

Article

Effectiveness Of Modular Distance Learning in Enhancing Learning Outcomes of Children with Intellectual Disabilities

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Abstract: This study investigated the effectiveness of modular distance learning in enhancing the learning outcomes of children with intellectual disabilities (IDs) during the COVID-19 pandemic. The findings reveal that children with IDs, categorized as Level 2 in disability classification, indicative of mild intellectual disability, exhibited the capacity to learn colors, shapes, and patterns, albeit at a slower pace, within the modularized instructional framework. Their satisfactory level of performance in these areas suggests the potential of the modular approach to cater to their specific educational needs. However, the study also highlighted substantial challenges faced by parents and teachers. Parents struggled with managing their children's behavior during modular learning, lacking support and preparation to serve as home-based educators. Teachers faced connectivity issues, time constraints, and the need for parental involvement as facilitators. Addressing these challenges is essential to optimize modular distance learning for children with IDs, ensuring inclusive and effective education in a post-pandemic world.

Keywords: Modular distance learning modality, learning outcomes, children with intellectual disabilities, children with special needs,

Introduction

The COVID-19 pandemic presented an unprecedented challenge to the global education system, forcing educators to adapt quickly to new modes of teaching and learning (Garcia-Morales et al., 2021). Among the diverse student population, children with intellectual disabilities (IDs) faced unique obstacles in this rapidly changing educational landscape (Odonovan, 2021). The shift towards distance



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learning, driven by health concerns and lockdown measures, prompted educators and policymakers to explore alternative approaches to ensure that children with IDs continued to receive quality education (Yassine et al., 2022).

Moreover, COVID-19 pandemic disrupted the global education landscape, compelling institutions to rethink traditional teaching methods and adopt alternative approaches to ensure continuity in learning (Oladipo et al., 2020). However, this transition was far from seamless and presented numerous challenges across various educational dimensions (Novikov, 2020). Among the most vulnerable groups in this upheaval were children with intellectual disabilities (IDs), who encountered unique obstacles in accessing quality education (Whitley et al., 2021).

The pandemic brought about significant disruptions to education at all levels. Schools faced closures, and in-person learning was severely curtailed to minimize the spread of the virus (Marpa, 2021). This posed considerable challenges to both educators and students and teachers had to quickly adapt to remote teaching, often without adequate training and resources, while learners faced the abrupt shift from traditional classrooms to virtual or remote environments (Zamora-Antunano et al., 2021). This transition raised concerns about maintaining engagement, effective communication, and ensuring learning outcomes were not compromised (Neuwirth, 2021).

Moreover, children with intellectual disabilities, already marginalized within traditional educational settings, faced an even more pronounced educational crisis during the pandemic (Page et al., 2021). The remote learning paradigm did not always cater to their diverse needs, including individualized support, specialized instruction, and accommodations (Meda & Waghid, 2022). In addition, many children with IDs struggled to adapt to the virtual learning format, leading to concerns about their academic progress and social development (Leech et al., 2022).

Within the broader context of education, institutions and policymakers sought to provide interventions to mitigate the adverse effects of the pandemic on students (Easterbook & Hadden, 2021). These interventions encompassed the deployment of various remote learning modalities, the distribution of digital devices, and the development of online curricula (Topping et al., 2022). For children with intellectual disabilities, personalized education plans and support services were crucial components of these interventions, aimed at addressing their unique learning requirements (Minkos & Gelbar, 2021).

Despite the concerted efforts to address the challenges brought about by the pandemic, there remains a paucity of research focusing specifically on the effectiveness of modular distance learning in enhancing the learning outcomes of children with intellectual disabilities. Existing studies often lack comprehensive data that

combines quantitative and qualitative perspectives, making it difficult to draw nuanced conclusions about the impact of this specific approach on the educational experiences of children with IDs. Even in schools serving students with special needs in the Schools Division of Ormoc City adopted the modular distance learning modality as the primary modality during the COVID-19 pandemic. One of the special education schools in Eastern Visayas that provides a curriculum for children with intellectual disabilities is the Ormoc City SPED Center which has adopted the said modality. However, given their inability to easily absorb the sessions' material, the researchers' experiences teaching children with intellectual disabilities (IDs) were overwhelming. The teachers struggled with teaching these children to distinguish colors, shapes, and patterns. The way the children behaved while being taught the lessons in the modules and while being guided and helped to complete the various exercises presented difficulties for the parents as facilitators of learning at home. During home visitations by the researchers as teachers of these children with IDs, they noticed the inability of these children to focus on the material being taught. The researchers were, therefore, prompted to determine the learning competency in the use of modular approach in enhancing learning outcomes of children with intellectual disabilities in Ormoc City SPED Center, Ormoc City, Leyte, with the end-view of developing action plans based on the findings. Thus, this study aims to bridge these research gaps by conducting an in-depth investigation into the effectiveness of modular distance learning for children with intellectual disabilities. It will employ a mixed-methods approach, combining quantitative assessments of learning outcomes with qualitative insights from teachers, parents, and students. By exploring the challenges, successes, and opportunities associated with this innovative educational approach, this research seeks to inform educational practitioners, policymakers, and stakeholders about the potential of modular distance learning as a means to enhance the educational experiences and outcomes of children with intellectual disabilities in the context of ongoing global challenges.

Methodology

The Mixed Method of research was used to determine the learning competency in using modular approach to improve learning outcomes for children with intellectual disabilities (IDs) in Ormoc City SPED Center, Leyte, and develop action plans. Quantitative analysis was utilized in descriptive study to characterize a phenomenon and its properties (Nassaji, 2015). Moreover, comparison analysis was used to compare the level of competency in learning and summative outcome performance by subject profile. In addition, this study also used qualitative analysis utilizing the phenomenological technique, which holds that people can be definite about how things seem in their

consciousness (Groenewald, 2004). This study used this method to accurately describe the realities or phenomena of teachers and parents using modular distance learning to teach children with intellectual disabilities under the new normal setup. An in-depth phenomenological interview helped researchers comprehend teachers and parents' modular distance learning issues from their own viewpoints.

Results and Discussion

Table 1. *Color Competency Level in Learning Demonstrated by the Children with IDs*

Competency	Teachers		Parents	
	Weighted Mean	Description	Weighted Mean	Description
1 Identify primary colors	3.64	Strongly Agree	3.41	Strongly Agree
2 Identify secondary colors	3.27	Strongly Agree	3.03	Agree
3 Color the objects according to their correct colors	3.50	Strongly Agree	3.14	Agree
4 Connect the objects to their similar color	3.56	Strongly Agree	3.20	Agree
<i>Average Weighted Mean</i>	3.49	Strongly Agree	3.19	Agree
<i>Standard Deviation</i>	1.01		1.12	

In Table 1, the competency levels of children with intellectual disabilities (IDs) in learning about colors through modular distance learning are summarized based on assessments from both teachers and parents. The results consistently demonstrate a high level of competence among these children in various aspects of color-related learning. Both teachers and parents "Strongly Agree" that the children can effectively identify primary colors (with weighted mean scores of 3.64 for teachers and 3.41 for parents) and primary colors (3.27 for teachers and 3.03 for parents). Additionally, the children exhibit commendable skills in coloring objects according to their correct colors (3.50 for teachers and 3.14 for parents) and connecting objects to their similar colors (3.56 for teachers and 3.20 for parents). The average weighted mean across all competencies stands at a robust 3.49, signifying a consistent "Strongly Agree" level of competency on average. Despite minor standard deviations, indicating some variability in responses, these findings collectively emphasize the success of modular distance learning in enhancing the color-related learning outcomes of children with IDs. This underscores the

effectiveness of this educational approach in catering to their specific learning needs in the context of distance learning.

Table 2. *Shapes Competency Level in Learning Demonstrated by the Children with IDs*

	Competency	Teachers		Parents	
		Weighted Mean	Description	Weighted Mean	Description
1	Identify the various shapes	3.58	Strongly Agree	3.29	Strongly Agree
2	Identify the correct shapes of objects	3.39	Strongly Agree	3.18	Agree
3	Connect the objects to their similar shapes	3.21	Agree	3.11	Agree
4	Trace and copy of shapes	3.33	Strongly Agree	3.11	Agree
	<i>Average Weighted Mean</i>	3.38	Strongly Agree	3.17	Agree
	<i>Standard Deviation</i>	1.31		1.20	

In Table 2, the competency levels of children with intellectual disabilities (IDs) in learning shapes through modular distance learning are summarized based on assessments from both teachers and parents. The results consistently reflect a high level of competence among these children in various aspects of shape-related learning. Both teachers and parents "Strongly Agree" that the children can effectively identify various shapes (with weighted mean scores of 3.58 for teachers and 3.29 for parents) and correctly identify shapes of objects (3.39 for teachers and 3.18 for parents). Moreover, the children demonstrate a commendable ability to connect objects to their similar shapes (3.21 for teachers and 3.11 for parents) and effectively trace and copy shapes (3.33 for teachers and 3.11 for parents). The average weighted mean across all competencies stands at a remarkably high 3.38, signifying a consistent "Strongly Agree" level of competency on average. Despite modest standard deviations, indicating some variability in responses, these findings collectively highlight the considerable success of modular distance learning in enhancing the shape-related learning outcomes of children with IDs, reaffirming the effectiveness of this approach in catering to their educational needs.

Table 3 summarizes the competency levels of children with intellectual disabilities (IDs) in learning about patterns through modular distance learning, as evaluated by both teachers and parents. The results consistently indicate a commendable level of competency among these children across various aspects of pattern-related learning. In the first competency, "Identifying the correct patterns of objects," both teachers and parents strongly agree with the children's abilities, with weighted mean scores of 3.26 for teachers and 3.09 for parents.

Table 3. *Patterns Competency Level in Learning Demonstrated by the Children with IDs*

	Competency	Teachers		Parents	
		Weighted Mean	Description	Weighted Mean	Description
1	Identify the correct patterns of objects	3.26	Strongly Agree	3.09	Agree
2	Connect the objects to their similar patterns of shapes	3.30	Strongly Agree	3.06	Agree
3	Draw the patterns of shapes	3.21	Agree	2.95	Agree
4	Complete the pattern correctly	3.20	Agree	2.86	Agree
	<i>Average Weighted Mean</i>	3.24	Agree	2.99	Agree
	<i>Standard Deviation</i>	0.91		1.14	

This suggests that the children demonstrate a strong understanding of correctly identifying patterns. Similarly, in "Connecting objects to their similar patterns of shapes," the children received strong agreement ratings from both teachers (weighted mean of 3.30) and parents (weighted mean of 3.06), affirming their competence in recognizing and associating objects with similar patterns. Regarding "Drawing the patterns of shapes," teachers assessed the children's competency as "Agree" (3.21), while parents rated them slightly lower at 2.95, still within the "Agree" category. This indicates that the children are proficient in drawing patterns to a satisfactory degree. Lastly, in "Completing the pattern correctly," both teachers (weighted mean of 3.20) and parents (weighted mean of 2.86) rated the children's competency as "Agree," indicating that they are capable of correctly completing patterns. The average weighted mean across all competencies stands at a robust 3.24, signifying an overall "Agree" level of competency. While there are slight variations in responses, as indicated by the standard deviations, these findings collectively emphasize the success of modular distance learning in enhancing the pattern-related learning outcomes of children with IDs. This underscores the effectiveness of this educational approach in addressing their specific learning needs within the context of distance learning.

Table 4. *Level of Performance of the Children with IDs based on the Summative Results*

	Competency	Weighted Mean	Description
1	Colors	3.00	Satisfactory
2	Shapes	2.80	Satisfactory
3	Patterns	2.86	Satisfactory

Table 4 summarizes the level of performance achieved by children with intellectual disabilities (IDs) across three key competencies: Colors, Shapes, and Patterns. The results indicate that, on average, these children attained a "Satisfactory" level of performance in each competency. In the Colors competency, they garnered a weighted mean score of 3.00, suggesting they demonstrated satisfactory proficiency in identifying and comprehending colors. Similarly, for Shapes, the children received a weighted mean score of 2.80, reflecting satisfactory performance in recognizing and understanding shapes. In the Patterns competency, they achieved a weighted mean score of 2.86, again falling within the "Satisfactory" range, indicating their satisfactory level of competence in working with patterns. These results collectively suggest that the modular distance learning approach employed in their education has effectively enabled them to achieve satisfactory learning outcomes in these specific areas of study, underscoring the potential of this approach to address the educational needs of children with IDs.

Table 5. Comparison on the Level of Competency in Learning when Grouped by the Profile of the Children with IDs

Level of Competency in Learning	Respondents' Profile	N	Mean	SD			
Colors	Age	66	3.92	0.77			
	Gender	66	3.72	0.64			
	Grade Level	66	3.72	0.84			
	Total	66	3.76	0.74			
Shapes	Age	66	3.68	0.77			
	Gender	66	3.72	0.82			
	Grade Level	66	3.85	0.70			
	Total	66	3.76	0.76			
Patterns	Age	66	3.68	0.75			
	Gender	66	3.67	0.85			
	Grade Level	66	3.95	0.77			
	Total	66	3.78	0.80			
ANOVA							
Level of Competency in Learning	Sources of Variation	Sum of Squares	df	Mean Square	F	Sig.	Evaluation
Colors	Between Groups	0.38	2	0.19	0.34	0.71	Not Significant
	Within Groups	35.60	64	0.56			
	Total	35.99	64				
Shapes	Between Groups	0.32	2	0.16	0.28	0.76	Not Significant
	Within Groups	37.64	64	0.59			
	Total	37.96	64				
Patterns	Between Groups	1.19	2	0.59	0.93	0.40	Not Significant
	Within Groups	41.06	64	0.64			
	Total	42.25	64				

As manifested in the table, all of the computed values are lesser than the level of significance set at 0.05 significance level with degrees of freedom for error of 64 and degrees of freedom for column means of 2, the decision is to accept the null hypothesis and reject the alternative hypothesis. Null hypothesis states that there is no significant difference on the level of competency in learning when grouped by the profile of age, gender, and grade level of the children with IDs. Hence, the results of the comparative analysis made showed a not significant difference in the level of competency in learning when children with IDs are grouped according to their age, gender, and grade level. Although Ismael et al. (2018, as cited in El Refae et al., 2021) believed some demographic variables like age to be influential in academic competency, there are other factors that facilitate obtaining academic competence. Since the study focused on children with IDs, these students appear to learn more slowly than other students, which may be related to their slower rate of intellectual development and further suggest that their development may not always coincide with their chronological age (Wehman, 1997, as cited in Shree & Shukla, 2016). These contentions by researchers explain the insignificance of some demographic variables, such as age to the children's level of competency in learning colors, shapes, and patterns. In the same manner, Byrnes and Miller (2007, as cited in Bergold et al., 2016) stressed that gender influences the interindividual disparities in students' academic competencies. However, Bergold et al. (2016) countered that a variety of factors present at the national, classroom, and student levels influence academic competencies apart from gender. Hence, the insignificance of gender in the learning competency of children with IDs as assessed by teachers as regards their learning of colors, shapes, and patterns, inasmuch as it is not the only variable that could influence learning competency.

The results suggested that, when grouped by grade level, children with IDs did not significantly differ in their level of competency in learning colors, shapes, and patterns from the teachers' assessments. As earlier discussed, the subjects of this study showed signs of being slow to understand and use language, according to the American Association on Intellectual and Developmental Disabilities (AAIDD) classification (Shree & Shukla, 2016), but they were able to learn fundamental reading, writing, and counting skills because they were mostly in ID Level 2. Since it is already expected that children with IDs will manifest slower pace of developing various competencies, their grade level classification does not determine their level of competency in learning colors, shapes, and patterns as manifested in the results. This finding is likewise supported by Bergold et al. (2016) that stressed a variety of factors present at the national, classroom, and student levels influencing academic competencies.

Table 6. Comparison on the Level of Performance when Grouped by the Profile of the Children with IDs

Level of Performance	Respondents' Profile	N	Mean	SD			
Colors	Age	66	3.73	0.62			
	Gender	66	3.63	0.87			
	Grade Level	66	3.90	0.63			
	Total	66	3.75	0.74			
Shapes	Age	66	3.78	0.51			
	Gender	66	3.68	0.82			
	Grade Level	66	3.55	0.84			
	Total	66	3.65	0.78			
Patterns	Age	66	3.41	0.58			
	Gender	66	3.54	0.94			
	Grade Level	66	3.37	0.85			
	Total	66	3.45	0.84			
ANOVA							
Level of Performance	Sources of Variation	Sum of Squares	df	Mean Square	F	Sig.	Evaluation
Colors	Between Groups	1.02	2	0.51	0.93	0.40	Not Significant
	Within Groups	35.39	64	0.55			
	Total	36.41	66				
Shapes	Between Groups	0.53	2	0.26	0.43	0.66	Not Significant
	Within Groups	39.40	64	0.62			
	Total	39.93	66				
Patterns	Between Groups	0.42	2	0.21	0.29	0.75	Not Significant
	Within Groups	46.35	64	0.72			
	Total	46.77	66				

As manifested in the table, all of the computed values are lesser than the level of significance set at 0.05 significance level with degrees of freedom for error of 64 and degrees of freedom for column means of 2, the decision is to accept the null hypothesis and reject the alternative hypothesis. Null hypothesis states that there is no significant difference on the level of performance when grouped by the profile of age, gender, and grade level of the children with IDs. Hence, the results of the comparative analysis made showed a not significant difference in the level of performance when children with IDs are grouped according to their age, gender, and grade level. Voyles (2011) claimed that when comparing a student's age to their level of academic performance, age frequently refers to their chronological age rather than their maturational age. However, according to Gray (1985, cited in Voyles, 2011), children of the same chronological age might have very different developmental and mental ages. This concept applies to children with IDs who might be the same age chronologically but different ages developmentally and mentally. As a result, some of these children might not be able to do even the bare minimum of a task when compared to their classmates who are closer in age. According to Crnic and Lamberty (1994, as cited by Voyles, 2011), maturational age is

associated to readiness for learning, but chronological age is related to preparedness for school. Since age in this study was determined as chronological age, it follows that age may not be crucial to their level of performance based on summative examinations, and therefore the insignificance of age to their level of performance. Byrnes and Miller (2007, as cited in Bergold et al., 2016) stressed that gender influences interindividual disparities in students' level of performance. However, Bergold et al. (2016) countered that a variety of factors present at the national, classroom, and student levels influence the capacities and capabilities of the students. This assumption by Bergold et al. explains the insignificance of gender in the level of performance of children with IDs based on summative tests. The results suggested that, when grouped by grade level, children with IDs did not significantly differ in their level of performance based on summative results. As earlier discussed, the subjects of this study showed signs of being slow to understand and use language, according to the American Association on Intellectual and Developmental Disabilities (AAIDD) classification (Shree & Shukla, 2016), but they were able to learn fundamental reading, writing, and counting skills because they were mostly in ID Level 2. Since it is already expected that children with IDs will manifest slower pace of developing various competencies, their grade level classification does not determine their level of performance. This finding is likewise supported by Bergold et al. (2016) that stressed a variety of factors present at the national, classroom, and student levels influencing academic abilities.

Challenges Met by Teachers and Parents Participants in the Modular Distance Learning of Children with IDs

In order to identify the challenges faced by special education teachers and parent participants in the modular distance learning of children with IDs, guide questions were prepared and themes were formulated based on the responses. A total of 15 special education teachers and 15 parents participated in the interviews. Based on the in-depth responses of the teachers and parents, themes were formulated. For parent-respondents, the following themes emerged: Child Behavior, Competence, Assistance or Support, and Teacher Figure. For the teacher-respondents, these are themes formulated: Connectivity, Time constraint, Parents' Support, Inadequacy, and School-home distance.

Parents

Theme 1 – Child Behavior

The pandemic has brought about many changes in the lives of the learners as well as their parents. Although parents are considered as the “first teachers” of their children, but teaching them at home with the use of modules is a different thing. Besides, the behavior of their

children is difficult to manage while they work on the activities. Here are some of what they experienced:

Parent 2 when asked about challenges in teaching her child using module said, “Ang problema kay dali ra siya mapulan” (*My problem is she easily gets bored*)

Parent 3 expressed similar sentiment:

“Lisod kay di man sad nato talent ning pag tudlo sa mga bata unya dili pud taas ato pasensya, unya kinahanglan jud baya pugngan ato pagsuko sa ako anak wala gehapon kasabot balikon na pud, mas mayo jud na may klase jud na atubang na kay mga bata usahay d man ma patuo nato” (*It is difficult for us parents because it is not our talent to teach our child and we do not have enough patience to deal with them. And we need to control our temper if the child cannot really understand even if we repeat the lesson many times. So, it is really better to have the face-to-face class because our children would not listen to us*).

She further expressed, “Ma stress sila, unya mag suko suko pud siya mangita ug away sa iya mga manghud pag nasamukan” (*He gets stress and easily gets tantrum and would quarrel his younger sibling when he is disturb*)

Parent 5 exclaimed

“Usahay dili mo sugot mag kuan sa iya module ganahan ra mag duwa pero amo a ge tagaan ug lugar para mag answer sa iya module” (*Sometimes my daughter has no interest in answering her module because she wants to play. So, we give her time to play first so that she will answer the module after.*)

Parent 7 answered this way:

“Amo na agi an sa parte sa module sa amoa apo naara sa balay mag answer kay usahay nay panahon na saputon katima d maminaw kaya kailangan jud mag pasensya” (*Our experienced regarding the use of module with our grandchild with us at home, there are times when she has tantrums and she will not listen to us. We need to have maximum patience with her.*)

As manifested by the parents, it is implied that parents do not have the competence in dealing with the behavior of their children with intellectual disabilities. They need to have experience before they are expected to do the task of a para-teacher. Therefore, parents' involvement is necessary in the education of their children even without pandemic. The role of parents is even more defined in the development of children with intellectual disabilities. In the development of functional skills among children with IDs, parents can help to achieve target goals. The roles of parents can range from providing different information about the developmental characteristics of their children, the specific intellectual disability, to giving information regarding the assessment made to their children regarding the latter's level of intellectual disability and the current functional skills possessed. The parents can, in fact, sit down with

teachers prior to the start of the lesson regarding the assessment results and findings conducted to their children so that the teachers can acquire more valuable inputs to development need-specific management or teaching plan (Mohsin et al., 2011).

Most importantly, the use of modular distance learning during the pandemic brought up a crucial issue about parental involvement in their children's education—specifically, whether parents can support learning at home. Hapsari et al. (2020) emphasized that parents' capacity to impart knowledge to their children depends on their ability to encourage learning at home. This places a burden on parents who are less educated because they struggle to teach their children about the subject, which in a way supports the study's findings on the common issue teachers face when trying to impart the curriculum's competencies without the parents' involvement.

Theme 2 –Competence

Teaching needs skill. For teachers, they spent four years of pre-service training to acquire skills and competence in the delivery of lesson. With the pandemic and lessons delivered online through different modalities like using module, parents become para-teachers to their children without proper training. Although they were given orientation by the teachers on the use of module, yet it is not enough for them to successfully deliver the lesson. Here are their confessions:

Parent 4 in all honesty shared her feelings:

“Sa pag ila sa letter ug pag sounds sa letters mao jud na ang problema” (Letter recognition and the correct sounds is my problem).

Parent 6 shared also her experienced

“Sa ako sir, ok ra kaayo ako nasinati sa pagtudlo kaniya kay kung naa koy pangutana niya mo answer man pud siya kaima ako a ra e explain”. (For me sir, my experienced is just alright, if I asked her questions provided in the module, she gives the answer after I explain to her the lesson).

Parent 7 echoed same feelings on her competence to manage her child's behavior and according to her:

“Okay raman and module sa bata pero mas okay unta na nay face to face kay lisod man sa amo na mo tudlo nila kay usahay d man maminaw lahi a jud ang maestro ug kami.” (The modules are well-prepared but we prefer for the face-to-face classes because it is difficult for us to act as teacher. The child would not listen to us as they do towards their teacher.)

Parent 8 said,

“Okay ra kay ma focus ako bata sa pag tudlo nako.” She continued, “Okay ra sd kay makatabang sd niya unya d ko mag lisod sa iya kay ka mao mao naman ako bata” Furthermore, “Mag lisod man ko usahay na mag explain sa iya kung unsaon pag sabot sa mga questions sa module.” (“It is alright for me

because the child has focus.” She continued, and it is okay for me because I can help my child and she can understand the lesson.” Furthermore, “what is difficult for me is how to explain to her so she will understand questions asked in the modules.”)

Answers of parents during the interview, suggest that competence or skills in teaching is necessary. They admitted that it is difficult for them to teach their children, and added that they are not in the position to teach their children with intellectual disabilities. Training is needed before they can accomplish the learning outcome as stated in the modules. Involving parents in the students’ learning as a microsystem and interacting with the teachers in school as a mesosystem requires knowing the type of parental involvement. It implies that merely being in school for school activities that may have social function like in Parents-Teachers Assemblies may not impact much on students’ achievement and overall development.

In this sense, parents need to be actively involved in the learning outcomes of students in the home. This type of parents’ involvement impacts on the students’ achievement in terms of higher grades or test scores. Similarly, this type of parents’ involvement impact on the students’ development in terms of better adaptation to school, greater sense of personal competence and efficacy for learning, and greater engagement in school work (Emerson et al., 2012). According to Pek and Mee Mee (2020), parental involvement in education is favorably correlated with children's academic achievement and success in school. In particular, parents who are more actively involved in their children's education tend to have children with better levels of academic achievement, whereas parents who are less actively involved tend to have children with lower levels of academic performance. Therefore, when developing educational policy, it is important to take into account how parents' involvement affects their children's academic progress, especially in distant learning environments.

Theme 3 – Teacher Figure

Children in face-to-face classes stay in school a greater number of hours with their teachers. From the beginning of the school year, they received and acquired learnings from the teachings of their teachers. Children have shown high regard to their teachers and as such majority of them make their teachers as models.

In this time of pandemic, when responsibility was turned-over to the parents while their children have to continue learning at home, parents encountered some challenges or perhaps difficulties as it is not easy to be an “instant” teacher. Their children may compare them to their teachers whose teaching strategies and techniques may not be demonstrated by the parents. Here are some expressions of disgust by the parents:

Parent 9 exclaimed with honesty:

“Lisod ma himu ug assistant kay dili mu sunod ang bata.” (It is difficult to be an assistant to the teacher, the child will not follow my instruction.)

On the experiences of the parents, it is implied that teaching-learning process is a teacher-student partnership. The teacher has to establish routines for the days' activities for the children before engaging them in their lessons. Motivation is necessary and this needs the skill too.

De Dios (2022) claimed that because parents are the only ones who are most likely to be able to accompany and teach their children remotely, remote education changed parents into crucial stakeholders in learning. Parents took up the duty of assisting their children with school-related tasks as a result of the usage of self-learning modules. Supporting their children's learning is among the responsibilities of parents during the pandemic. However, it is difficult for parents to act as a learning coach for their children, particularly if they were working. Moreover, Al-Mawee et al. (2021, cited in De Dios, 2022) stressed that isolation and a lack of social connection in children's home environments may impede their learning and development. Children who receive their education in modules end up being socially isolated and subjected to negative interactions in their homes. This latter circumstance may cause students to feel nervous, which may have an effect on their growth.

Teachers

Theme 1 – Internet Connectivity

Advances in technology has made distance learning a more viable option as students are able to interact with each other and with the instructor, utilize audio, video and text to learn and use the internet for research. To ensure that student is an effective distance learner, they must have access to all the technology they need and to be able to effectively navigate and use the tools at their disposal. One of the major issues teachers confront when using a distant learning modality is that not all students, teachers, or schools have access to an internet connection.

Hence, teachers teaching children with IDs expressed their sentiments on internet connectivity. Here are some examples of how teachers have described their struggles with internet connection issues:

Teacher 1 manifested problems in teaching during the pandemic, including problems with internet connection:

Yes, I encountered different problems in teaching during this time of pandemic like for example, one is the internet connection there's a problem in the internet, second is burden on the part of the parents especially if they are living in the far-flung area and they have no means of communications and some of them are poor and they don't have a money to use in traveling here in our school and aside from that our parents are financial constraint also.

Teacher 9 also expressed problem with internet connectivity

Yes. In this time of pandemic, since there is no face to face, we need to conduct virtual/online teaching. But some of the learners don't have internet connection.

Regarding internet connectivity for usage during pandemic education, there are differing opinions in the Philippine educational setting. A strong internet connection was identified as one of the difficulties in remote learning by Fabito et al. (2020, as cited in Asio et al., 2021). Additionally, Casillano (2019, as cited in Asio et al., 2021) suggested that access to e-learning platforms is hampered by lack of internet. However, because internet rentals are available in cafés, Yra et al. (2020, as cited in Asio et al., 2021) showed that students were prepared for remote learning.

According to Cullinan et al. (2021), disparities in the quality of broadband connectivity for students participating in remote learning should be taken into account in the pandemic-affected educational system as a possible divide that could cause learning losses. Rasheed et al. (2020, as cited in Cullahan et al., 2021) underlined that one of the major difficulties of a blended learning environment for both students and teachers was the availability of high-quality broadband. Thus, these discussions on the gaps in online access that are necessary to participate in the pandemic-affected education, which is typically remote, confirm the teachers' concerns regarding internet connectivity in this study.

Theme 2 – Lack of Parents' Competence and Support

The adoption of distant learning as the new norm following the pandemic necessitates parental help because children cannot learn on their own in their homes. Parents must actively participate as mentors in a series of distance learning activities using self-learning modules to their children with IDs. The expectation for parents to be mentors for their children's learning at home, replacing the function of their teachers in school, was emphasized by Sari and Maningtyas (2020). This role might range from providing learning facilities at home to learning management at home. Sadly, the current conditions in distance learning using modules showed different scenarios as expressed by the teachers:

Teacher 1 said that the problem is on parents who encountered problems helping their children with IDs to learn the lessons at home, especially in handling them

There are also problems regarding some challenges in modular teaching especially to our parents some of them are not educated and so they will not able to help their children and aside from that in the module teaching also the problem is the pattern as speed teacher there's a differentiation in how we teach our children because of our level of our intellectual disabilities and so we have to prepare different kinds of activities to the children.

Teacher 5 expressed the parents' difficulty in getting their children's modules because of geographical distance of home to school

Modular teaching is a little difficult because some learners live in distant barangay which it makes difficult for parents to get their modules.

Teacher 6 also expressed the parents' difficulty during modular distance learning of their children with IDs

Challenges that I have in modular teaching is that there are big chances that my learners are not the one answering or performing the given tasks, it may be their parents or guardians. Therefore, it is difficult for me to identify on what tasks/lessons do I need to improve or enhance.

Teacher 9 manifested the parents' lack of support to their children's education using modular distance learning

Some of the parents lack support in getting modules in school. Because they are busy with their work or other errands.

The parents' inability or lack of interest in providing their children with IDs with assistance in learning at home was highlighted by the teachers' discussions of the challenges they encountered implementing modular instruction. Parents' participation in homework at home is essential, as stated by Lilawati (2020, as cited in Sari & Maningtyas, 2020), who emphasized that these parents assist and direct in the completion of assignments assigned by the teachers. Pek and Mee Mee (2020) emphasize the significance of parental involvement in children's education and claim that it is linked to the achievement of the child in school. They also argued that children who have parents who are more engaged in their education perform better academically than kids whose parents are less engaged. However, there are obstacles that prevent parents from encouraging interest in and support for their children's learning. The main one is that they are largely unaware of the educational methods in adopting modular distance learning due to their hectic work schedules.

According to Bonilla et al. (2022), many parents struggle with the subject matter that their children study because they lack the necessary education to evaluate and understand what was accomplished in school. This suggested that parents who are better educated are more likely to participate in their children's educational pursuits at home because they are confident in their ability to succeed in school.

Theme 3 – Distance of House to School

There is less interaction between teachers and students in distance learning, such as in modularized instruction. Different media are employed to help the communication between students and teachers and to encourage interaction and knowledge sharing. Bonilla et al. (2022) emphasized the importance of using teaching strategies that extend learning outside of the classroom and do away with some

barriers to learning, such as distance and physical location. The teachers make extra efforts to reduce the barrier between them and their students because collaboration and communication are crucial skills for education, even in modular distance learning. However, in local schools, teachers must take into account the parents' accessibility to their children's schools when implementing a modularized curriculum. The teachers' sentiments on this concern are manifested in the following:

Teacher 3 expressed that even during the pandemic, there were pupils who wanted to have face-to-face classes because of the problem on distance

In terms of teaching in this type of pandemic there are some pupils who really like to have a face to face.

Teacher 4 emphasized the distance of the parents' house to school as a challenge in modular distance learning

Yes, some of the parents cannot get there PTGs or the Parent-Teaching Guide because their living far from the city and our boarders before are very strict they will not allow people from other cities.

Teacher 6 also reiterated proximity as a challenge in modular distance learning

At this time of pandemic, one of the major problems I have encountered is that we don't have physical contact with my learners, with this it is quite difficult to import and facilitate knowledge because I don't have one on one interaction have on daily basis.

According to Abamba (2021), numerous activities at the school are connected by its location. Since space has the ability to arrange and stimulate interactions between students and teachers, to give changes, to promote choices and activities, and for its potential to support many types of emotional and social learning, the site of the school can be thought of as the second teacher. Akinyele (2011, cited in Abamba, 2021) also claimed that a child's immediate surroundings have a significant impact on the socialization process. As a result of the distance from learning resources, the location of the school has an impact on a student's academic performance. Specifically, students from rural regions often experience issues including a lack of teachers and inadequate learning resource materials because schools are located far from the students' homes. Owuoye and Yara (2011, cited in Abamba, 2021) stated that the proximity of schools to students' homes is a factor because parents are hesitant to send their children to school because they are preoccupied with other means of subsistence and there are not enough roads and communication facilities to get books and learning materials to schools.

Theme 4 – (Inadequacy) Lack of Supplies

One aspect of inadequate teaching in schools is a lack of adequate material resources. Additionally, the quality of teaching aids like textbooks and modules plays a critical role in enhancing

instruction. As a result, providing effective instruction in schools requires attention to the availability of sufficient material resources. However, there are times when these resources are insufficient to give the students effective physical and psychosocial learning settings. This paucity in material resources is expressed by the teachers in teaching children with IDs as follow:

Teacher 4 reiterated the problem on running out of supplies in school

Sometimes we run out of supplies and ink.

Teacher 7 emphasized that schools lack material resources for module production

Lack of supplies, like bond paper, ink etc. The modules as well are delayed. That's why we need to gather/make our own activities for the children with special needs.

According to Maffea (2020), the lack of resources for schools is a problem on a global scale. Because teachers need the right materials to teach the students, this lack of resources is disruptive to the teaching and learning process. The absence of resources can have an effect on students in a variety of ways since it will prevent them from reaching their full potential during the learning process. Students may learn the topics through the teachers' knowledge of content and competence in using teaching methods, but without the resources, they will not fully understand the lessons.

Theme 5 – Less Follow-up

Teacher 7 expressed that they have lesser follow up on their children's learning during the pandemic

Yes. Because there is less monitoring this time of pandemic. We can't really check if the learners can comprehend with the lessons/modules that we have given to them.

Teachers and students must adjust to the new practice of giving feedback or following up on learning, according to Yang et al. (2021). They described feedback as information given to a student on his academic achievement in order to disclose his learning process and assist him in managing, monitoring, and improving his learning. During the pandemic, the spontaneous, in-person feedback in traditional classrooms gave way to other methods, like online feedbacking through social media in remote learning. The use of non-traditional methods to provide feedback to students is not without its difficulties, such as handling online feedbacks and technical issues. Additionally, students might not always be able to respond correctly to feedback that may not be given in a timely manner.

Conclusion

Based on the significant findings of the study, several key conclusions

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can be drawn. First, it was determined that the children with intellectual disabilities (IDs) fell within Level 2 of disability classification, indicating mild intellectual disability. Despite their cognitive challenges, these children displayed the capacity to learn colors, shapes, and patterns, albeit at a slower pace, even within the framework of modularized instruction. This suggests that the modular approach was effective in facilitating their understanding of these fundamental concepts. Second, the study revealed that children with IDs exhibited a satisfactory level of performance in the areas of colors, shapes, and patterns, indicating their adaptability to the modularized instructional setting. These positive outcomes underscore the potential of this approach in catering to the specific educational needs of children with intellectual disabilities. However, the study also highlighted significant challenges faced by parents and teachers. Parents struggled with managing their children's behavior during modular learning and felt ill-equipped to handle this type of instruction at home. They lacked the necessary support and preparation to effectively assume the role of teachers in a home-based learning environment. Similarly, teachers encountered obstacles such as internet connectivity issues, limited time for instruction, and the need for parental support as facilitators of learning at home. These challenges, coupled with resource inadequacies and long distances between schools and students' homes, hindered the teachers' ability to transfer content and competencies to their students effectively. Addressing these challenges is crucial for optimizing the effectiveness of modular distance learning for children with IDs in the future.

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