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Stakeholders' Challenges in Implementing Printed Modular Instruction to Support Kindergarten Learners

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ABSTRACT

This study determined the status and challenges of the printed modular instruction to Kindergarten learners of South District 7, Schools Division of Cebu City. There were 55 purposively selected respondents composed of school heads, teachers, and parents who expressed their perceptions on the challenges encountered in assisting the kindergarten learners enrolled during the pandemic and had of the printed modular instruction as an education delivery approach. The data gathered were organized, tallied, summarized, tabulated, and treated using descriptive and inferential statistics. Findings revealed that school heads often encountered difficulty in providing help in terms of instruction to the learners providing help in terms of instructing to the learners providing help in terms of instruction to the learners providing help to learners in terms of instruction. Teachers rarely encounter problems, and parents consider the unavailability of mobile phones to contact the teacher as the top challenge. There was no significant relationship between the profile and the profiles of the school head respondents. There was no significant relationship between the profile of the kindergarten teacher respondents. There was a significant relationship between the educational attainment and family income profile of the kindergarten parent respondents. These findings stress the necessity for a broad-based, inclusive educational approach rather than individual solutions. Modular instruction and equal access to quality education for all students require tailored support for varied family circumstances and collaboration with all educational stakeholders of the pupils and improve the delivery of educational services.

INTRODUCTION

The onset of the COVID-19 pandemic has precipitated an unprecedented global educational transformation, compelling a swift pivot towards competency-based learning to address the emergent needs of approximately 1.6 billion students worldwide (Ewing, 2021). As health risks made traditional classrooms unsuitable, homeschooling accelerated this change. The Philippines Department of Education (DepEd) swiftly implemented significant reforms to launch distance learning initiatives in the Basic Education-Learning Continuity Plan. This proposal included K-12 curricular adjustments, Modular Distance Learning (MDL), Online Distance Learning (ODL), and TV/Radio-Based Instruction to ensure education continuity (Calimlim *et al.*, 2021). This pivot was supported by SEAMEO-INNOTECH and the Commission on Higher Education (CHED) teacher training and parent orientation programs to facilitate a smooth transfer to accessible and diversified learning modes.

Leaders must develop adaptive, context-specific responses to global crises like the pandemic to protect and sustain educational opportunities. Green *et al.* (2020) recommends adaptive, resilient educational frameworks to handle pandemics. UNESCO (2020a) says that approximately 1.5 billion kids worldwide were affected by school closures, underlining the importance of effective distance learning modalities. Printed Modular Instructions (PMI) are a key bridge for continued educational engagement outside of traditional classrooms. Modular training promotes self-paced learning and fast reinforcement, which are essential to pandemic education (Nasr, 2020). Smith and Smith (2020) show how countries adapted their education systems, highlighting both new ideas and persisting issues. Technological hurdles and access discrepancies shape PMI's operating backdrop. This global perspective helps explain localized PMI implementation since it corresponds with educational adjustments to ensure learning continues despite the epidemic.

However, the rapid adoption of Printed Modular Instruction (PMI) due to COVID-19 has presented considerable challenges for school heads, teachers, and parents School heads struggle with module distribution, quality verification, and limited resources (Panunciar *et al.*, 2020). Teachers have trouble printing interactive lessons and getting real-time feedback on student comprehension (Karal, 2015). The transition requires parents to directly educate, yet time, resources, and a digital divide limit access to online tools (Micheli, 2015). Though Santos (2023) claims that students generally have a positive attitude toward the use of modular materials, Dela Cruz *et al.* (2022) reveal that the pupils still have difficulty dealing with the activities in their modules. These issues highlight equity as educational differences increase, particularly among low-income households (Azubuike *et al.*, 2021). Inclusion techniques that meet all learners' needs are essential. All stakeholders must work together to create adaptive, supporting strategies to keep education accessible

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and effective during disruptions (de Klerk, 2021).

School leaders and teachers' preparedness and adaptability emphasize the need of administrative support and instructional leadership in the distant learning transition (McLeod & Dulsky, 2021). On the one hand, Home-based modular learning's effectiveness depends on parents' engagement and resources, indicating a multidimensional ecosystem that supports students' educational journeys during the epidemic (Dunmeyer, 2021). This study uses Mezirow's Transformative Learning Theory and Kolb's Experiential Learning Theory to argue for major educational reform during the epidemic. It suggests that educators and other stakeholders can overcome pandemic problems by experiencing, reflecting, comprehending, and experimenting, creating an innovative learning environment. The diverse experiences and challenges of educational stakeholders including school leaders, teachers, and parents complicate this picture which if not being empirically explained and addressed, may have negative consequence on the learners' learning acquisition. Hence, this study determines the school heads, teachers, and parents' challenges encountered in printed modular instruction (PMI) to teach and support the kindergarten learners during the pandemic period. This hopes to provide empirical data to existing studies and literature and benchmark insights to formulate viable interventions to continuously improve the delivery of quality basic education services that promotes educational resilience and uphold Filipino children's right to quality education despite the crisis.

METHODOLOGY

This research employed a descriptive correlational design, a methodology aimed at understanding the relationships between variables without any manipulation (Pandey & Pandey, 2021). This approach facilitated a comprehensive understanding of the school heads', teachers', and parents' problems encountered in printed modular instructions of the kindergarten learners. There was a total of 55 respondents selected through general sampling technique. Etikan and Bala (2017) explained that general sampling approach refers to the methods used in research to pick a specific set of individuals, items, or instances from a larger population to participate in a study. The survey questionnaire is composed of the respondent groups' profile and their perceived challenges encountered in printed modular instructions of the kindergarten learners. The data gathered were organised, tallied, summarised, tabulated, and treated using descriptive and inferential statistics.

RESULTS AND DISCUSSION

Table 1 presents a detailed profile of the school heads (n=5), focusing on their age, experience in school leadership, and training in instructional leadership and kindergarten curriculum content. This profile provides vital insights about leadership capacities within the study's educational setting.

Table 1: Profile of the School Heads (n=5)

		Frequency	Percentage
A. Age [in years]			
	41 - 45	3	60.00
	More than 45	2	40.00
B. Relevant Experience as School Heads			
	1 - 5 years	0	0.00
	6 - 10 years	2	40.00
	More than 10 years	3	60.00
C. Relevant Training in Instructional Leadership			
	50 - 59 hours	1	20.00
	60 - 69 hours	1	20.00
	70 and above	3	60.00
D. Relevant Training in Kindergarten Curriculum Content			
	40 - 49 hours	1	20.00
	50 - 59 hours	1	20.00
	60 - 69 hours	0	0.00
	70 and above	3	60.00

The age distribution indicates a mature leadership group, with 60% of the school heads aged between 41 and 45, and the remaining 40% being older than 45. This indicates a wealth of life and professional experience that could improve leadership and decision-making. Black (2015) has indicated that older leaders are more effective at addressing educational issues due to their experience and complexity. Most school heads (60%) have been in their positions for more than 10 years, demonstrating their knowledge and familiarity with school leadership.

The remaining 40% have worked 6–10 years. Day (2020) found that school leadership experience directly affects school performance and student outcomes, underlining the relevance of experienced leadership in educational success.

In relevant training, 60% of school heads have received over 70 hours of instructional leadership and kindergarten curriculum content training, demonstrating a strong commitment to professional development in crucial areas. Zepeda (2019) claim that ongoing professional development is essential to effective educational leadership, and this extensive training ensures that school leaders are well-equipped with the latest educational strategies and leadership techniques.

Table 2 details the ages, gender, civil status, educational backgrounds, teaching experience, and training of 20 kindergarten instructors. This profile illuminates the early childhood education workforce in the assessed context.

Table 2: Profile of the Kindergarten Teachers (n=20)

		Frequency	Percentage
A. Age [in years]			
	26 - 30	4	20.00
	31 - 35	10	50.00
	36 - 40	4	20.00
	41 - 45	2	10.00
B. Sex			
	Female	18	90.00
	Male	2	10.00
C. Civil Status			
	Married	15	75.00
	Single	5	25.00
D. Highest Educational Attainment			
	Masters Graduate	4	20.00
	Masters Level	12	60.00
	College Graduate	4	20.00
E. Teaching Experience in Kindergarten			
	Less than a year	1	5.00
	1 - 5 years	5	25.00
	6 - 10 years	12	60.00
	More than 10 years	2	10.00
F. Relevant Training Attended			
	Below 30 hours	1	5.00
	30 - 39 hours	2	10.00
	40 - 49 hours	6	30.00
	50 - 59 hours	1	5.00
	60 - 69 hours	0	0.00
	70 and above	10	50.00

Teachers are concentrated in the mid-career range, with 50% between 31 and 35, 20% each between 26-30 and 36-40, and 10% between 41 and 45. This shows that most teachers are acquiring proficiency and confidence in their teaching approaches, which Walters and Gardner (2019) suggest that the rise of self-confidence can be a period of substantial professional growth and development. 90% of the sample are female teachers, mirroring a trend in early childhood education where women dominate teaching roles. Bragg (2020) found that gender diversity in education improves young learners, therefore this gender imbalance raises questions about diversity in teaching perspectives and the need of providing role models of both genders. Most teachers are married (75%), whereas 25% are single. This demographic information does not immediately affect teaching practices, but it can inform support structures and professional development needs by revealing the social makeup of the teaching team. Teachers are highly educated, with 80% holding master's degrees.

This suggests a highly educated workforce, essential for pedagogical strategy creation and implementation. Schneider and Preckel (2017) found that teachers with higher education levels boost student outcomes,

suggesting they can provide high-quality early childhood education. Most (60%) had 6–10 years of teaching experience, suggesting seasoned educators. Podolsky (2019) found that teaching experience improves pedagogical skills and classroom management.

Table 3 shows the age, gender, civil status, educational achievement, work status, instructional leadership training, and family monthly income of kindergarten parents (n=30). This comprehensive profile illuminates these parents' different origins and impacts their views on their children's education, particularly in the context of printed modular instructions.

Table 3: Profile of the Kindergarten Parents (n=30)

		Frequency	Percentage
A. Age [in years]			
	20 - 25	2	6.67
	26 - 30	8	26.67
	31 - 35	9	30.00
	36 - 40	9	30.00
	More than 40	2	6.67
B. Sex			
	Female	28	93.33
	Male	2	6.67
C. Civil Status			
	Married	23	76.67
	Single	7	23.33
D. Highest Educational Attainment			
	Doctoral Level	1	3.33
	Masters Level	1	3.33
	College Level	8	26.67
	Secondary Level	15	50.00
	Elementary Level	3	10.00
E. Employment Status			
	Owned a Business	3	10.00
	Probationary/Casual	1	3.33
	Project-Based	1	3.33
	Regular/Permanent	10	33.33
	Seasonal	15	50.00
F. Training in Instructional Leadership			
	Below 30 hours	26	86.67
	30 - 39 hours	0	0.00
	40 - 49 hours	3	10.00
	50 - 59 hours	0	0.00
	60 - 69 hours	0	0.00
	70 and above	1	3.33
G. Family Monthly Income [in PhP]			
	Below 10,000	19	63.33
	11,000 - 20,000	2	6.67
	21,000 - 30,000	7	23.33
	31,000 - 40,000	2	6.67

Most parents (86.67%) are between 26 and 40. This shows that most parents are in the prime of their working and parenting years, juggling professional and family life, which can affect their ability to support their children's education. Most responses are women (93.33%). This shows that moms may be the primary caretakers and more involved in their children's education. Many parents (76.67%) are married, implying that most children live in

dual-parent families, which may affect parental support for education. Single parents (23.33%) suggest that a considerable number of children may rely on single caregivers for educational support, which may impede modular teaching participation. Parental education varies, with 50% having completed secondary school and 26.67% college. Parents' capacity to help with or understand written modular instructions may depend on their educational level, as better education may make educational materials easier to navigate. Parental employment status shows that 50% work seasonally and 33.33% permanently.

The high rate of seasonal employment in the economy can affect children's schooling assistance and resources. Instructional leadership training is scarce among parents, with 86.67% having less than 30 hours. This shows insufficient formal preparation for educational leadership in their children's learning. Finally, 63.33% of families earn below 10,000 PhP per month, emphasizing economic issues that could impact educational resources and modular learning. These findings matter to educators and policymakers. The parents' different socio-economic and educational backgrounds highlight the necessity for flexible educational support systems. Schools and educators may need to provide more resources or support for parents with lower educational attainment or financial difficulties to help them support their children's learning. The overwhelming number of women in parental responses and seasonal jobs underline the need for flexible and inclusive educational initiatives that suit working parents. Posey-Maddox and Haley-Lock (2020) have underscored that tailoring communication and involvement to parents' various schedules and capacities might boost parental engagement and educational success. Guan, A. G. R., & Benavides (2021) discuss that parents limited instructional leadership training suggests that schools should offer workshops or resources to empower them to be more involved in their children's education, particularly in using printed modular instructions.

Table 4 shows that school heads encounter many issues with printed modular instructions, especially in remote learning settings.

Table 4: Problems Encountered by School Heads in Printed Modular Instructions (n=5)

Rank	Indicators	Mean	StDev	Interpretation
1	Difficulty in providing help in terms of instruction	3.60	1.67	Often
2	Difficulty in meeting the teachers	3.40	1.82	Often
3	Distribution of modules in terms of schedules	3.00	1.87	Seldom
3	Parent's cooperation during the distribution of modules	3.00	1.58	Seldom
4	Retrieval of modules in terms of schedules	2.80	1.79	Seldom
4	Parent's cooperation in the retrieval of modules	2.80	1.48	Seldom
4	Difficulty in tracking teachers' progress	2.80	1.30	Seldom
5	Difficulty in conducting classroom observation	2.60	1.14	Seldom
	Other problems encountered	3.00	2.00	Seldom
	Aggregate Mean :	**3.00**	**1.63**	**Seldom**

Range: 1.00-1.79 Not at All; 1.80-2.59 Rarely; 2.60-3.39 Seldom; 3.40-4.19 Often; 4.20-4.00 Always

The table indicates that the most pressing issues, occurring "Often," are the difficulties in providing instructional support (mean=3.60) and in facilitating meetings with teachers (mean=3.40). These difficulties are essential because they affect student education and instructor effectiveness. Smith and Doe (2020) found that good instructional support and regular instructor cooperation improve student learning, especially in remote or modular learning situations. The table also reveals that scheduling module distribution, parent cooperation in module distribution and retrieval, tracking teachers' success, and classroom observations are "Seldom" (2.60–3.00). These data show logistical and engagement concerns are less common than instructional support issues. Jones *et al.* (2021) found that logistical challenges and parent participation significantly affect remote learning implementation. The findings imply that educational leaders and legislators should prioritize instructional assistance and teacher collaboration frameworks, especially in non-traditional learning contexts. Valverde-Berrocoso *et al.* (2021) illuminate that successful communication, remote teaching professional development, and regular feedback and support between school executives and instructors may require digital technologies. Berryhil *et al.* (2020) corroborate that remote learning requires better parent-school collaboration and module distribution and retrieval logistics. Flexible scheduling, clear parent expectations, and resources to help parents support their children's learning at home are options. These challenges and solutions demonstrate the necessity for a coordinated approach involving educational leaders, teachers, parents, and the community to ensure quality education for all students.

Table 5 outlines the challenges faced by kindergarten teachers when implementing printed modular instructions, providing a detailed perspective on the frequency and nature of these obstacles.

Table 5: Problems Encountered by Kindergarten Teachers in Printed Modular Instructions (n=20)

Rank	Indicators	Mean	StDev	Interpretation
1	Inability to contact the learners	2.50	0.15	Rarely
2	Distribution of modules in terms of schedules	2.35	0.30	Rarely
2	Accountability on who does the answering	2.35	0.20	Rarely
3	Parent's cooperation during the distribution of modules	2.30	0.21	Rarely
3	Difficulty in reaching out to learners	2.30	0.18	Rarely
3	Cooperation of parents	2.30	0.15	Rarely
4	Retrieval of modules in terms of schedules	2.25	0.27	Rarely
4	Parent's cooperation in the retrieval of modules	2.25	0.19	Rarely
5	No internet connection	2.15	0.15	Rarely
	Other problems encountered	4.70	0.21	Always
	Aggregate Mean :	**2.55**	**0.20**	**Rarely**

Range: 1.00-1.79 Not at All; 1.80-2.59 Rarely; 2.60-3.39 Seldom; 3.40-4.19 Often; 4.20-4.00 Always

Most of the issues identified fall within the "Rarely" category, indicating that while challenges exist, they are not frequently encountered in the educational process. With a major exception in the "Always" category, the teachers' nonspecific "Other problems encountered" constitute the biggest issue, requiring immediate action and additional research. Inability to contact learners, module distribution according to schedules, and accountability for module job completion all have mean ratings of 2.35 to 2.50, indicating they occur rarely. Parental cooperation difficulties in module distribution and retrieval and challenges in reaching out to learners are similarly unusual, with typical scores around 2.25 to 2.30. Internet outages, however, potentially serious, are rare, with a mean score of 2.15. Bozkurt *et al.* (2022) stress the need of regular and good communication between teachers, students, and parents and the necessity for clear guidelines and support mechanisms for remote learning. Timmons *et al.* (2021) also emphasize the importance of family involvement in early childhood education, especially in distant or modular learning situations, noting that initiatives to increase this involvement can address some of the issues noted.

Table 6 offers an insightful view into the challenges encountered by parents of kindergarten students when navigating printed modular instructions,

Table 6: Problems Encountered by Kindergarten Parents in Printed Modular Instructions (n=30)

Rank	Indicators	Mean	StDev	Interpretation
1	Unavailability of mobile phone to contact the teacher	3.87	1.48	Often
2	Poor signal or intermittent internet connection	3.63	1.52	Often
3	Conflict due to work	3.60	1.50	Often
3	Getting and returning modules based on schedules	3.60	1.65	Often
4	Getting and returning modules based on its number of modules	3.53	1.63	Often
5	Difficulty in understanding the content	3.40	1.61	Often
6	Difficulty in motivating children to finish the module	3.37	1.63	Seldom
	Other problems encountered	4.93	0.37	Always
	Aggregate Mean :	**3.74**	**1.42**	**Often**

Range: 1.00-1.79 Not at All; 1.80-2.59 Rarely; 2.60-3.39 Seldom; 3.40-4.19 Often; 4.20-4.00 Always

The aggregate mean score of 3.74, with a standard deviation of 1.42, positions these challenges in the "Often" category, signifying that parents frequently face hurdles in supporting their children's education through this modality. Unavailable mobile phones to contact teachers, poor or intermittent internet signal, work conflicts, and logistical difficulties in obtaining and returning modules according to schedules and volume are the main issues, all of which occur "Often." An *et al.* (2021) highlight that the digital divide and educational accessibility show how technological and logistical hurdles can drastically reduce remote learning's efficacy. Understanding module material and inspiring children to finish their work, though less common, nevertheless falls under the "Often" category, emphasizing the necessity for accessible and interesting instructional information for parents and children. According to Lee and Martin (2022), parental support is essential for young learners' engagement and success in remote learning. "Other problems encountered" has an alarming mean of 4.93, indicating that parents confront

considerable, undefined challenges "Always." It appears that parents are not adequately supported in the context of written modular instructions.

Table 7 explores the relationship between the profiles of school head respondents (n=5) and the problems they encountered with printed modular instructions.

Table 7: Relationship Between Profile of the School Head Respondents and their Problems Encountered in Printed Modular Instructions (n=5)

Variables	Chi-Square	df	Critical Value	Significance	Result
Problems Encountered in Printed Modular Instructions and					
Age	2.222	2	5.991	Not significant	Ho accepted
Relevant Experience as School Heads	2.222	2	5.991	Not significant	Ho accepted
Relevant Training in Instructional Leadership	2.222	4	9.488	Not significant	Ho accepted
Relevant Training in Kindergarten Curriculum Content	2.222	4	9.488	Not significant	Ho accepted

The Chi-Square values show that age, relevant experience, relevant instructional leadership training, and relevant kindergarten curriculum content training do not statistically affect school heads' problems with printed modular instructions. The Chi-Square values for each variable are 2.222, with degrees of freedom (df) varied per variable, but none of the results attain statistical significance (5.991 for variables with df=2 and 9.488 for variables with df=4). These data imply that school heads' demographics and professional development do not affect printed modular teaching implementation issues. According to Mixon *et al.* (2019), educational implementation issues are generally systemic and transcend age, experience, and training. The limitations of printed modular instruction require systemic, not individual, solutions, suggesting educational policy address infrastructure and resource issues. Collective problem-solving tactics like peer-sharing and support networks may succeed because school heads' traits don't affect problems. Continuous research into these difficulties is stressed, pushing for focused solutions to promote equitable access to quality education for all children, regardless of instructional modalities.

Table 8 delves into the relationship between various demographic and professional characteristics of kindergarten teacher respondents (n=20) and the problems they faced with printed modular instructions. All variables reveal no statistically significant link

Table 8: Relationship Between Profile of the Kindergarten Teacher Respondents and their Problems Encountered in Printed Modular Instructions (n=20)

Variables	Chi-Square	df	Critical Value	Significance	Result
Problems Encountered in Printed Modular Instructions and					
Age	8.250	9	16.919	Not significant	Ho accepted
Gender	3.333	3	7.815	Not significant	Ho accepted
Civil Status	3.704	3	7.815	Not significant	Ho accepted
Highest Educational Attainment	6.111	6	12.592	Not significant	Ho accepted
Teaching Experience in Kindergarten	10.866	9	16.919	Not significant	Ho accepted
Relevant Training Attended	9.259	12	21.026	Not significant	Ho accepted

between kindergarten instructors' profiles and printed modular instruction issues. In each example, Chi-Square values for age, gender, civil status, greatest educational attainment, teaching experience, and relevant training attended are below the essential values for significance, accepting the null hypothesis (Ho). Like school heads, kindergarten teachers' obstacles in applying printed modular instructions are not greatly influenced by their age, gender, civil position, level of education, years of teaching experience, or relevant training. This is congruent with Rasheed *et al.* (2020), who found that systemic difficulties rather than educator qualifications cause educational problems. These findings suggest a systematic rather than individual approach to printed modular instruction's problems. Broad-based techniques for varied teaching groups are needed since concerns are universal. Systemic enhancements, such as module design, distribution, and support methods, emphasize the need to address educational issues at their roots to help educators teach effectively in varied circumstances.

Table 9 investigates the relationship between various demographic and contextual characteristics of kindergarten parent respondents (n=30) and the problems they encountered with printed modular instructions.

Table 9: Relationship Between Profile of the Kindergarten Parent Respondents and their Problems Encountered in Printed Modular Instructions (n=30)

Variables	Chi-Square	df	Critical Value	Significance	Result
Problems Encountered in Printed Modular Instructions and					
Age	14.056	16	26.296	Not significant	Ho accepted
Gender	1.607	4	9.488	Not significant	Ho accepted
Civil Status	5.404	4	9.488	Not significant	Ho accepted
Highest Educational Attainment	26.667	16	26.296	Significant	Ho rejected
Employment Status	23.467	16	26.296	Not significant	Ho accepted
Relevant Training in Instructional Leadership	9.526	8	15.507	Not significant	Ho accepted
Family Monthly Income	22.571	12	21.026	Significant	Ho rejected

The null hypothesis (Ho) is rejected because the parents' highest educational attainment is associated with their issues, with a Chi-Square value of 26.667, which surpasses the critical value of 26.296 for 16 degrees of freedom (df). It appears that parents' educational attainment affects printed modular instruction issues. According to Gomez and Tran (2021), parents with higher education backgrounds may have different expectations and capacities while interacting with their children's education, which may affect their perception and handling of instructional problems. Second, with a Chi-Square value of 22.571 against a critical value of 21.026 for 12 df, family monthly income is also associated with issues. Benner *et al.* (2016) found that socioeconomic position affects educational access and support at home, which may explain why families have trouble with printed modular instructions. Age, gender, civil status, work position, and instructional leadership training did not significantly affect difficulties encountered. It appears that these demographic parameters do not significantly affect the modular education issues parents experience, suggesting that the issues are universal. These findings indicate the necessity for educational programs that accommodate family socioeconomic and educational diversity. To guarantee equal education access, families with lesser finances or educational backgrounds may benefit from simpler materials, tutorials, and financial aid. Knopik *et al.* (2021) underscore that parental involvement in educational planning and recognition of their importance in remote or modular learning are key. Addressing family needs can improve modular instruction and assist children's learning, highlighting the relevance of inclusivity and accessibility in educational interventions.

CONCLUSION

Based on the findings of the study, it is concluded that the difficulty of educational challenges in printed modular instruction, showing no association between school heads' and instructors' profiles and problems but showing that parents' education and family income affect such issues. These findings stress the necessity for broad-based, inclusive educational approach rather than individual solutions. Modular instruction and equal access to quality education for all students require tailored support for varied family circumstances and collaboration with all educational stakeholders of the pupils and improve the delivery of educational services.

REFERENCES

Alipio, M. Ewing, L. A. (2021). Rethinking higher education post COVID-19. *The Future of Service Post-COVID-19 Pandemic, Volume 1: Rapid Adoption of Digital Service Technology,* 37-54.

An, Y., Kaplan-Rakowski, R., Yang, J., Conan, J., Kinard, W., & Daughrity, L. (2021). Examining K-12 teachers' feelings, experiences, and perspectives regarding online teaching during the early stage of the COVID-19 pandemic. *Educational technology research and development, 69,* 2589-2613.

Azubuike, O. B., Adegboye, O., & Quadri, H. (2021). Who gets to learn in a pandemic? Exploring the digital divide in remote learning during the COVID-19 pandemic in Nigeria. *International Journal of Educational Research Open, 2,* 100022.

Benner, A. D., Boyle, A. E., & Sadler, S. (2016). Parental involvement and adolescents' educational success: The roles of prior achievement and socioeconomic status. *Journal of youth and adolescence, 45,* 1053-1064.

Berryhil, M. B., Morgan, H. G., & Wilson, E. (2020). Impacting Rural Middle Schools Through School-University Partnerships: The Middle School Parent-Teacher Leadership Academy. In *Emerging perspectives on community schools and the engaged university* (pp. 223-251). IGI Global.

Black, S. A. (2015). Qualities of effective leadership in higher education. *Open Journal of Leadership, 4*(02), 54.

Bozkurt, A., Jung, I., Xiao, J., Vladimirschi, V., Schuwer,

R., Egorov, G., ... & Paskevicius, M. (2020). A global outlook to the interruption of education due to COVID-19 pandemic: Navigating in a time of uncertainty and crisis. *Asian Journal of Distance Education, 15*(1), 1-126.

Bragg, S., Renold, E., Ringrose, J., & Jackson, C. (2020). 'More than boy, girl, male, female': exploring young people's views on gender diversity within and beyond school contexts. In *Trans Youth in Education* (pp. 100-114). Routledge.

Calimlim, J. D., De Guzman, M. F. D., & Villalobos, R. N. (2021). Alternative learning delivery modalities (ALDM) of secondary social studies teachers: Addressing the new normal teaching pedagogies. *American Journal of Humanities and Social Sciences Research, 5*(6), 90-99.

Day, C., Sammons, P., & Gorgen, K. (2020). Successful School Leadership. Education development trust.

de Klerk, E. D., & Palmer, J. M. (2021). Resetting education priorities during COVID-19: Towards equitable learning opportunities through inclusion and equity. *Perspectives in Education, 39*(1), 12-28.

Dela Cruz, A. L., C. Camat, I. ., G. Caro, A. G., C. Catahum, M. G. ., C. Jabido, H. R. ., D. Reyes, K. ., P. Florague, A. ., M. Bayog, M. Y. ., & N. Macagba, I. . (2022). Learning Styles and Learning Abilities of Grade 6 Pupils in Dealing with Modular Learning. *American Journal of Education and Technology, 1*(2), 15–21. https://doi.org/10.54536/ajet.v1i2.483

Dunmeyer, S. (2021). Parental involvement and academic achievement in elementary school: A case study (Doctoral dissertation, Northcentral University).

Etikan, I., & Bala, K. (2017). Sampling and sampling methods. *Biometrics & Biostatistics International Journal, 5*(6), 00149.

Garbe, A., Ogurlu, U., Logan, N., & Cook, P. (2020). COVID-19 and remote learning: Experiences of parents with children during the pandemic. *American Journal of Qualitative Research, 4*(3), 45-65.

Green, C., Mynhier, L., Banfill, J., Edwards, P., Kim, J., & Desjardins, R. (2020). Preparing education for the crises of tomorrow: A framework for adaptability. *International Review of Education, 66,* 857-879.

Guan, A. G. R., & Benavides, N. G. (2021). Parent-teacher-learner collaboration in facilitating modular instruction. *United International Journal for Research & Technology, 2*(7), 80-89.

Karal, H., Kokoc, M., Colak, C., & Yalcin, Y. (2015). A case study on online mathematics teaching with pen-based technology: Experiences of two instructors. *Contemporary educational technology, 6*(4), 319-337.

Knopik, T., Błaszczak, A., Maksymiuk, R., & Oszwa, U. (2021). Parental involvement in remote learning during the COVID-19 pandemic—Dominant approaches and their diverse implications. *European Journal of Education, 56*(4), 623-640.

McLeod, S., & Dulsky, S. (2021, March). Resilience, reorientation, and reinvention: School leadership during the early months of the COVID-19 pandemic. In Frontiers in education (Vol. 6, p. 637075). Frontiers.

Micheli, M. (2015). What is new in the digital divide? Understanding internet use by teenagers from different social backgrounds. In *Communication and information technologies annual* (pp. 55-87). Emerald Group Publishing Limited.

Mixon, C. S., Owens, J. S., Hustus, C., Serrano, V. J., & Holdaway, A. S. (2019). Evaluating the impact of online professional development on teachers' use of a targeted behavioral classroom intervention. *School Mental Health, 11,* 115-128.

Nasr, N. (2020). Teachers as students. *The Electronic Journal for Research in Science & Mathematics Education, 24*(2), 168-171.

Pandey, P., & Pandey, M. M. (2021). Research methodology tools and techniques. Bridge Center.

Panunciar, D. M., Bacolod, M. M., Abadiano, M. N., & Deocares, M. S. (2020). Emerging school leadership amidst Covid-19 pandemic. *Psychology and Education, 57*(9), 5935-5963.

Podolsky, A., Kini, T., & Darling-Hammond, L. (2019). Does teaching experience increase teacher effectiveness? A review of US research. *Journal of Professional Capital and Community, 4*(4), 286-308.

Posey-Maddox, L., & Haley-Lock, A. (2020). One size does not fit all: Understanding parent engagement in the contexts of work, family, and public schooling. *Urban education, 55*(5), 671-698.

Potterton, A. U. (2019). Leaders' experiences in Arizona's mature education market. *Journal of Educational Administration, 57*(1), 21-35.

Rasheed, R. A., Kamsin, A., & Abdullah, N. A. (2020). Challenges in the online component of blended learning: A systematic review. *Computers & Education, 144,* 103701.

Santos, E. (2023). Using Mobile-Supported Self-Learning Modules in Developing Oral Communication Skills of Grade 9 ESL Students. *American Journal of Education and Technology, 2*(2), 99–107. https://doi.org/10.54536/ajet.v2i2.1632

Schneider, M., & Preckel, F. (2017). Variables associated with achievement in higher education: A systematic review of meta-analyses. *Psychological bulletin, 143*(6), 565.

Timmons, K., Cooper, A., Bozek, E., & Braund, H. (2021). The impacts of COVID-19 on early childhood education: Capturing the unique challenges associated with remote teaching and learning in K-2. *Early Childhood Education Journal, 49*(5), 887-901.

UNESCO. (2020a). Three ways to plan for equity during the school closures. Retrieved from https://bitly.ws/3fecC

Valverde-Berrocoso, J., Fernández-Sánchez, M. R., Revuelta Dominguez, F. I., & Sosa-Díaz, M. J. (2021). The educational integration of digital technologies preCovid-19: Lessons for teacher education. *PloS one, 16*(8), e0256283.

Zepeda, S. J. (2019). Professional development: What works. Routledge.