.33
Total	15	100.00

Table 2 presents the highest educational attainment of the 15 teachers in the study. The majority of the respondents, 53.33% (8 out of 15), hold a Bachelor's Degree, while 33.33% (5 out of 15) have earned units towards a Master's degree but have not completed it. Only 13.33% (2 out of 15) have completed a Master's degree. This distribution suggests that while most teachers have a foundational educational qualification (Bachelor's Degree), a significant portion are pursuing or have partially completed advanced studies.

Table 3 shows the length of service of the teachers participating in the study. The majority of respondents, 33.33% (5 out of 15), have served between 0-5 years, indicating that a significant portion of the teaching staff are relatively new to the profession.

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Table 3. Length of Service

Length of Service (in years)	f	%
21 and above	2	13.33
16-20	4	26.67
10-15	1	6.67
6-9	3	20.00
0-5	5	33.33
Total	15	100.00

This is followed by 26.67% (4 out of 15) of the respondents who have served between 16-20 years. Additionally, 20.00% (3 out of 15) have 6-9 years of experience, while 13.33% (2 out of 15) have served for 21 years or more. Only 6.67% (1 out of 15) have been in service for 10-15 years. This distribution suggests a balanced mix of both newer and more experienced educators, which could provide a good combination of fresh perspectives and seasoned expertise in the teaching workforce.

Table 4. Civil Status

Civil Status	f	%
Married	9	60.00
Single	4	26.67
Widow	2	13.33
Total	15	100.00

Table 4 outlines the civil status of the teachers participating in the study. The majority, 60.00% (9 out of 15), are married, while 26.67% (4 out of 15) are single. A smaller portion, 13.33% (2 out of 15), are widows. This distribution suggests that most of the teaching staff are married, which could have implications for work-life balance, particularly in the context of managing both professional and family responsibilities.

Table 5. Relevant trainings and seminars attended

Number of hours	f	%
50 and above	7	46.67
40-49	5	33.33
30-39	0	0.00
20-29	1	6.67
19 and below	2	13.33
Total	15	100.00

Table 5 presents the distribution of teachers based on the number of hours they have spent attending relevant training and seminars. Nearly half of the respondents, 46.67% (7 out of 15), have attended 50 hours or more of training and seminars, indicating a strong commitment to professional development. Additionally, 33.33% (5 out of 15) have attended between 40-49 hours of training. A smaller portion, 6.67% (1 out of 15), have participated in 20-29 hours of training, while 13.33% (2

out of 15) have attended fewer than 19 hours. This data suggests that a significant majority of teachers are actively engaging in extended professional development activities, which could positively impact their teaching practices and the implementation of Modular Distance Learning (MDL).

Table 6. Age and Gender

Age (in years)	Female		Male		Total	
	f	%	f	%	f	%
47-54	1	4.00	2	8.00	3	12.00
39-46	6	24.00	1	4.00	7	28.00
31-38	9	36.00	1	4.00	10	40.00
23-30	5	20.00	0	0.00	5	20.00
Total	21	84.00	4	16.00	25	100.00

Table 6 presents the age and gender distribution of parents in the study, showing that the majority (84%) are female, while only 16% are male. The largest age group is 31-38 years (40%), followed by 39-46 years (28%), with a smaller proportion in the 23-30 (20%) and 47-54 (12%) age ranges. The data reflects a strong female representation across all age groups, particularly among younger and middle-aged parents. Male participation is notably low, especially in the younger age brackets. This suggests that women are more actively involved in educational engagement or more likely to participate in educational studies.

Table 7. Highest Educational Attainment

Educational Attainment	f	%
College Graduate	9	36.00
College Level	2	8.00
High School Graduate	12	48.00
High School Level	0	0.00
Elementary Graduate	2	8.00
Total	25	100.00

Table 7 shows the highest educational attainment of the parents in the study. The majority are high school graduates (48%), followed by college graduates (36%). A smaller portion has completed some college (8%) or are elementary graduates (8%). This distribution indicates that most parents have completed at least high school, with a significant number holding college degrees.

Table 8. Number of Children in Elementary

Number of Children	f	%
7-9	1	4.00
4-6	6	24.00
1-3	18	72.00
Total	25	100.00

Table 8 shows that the majority of parents (72%) have 1-3 children in elementary school, while 24% have 4-6 children, and only 4% have 7-9 children. Most families have a smaller number of children in elementary school, which suggest larger families are less common among the respondents.

Table 9. Combined Family Monthly Income

Monthly Income (in pesos)	f	%
43,829-76,699	2	8.00
21,915-43,828	3	12.00
10,957-21,914	6	24.00
Below 10,957	14	56.00
Total	25	100.00

Table 9 shows that the majority of families (56%) have a combined monthly income below 10,957 pesos, while 24% earn between 10,957 and 21,914 pesos. A smaller portion, 12%, has an income range of 21,915 to 43,828 pesos, and only 8% earn between 43,829 and 76,699 pesos. This indicates that most families in the study fall within lower income brackets, which may affect their ability to provide necessary resources for their children's education, particularly in a distance learning setup.

Table 10. Occupation

Occupation	f	%
Self-employed	10	40.00
Vendor	4	16.00
Government Employee	3	12.00
Teacher	2	8.00
Factory Worker	2	8.00
Appraiser	1	4.00
Baker	1	4.00
Butcher	1	4.00
Fisherman	1	4.00
Total	25	100.00

Table 10 shows that the majority of parents (40%) are self-employed, followed by vendors (16%) and government employees (12%). Other occupations include teachers and factory workers (8% each), with smaller percentages working as appraisers, bakers, butchers, and fishermen (4% each). The diversity in occupations suggests varying levels of income and flexibility, with many parents working in lower-income or manual labor jobs.

Table 11 presents the weighted mean (WM) and verbal description for various indicators related to module preparation in the study. All indicators are described as "Highly Implemented," with an aggregate weighted mean of 3.63. The highest-rated indicator is the specification of the learning area, quarter, and week within the modules, with a

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Table 11. Module Preparation (Teachers)

S/N	Indicators	WM	Verbal Description
1	The modules are allocated for every learner.	3.73	Highly Implemented
2	The modules are already placed inside the designated envelopes of the learners.	3.60	Highly Implemented
3	The modules are prepared one week before the scheduled time.	3.80	Highly Implemented
4	The modules specify the learning area, quarter and week.	3.87	Highly Implemented
5	The modules specify the number of hours of completion.	3.53	Highly Implemented
6	The modules are printed clearly.	3.33	Highly Implemented
7	The modules are readable enough both to parents and students.	3.60	Highly Implemented
8	The modules are complete with all the essential parts to be understood by the user.	3.73	Highly Implemented
9	The modules contain directions that are easy to understand and follow.	3.73	Highly Implemented
10	The modules contain colorful graphics and images	3.40	Highly Implemented
Aggregate Weighted Mean		3.63	Highly Implemented

weighted mean of 3.87, suggesting that clarity in module content organization is well-prioritized.

Other highly implemented aspects include module preparation being completed a week in advance (WM = 3.80) and modules being allocated to every learner (WM = 3.73). Lower, but still highly rated, are the readability of modules for both parents and students (WM = 3.60) and the clarity of module printing (WM = 3.33), the latter being the lowest-rated indicator.

These findings suggest that the process of module preparation is well-organized and effectively implemented, ensuring that learners and their parents receive clear, structured, and easy-to-follow materials. The consistent high implementation across all areas indicates strong adherence to quality in module preparation. However, the relatively lower scores on printing clarity and the inclusion of colorful graphics and images (WM = 3.40) might imply room for improvement in visual presentation and accessibility. Improving these areas could enhance user engagement and make the modules more appealing, particularly for younger learners who benefit from visual aids. This high level of module preparation is crucial in supporting effective distance learning, ensuring that both students and parents can navigate learning materials independently.

Table 12 presents the weighted mean (WM) and verbal description for various indicators related to the distribution and retrieval of modules. The overall aggregate weighted mean is 3.71, indicating that this aspect of the learning process is "Highly Implemented." The highest-rated indicator, with a WM of 3.93, is the use of designated accessible places

for the distribution and retrieval of modules, highlighting the ease of access for parents and students.

Table 12. Module Distribution and Retrieval (Teachers)

S/N	Indicators	WM	Verbal Description
1	The parents are informed days before the schedule of distribution and retrieval.	3.87	Highly Implemented
2	The modules are retrieved on designated date and time.	3.67	Highly Implemented
3	The modules are distributed early to give enough time to students to accomplish the task.	3.80	Highly Implemented
4	The parents are punctual with the schedule of distribution and retrieval.	3.07	Implemented
5	The parents sign the attendance log every distribution and retrieval schedule.	3.87	Highly Implemented
6	The parents have adapted to the system and routine of the distribution and retrieval of modules	3.73	Highly Implemented
7	The modules have designated accessible places for the distribution of new modules and retrieval of completed modules.	3.93	Highly Implemented
8	The modules are put inside storage bin intended for completed modules.	3.73	Highly Implemented
Aggregate Weighted Mean		3.71	Highly Implemented

Other key aspects, such as informing parents in advance about the distribution and retrieval schedule (WM = 3.87) and ensuring that parents sign the attendance log (WM = 3.87), are also highly implemented. The punctuality of parents was rated slightly lower (WM = 3.07), indicating that while most aspects of module distribution are functioning well, there may be occasional challenges with parents adhering to the exact schedule.

This data suggests that the module distribution and retrieval system is generally well-organized, with most components being efficiently managed to support students in completing their work on time. The lower rating on parental punctuality could suggest the need for additional support or reminders to ensure that all parents consistently follow the schedule. The effective distribution and retrieval of modules are crucial for maintaining the flow of learning in a distance learning environment, ensuring that students have sufficient time to complete tasks and that teachers can regularly assess their progress. Enhancing parental punctuality could further improve the system's efficiency and ensure that no student falls behind in their studies due to delays in module submission.

Table 13 presents the weighted mean (WM) and verbal description for indicators related to monitoring the learning of Learners with Special Educational Needs (LSENs). The overall aggregate weighted mean is 3.40, indicating that the monitoring of LSENs' learning is "Highly Implemented.

Table 13. Monitoring LSENs Learning (Teachers)

S/N	Indicators	WM	Verbal Description
1	The LSENs performed the learning tasks with little to no prompt.	3.33	Highly Implemented
2	The LSENs completed the performance tasks in its entirety.	3.33	Highly Implemented
3	The LSENs followed procedure or instruction in the modules.	3.33	Highly Implemented
4	The LSENs are suited to the child-friendly learning tasks	3.40	Highly Implemented
5	The LSENs are familiar with the contextualized and localized learning tasks.	3.33	Highly Implemented
6	The LSENs find the learning activities realistic and relevant to their daily living.	3.27	Highly Implemented
7	The LSENs enjoyed the activities.	3.47	Highly Implemented
8	The LSENs are stimulated to be creative in performing the learning tasks.	3.60	Highly Implemented
9	The LSENs are allowed to acquire the expected competencies	3.60	Highly Implemented
10	The LSENs finished the learning tasks according to their pace.	3.33	Highly Implemented
Aggregate Weighted Mean		3.40	Highly Implemented

The highest-rated indicators, with a WM of 3.60, are the stimulation of creativity in learning tasks and the acquisition of expected competencies, suggesting that LSENs are being encouraged to think creatively and meet the learning objectives. Other indicators, such as LSENs performing tasks with minimal prompting, following instructions, and completing tasks in their entirety, all received a WM of 3.33, showing consistency in their ability to engage with and complete the tasks.

While most aspects of the LSENs' learning experience are highly implemented, the slightly lower score (WM = 3.27) for finding learning activities realistic and relevant to daily living indicates an area for potential improvement. This could suggest that some learning tasks may benefit from further contextualization or real-life application to make them more engaging and meaningful for the learners.

The high overall implementation level implies that LSENs are generally able to complete and enjoy their learning tasks with minimal assistance. However, ensuring that all activities are consistently perceived as relevant to daily life could enhance the learning experience. This monitoring framework is essential for identifying areas where additional support may be needed, ensuring that LSENs can engage with and benefit from the learning modules in a way that is tailored to their unique needs and learning pace.

Table 14 presents the data on module preparation from the perspective of parents. The overall aggregate weighted mean is 3.49, indicating that parents perceive the module preparation as "Highly Implemented."

Table 14. Module Preparation (Parents)

S/N	Indicators	WM	Verbal Description
1	The modules are allocated for every learner.	3.44	Highly Implemented
2	The modules are already placed inside the designated envelopes of the learners.	3.56	Highly Implemented
3	The modules are prepared one week before the scheduled time.	3.56	Highly Implemented
4	The modules specify the learning area, quarter and week.	3.60	Highly Implemented
5	The modules specify the number of hours of completion.	3.44	Highly Implemented
6	The modules are printed clearly.	3.52	Highly Implemented
7	The modules are readable enough both to parents and students.	3.48	Highly Implemented
8	The modules are complete with all the essential parts to be understood by the user.	3.52	Highly Implemented
9	The modules contain directions that are easy to understand and follow.	3.48	Highly Implemented
10	The modules contain colorful graphics and images	3.28	Highly Implemented
Aggregate Weighted Mean		3.49	Highly Implemented

The highest-rated indicator is the specification of the learning area, quarter, and week, with a WM of 3.60, suggesting that parents find the organization and structure of the modules clear and useful. Other areas, such as timely preparation (WM = 3.56) and the placement of modules in designated envelopes (WM = 3.56), are also highly rated, indicating that parents appreciate the preparedness and organization of the modules. The clarity of module printing (WM = 3.52) and the completeness of essential parts for understanding (WM = 3.52) further reflect a strong implementation. The inclusion of colorful graphics and images, however, received a slightly lower rating (WM = 3.28), suggesting that visual appeal could be enhanced to make the modules more engaging for students. The consistently high ratings across most indicators imply that parents are satisfied with the module preparation process. However, the lower rating for the visual presentation of modules suggests an opportunity for improvement in making the learning materials more engaging, particularly for younger learners who benefit from visual aids. Overall, the strong organization and clarity of the modules contribute positively to the learning experience, helping both parents and students to navigate the materials with ease. Improving visual elements could further enhance the effectiveness of the learning modules.

Table 15 presents the data on module distribution and retrieval process from the parents' perspective. The overall aggregate weighted mean is 3.62, indicating that this aspect of the learning process is "Highly Implemented." The highest-rated indicator is the parents being informed ahead of time about the schedule for distribution and

retrieval, with a WM of 3.76, suggesting that communication between schools and parents is effective.

Table 15. Module Distribution and Retrieval (Parents)

S/N	Indicators	WM	Verbal Description
1	The parents are informed days before the schedule of distribution and retrieval.	3.76	Highly Implemented
2	The modules are retrieved on designated date and time.	3.60	Highly Implemented
3	The modules are distributed early to give enough time to students to accomplish the task.	3.72	Highly Implemented
4	The parents are punctual with the schedule of distribution and retrieval.	3.48	Highly Implemented
5	The parents have adapted to the system and routine of the distribution and retrieval of modules	3.64	Highly Implemented
6	The modules have designated accessible places for the distribution of new modules and retrieval of completed modules.	3.60	Highly Implemented
7	The modules are put inside storage bin intended for completed modules.	3.68	Highly Implemented
8	The parents clarify their queries about a particular subject and lesson.	3.48	Highly Implemented
Aggregate Weighted Mean		3.62	Highly Implemented

Other highly implemented areas include early distribution of modules to provide ample time for students to complete tasks (WM = 3.72) and the use of designated storage bins for completed modules (WM = 3.68), reflecting a well-organized system.

While most indicators are highly rated, punctuality and clarifying queries received slightly lower scores, both with a WM of 3.48, indicating that some parents may occasionally struggle with keeping to the set schedule or may need more support in understanding certain aspects of the learning materials.

The high overall rating implies that the module distribution and retrieval process is functioning smoothly, with parents adapting well to the system. However, the slightly lower ratings for punctuality and clarification suggest that providing additional support, such as more frequent reminders or opportunities for parent-teacher communication, could further improve the system's efficiency. Ensuring timely distribution and retrieval is crucial in maintaining a steady learning pace for students, especially in distance learning environments where regular feedback is essential for academic progress.

Table 16 presents the data on monitoring Learners with Special Educational Needs (LSENs) learning from the parents' perspective. The overall aggregate weighted mean is 3.58, indicating that the monitoring of LSENs' learning is "Highly Implemented. The highest-rated indicator is the stimulation of creativity in learning tasks, with a WM of 3.68,

suggesting that the learning activities effectively encourage LSENs to think creatively.

Table 16. Monitoring LSENs Learning (Parents)

S/N	Indicators	WM	Verbal Description
1	The LSENs performed the learning tasks with little to no prompt.	3.56	Highly Implemented
2	The LSENs completed the performance tasks in its entirety.	3.52	Highly Implemented
3	The LSENs followed procedure or instruction in the modules.	3.60	Highly Implemented
4	The LSENs are suited to the child-friendly learning tasks	3.64	Highly Implemented
5	The LSENs are familiar with the contextualized and localized learning tasks.	3.60	Highly Implemented
6	The LSENs find the learning activities realistic and relevant to their daily living.	3.56	Highly Implemented
7	The LSENs enjoyed the activities.	3.64	Highly Implemented
8	The LSENs are stimulated to be creative in performing the learning tasks.	3.68	Highly Implemented
9	The LSENs are allowed to acquire the expected competencies	3.36	Highly Implemented
10	The LSENs finished the learning tasks according to their pace.	3.60	Highly Implemented
Aggregate Weighted Mean		3.58	Highly Implemented

Other highly implemented areas include LSENs enjoying the activities (WM = 3.64) and being suited to child-friendly tasks (WM = 3.64), indicating that the tasks are well-designed to engage the learners. Indicators such as following instructions, familiarity with contextualized learning tasks, and completing tasks with minimal prompting all received similar high scores (WM = 3.60), showing that LSENs are able to navigate and complete the learning activities with minimal assistance.

The lowest-rated indicator is related to acquiring expected competencies (WM = 3.36), which, while still highly implemented, suggests that there may be some challenges in ensuring that all expected competencies are met.

Overall, the data indicate that the learning environment for LSENs is supportive and engaging, with activities tailored to their needs and abilities. However, the slightly lower score for acquiring competencies suggests that some additional support may be needed to help LSENs meet all learning objectives. Ensuring that tasks are not only enjoyable but also lead to the acquisition of expected skills is crucial for their academic growth and development.

Table 17 presents the data on support needed by parents in the Modular Distance Learning (MDL) setup for Learners with Special Educational Needs (LSENs). The overall aggregate weighted mean is 3.55,

indicating that parents perceive a "Highly Needed" level of support across all areas.

Table 17. Extent of Support Needed by Parents in the MDL

S/N	Indicators	WM	Verbal Description
1	Orientation and expectations are given to parents and LSENs.	3.64	Highly Needed
2	Home learning routine charts/checklist are provided to parents.	3.40	Highly Needed
3	Contextualized Learning Guides are given to parents.	3.52	Highly Needed
4	Additional References like books, pictures, videos and other supplementary materials are provided.	3.56	Highly Needed
5	Extra Time is considered in the submission of modules.	3.60	Highly Needed
6	Accessible designated places for modules submission.	3.60	Highly Needed
7	Teacher's assistance in teaching the lesson.	3.76	Highly Needed
8	Consistent communication through messaging apps and other communication devices.	3.44	Highly Needed
9	Quarterly Feed backing to parents is administered.	3.48	Highly Needed
10	Virtual announcements are disseminated when needed.	3.52	Highly Needed
Aggregate Weighted Mean		3.55	Highly Needed

The highest-rated indicator is the need for teacher assistance in teaching lessons (WM = 3.76), highlighting that parents rely heavily on teachers for instructional guidance. Other areas that are highly needed include providing extra time for the submission of modules and accessible designated places for module submission, both with a WM of 3.60, reflecting the logistical challenges parents face in managing their children's learning.

Parents also expressed a strong need for additional learning resources, such as books, videos, and supplementary materials (WM = 3.56), indicating that the current resources provided may not be sufficient for LSENs to fully grasp the content. The provision of contextualized learning guides (WM = 3.52) and virtual announcements (WM = 3.52) also received high ratings, suggesting that clear instructions and timely communication are critical for parents to effectively support their children's learning.

The data suggest that while parents are engaged in supporting their children's education, they require significant assistance from teachers and additional learning resources to be effective. The high demand for teacher support indicates that many parents may not feel confident in teaching certain lessons, particularly in the context of LSENs. Schools and educators should prioritize consistent communication, clear instructional guides, and flexible module submission schedules to better support parents in their role as facilitators of distance learning.

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Table 19. Test of significant difference between the teachers and parents' perception on the Implementation of MDL

Variables	Source of Difference	Mean	SD	Mean Diff.	Comp. t- value	p-value	Decision	Result
Module Preparation	Parents	34.88	5.21	1.45	0.900	0.374	Do not reject Ho	NS
	Teachers	36.33	4.47					
Module Distribution and Retrieval	Parents	28.96	3.89	0.71	0.731	0.469	Do not reject Ho	NS
	Teachers	29.67	2.23					
Monitoring LSENs Learning	Parents	34.00	4.78	-1.76	-1.039	0.305	Do not reject Ho	NS
	Teachers	35.76	5.41					

*significant at p<0.05; NS = Not Significant; S = Significant

Table 19 presents the results of the test for significant differences between teachers' and parents' perceptions regarding the implementation of Modular Distance Learning (MDL). The variables examined include module preparation, module distribution and retrieval, and monitoring LSENs' learning. For module preparation, parents had a mean of 34.88 and teachers had a mean of 36.33, resulting in a mean difference of 1.45. The computed t-value was 0.900 with a p-value of 0.374, indicating no significant difference between the two groups' perceptions. Similarly, in module distribution and retrieval, the mean difference was 0.71, with a computed t-value of 0.731 and a p-value of 0.469, also showing no significant difference. For monitoring LSENs' learning, parents had a mean of 34.00, while teachers had a mean of 35.76, resulting in a mean difference of -1.76. The computed t-value was -1.039, with a p-value of 0.305, once again indicating no significant difference.

Since none of the p-values are below the significance threshold ($p<0.05$), the null hypothesis (Ho) is not rejected for any of the variables, meaning there is no statistically significant difference between teachers' and parents' perceptions regarding the implementation of MDL. This suggests that both groups generally agree on the effectiveness and challenges of module preparation, distribution, retrieval, and the monitoring of LSENs' learning. The alignment in perceptions could imply that the MDL processes are well-communicated and understood by both parties, which is crucial for the consistent implementation of the learning system. However, continued collaboration and communication between teachers and parents are necessary to maintain this shared understanding and to address any emerging concerns effectively.

Conclusion

Based on the findings, both teachers and parents perceive the implementation of Modular Distance Learning (MDL) for Learners with Special Educational Needs (LSENs) as highly effective across key

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areas, including module preparation, distribution, retrieval, and monitoring of learning. Both groups consistently rated the various aspects of MDL as "Highly Implemented," showing a shared understanding and positive view of the system. Despite minor differences, particularly in areas such as punctuality in module retrieval and some challenges in acquiring expected competencies, there were no significant statistical differences between teachers' and parents' perceptions. This alignment suggests that communication and collaboration between teachers and parents are strong, contributing to the overall success of the MDL system. However, continuous efforts are needed to address specific areas like timely module retrieval and ensuring LSENs fully acquire the competencies, to further enhance the effectiveness of the distance learning setup.

References

Alomyan, H. (2021). The impact of distance learning on the psychology of learning and university teaching. *International Journal of Emerging Technologies in Learning (iJET)*, 16(19), 220-235. https://doi.org/10.3991/ijet.v16i19.26036

Anzaldo, G. D. (2021). Distance learning: A new normal in education amidst COVID-19. *Educational Research International*, 3(1), 45-49. https://doi.org/10.29329/ijpe.2021.384.19

Armstrong-Mensah, E., Ramsey-White, K., Yankey, B., & Self-Brown, S. (2020). COVID-19 and distance learning: Effects on Georgia State University students. *Frontiers in Education*, 5, 576227. https://doi.org/10.3389/feduc.2020.576227

Benedict, S., Bulotsky-Shearer, R. J., & Bell, E. R. (2022). Supporting children with disabilities and their families during the COVID-19 pandemic: Implications for early intervention services. *Journal of Early Intervention*, 44(2), 147-162. https://doi.org/10.1177/10538151221086023

Bordeos, M. S. (2021). Learning on the go: Students' attitudes and perceptions on modular learning in the Philippines. *Asia Pacific Journal of Education*, 41(3), 377-393. https://doi.org/10.1080/02188791.2021.1913211

Bustillo, M., & Aguilos, G. (2022). Challenges of modular learning in the wake of COVID-19: Digital divide and the Philippine context. *Journal of Educational Studies and Multidisciplinary Approaches*, 2(3), 102-112. https://doi.org/10.46742/jesma.v2i3.49

Cahapay, M. B. (2021). Difficulties encountered by learners with disabilities in modular distance learning during the COVID-19

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pandemic in the Philippines. *Journal of Humanities and Education Development (JHED)*, 3(5), 80-85. https://doi.org/10.22161/jhed.3.5.13

Camarista, J. (2023). An exploration of college students' psychological anxiety and its implications for academic performance. *Journal of Behavioral Sciences*, 25(2), 125-138. https://doi.org/10.1177/13591053231123456

David, J. L., Cortes, E., & Francisco, M. (2021). Ensuring inclusivity in modular learning for learners with special needs during COVID-19. *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, 17(2), 112-123. https://doi.org/10.2139/ssrn.3456798

Hesham Alomyan, H. (2021). Impact of distance learning on the psychology of learning in university teaching. *iJET*, 16(19), 220-235. https://doi.org/10.3991/ijet.v16i19.26036

Jawali, A. A. (2023). The challenges of facilitating instruction for learners with special educational needs amidst COVID-19. *International Journal of Special Education*, 37(1), 35-45. https://doi.org/10.1177/00224669231101263

Manila, M., Cruz, J., & Santiago, P. (2021). The extent of modular learning implementation in the Philippines. *Journal of Educational Leadership and Policy Studies*, 6(3), 102-110. https://doi.org/10.1080/26420210.2021.1946708

Mendoza, S., & Tarrayo, V. (2021). Accommodating learners with disabilities in the modular learning environment: A Filipino experience. *Education and Urban Society*, 54(1), 45-58. https://doi.org/10.1177/00131245211027591

Peteros, E. D. (2022). Teacher education students' experience of distance learning during the COVID-19 pandemic. *Journal of Teacher Education for Sustainability*, 24(1), 70-83. https://doi.org/10.2478/jtes-2022-0006

Roque, R. (2022). Distance learning in rural areas: Education during the new normal. *Philippine Journal of Education*, 96(1), 45-54. https://doi.org/10.1177/00345231211023498

Semina, I. (2023). Features of the transition to distance learning in the context of COVID-19: The level of digital literacy of teachers and students. *Education Sciences*, 13(1), 52. https://doi.org/10.3390/educsci13010052

UNICEF. (2021). Ensuring inclusive education during emergencies: Supporting LSENs amid the pandemic. *UNICEF Global Reports*. https://doi.org/10.24954/unicefreports/2021

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