

Pupils' Level of Reading Literacy During Modular Distance Learning

Jenilyn S. Eodorot^a, Rosalinda C. Tantiado^b

^ajenilyn.sarin@deped.gov.ph, ^brosalinda.tantiado@deped.gov.ph
Southern de Oro Philippines College – Graduate School, Cagayan de Oro City, Philippines

Abstract

This study aimed to determine the pupils' practices at home during Modular Distance Learning (MDL) in terms of Reading, Parenting, and Gadgets, to find their Reading Literacy levels either Independent, Instructional, Frustrated, or Non-Readers, and further find the significant relationship between the pupils' practices at home during MDL and the Reading Literacy Level. Also, to design an Action Plan based on the study's findings to help the pupils with problems with their reading level. This study used a descriptive correlation research design. A researcher-made questionnaire was utilized to acquire information relevant to the study and Phil-IRI Assessment Tool to identify the reading Literacy level of pupils. Respondents were 177 Grade IV pupils of San Martin Integrated School using a convenient sampling procedure. Results revealed that pupils were often reading at home during MDL. Most of them are in the Instructional level, which means that they can read but not counted as fast readers. They read the reading materials given by their teachers. Reading, Parenting and use of Gadgets have Significant Relationship with the reading level of pupils. It is recommended that parents will not forget to have reading practice at home.

Keywords: Modular Distance Learning, Reading, Parenting, Gadget, Independent Reader

1. Introduction

The world was shocked when COVID-19 spread around the world. All were affected by the pandemic, and every sector, business, organization, and office were at stake during the time. Since its outbreak in late December 2019, COVID-19 has wreaked havoc worldwide; like any critical sector, education has been hit hard. Pupils, schools, colleges, and universities have been deeply impacted. People find it hard to adjust to the new set of living due to the pandemic, employed become unemployed, healthy becomes unhealthy, crowded places suddenly changed into quiet zone, gatherings were prohibited, face-to-face became impossible, lockdowns and quarantines were implemented by the government to control the spread of the virus and the birth of online transactions was created.

During the COVID-19 pandemic, education was at risk due to the cancelation of face-to-face classes, so the Department of Education implemented different learning modalities, the choices include modular (printed or digitized), online learning, radio and television-based instruction, or a combination of these (blended learning) to continue the teaching-learning process. It was found that Modular learning, a form of distance learning that uses Self-Learning Modules (SLM), was highly convenient for most typical Filipino pupils. It was also the preferred learning delivery modality of most parents and guardians for their children. The SLM was based on the Most Essential Learning Competencies (MELCS) provided by the Department of Education.

MDL involved tailored instruction that enabled pupils to employ self-learning modules (SLMs) in print or digital format/electronic copy, depending on what was appropriate for the pupil, as well as additional learning resources such as textbooks, activity sheets, study guides, and other study materials. Learners used a computer, tablet PC, or smartphone to access electronic versions of the course materials. E-learning resources,

including offline E-books, can be distributed using CDs, DVDs, USB storage, and computer-based apps. The duty of keeping track of the pupils' progress fell to the teachers. The teacher can be contacted by the students by phone, text message, instant message, or other means. When possible, the instructor should make home visits to students who require help or remediation (Llego, 2021).

After two years of distance learning, even if the virus is still around but is now gradually controlled, a normal educational setting has started. The School Year 2022-2023 is the resumption of the face-to-face teaching-learning process. Department Order No. 34, s. 2022, calls for the new learning delivery as In-person classes. During the implementation of the In-person classes, some problems arise. Audibility issues due to the use of face masks and the "unreadiness" of some pupils for in-person learning were some of the challenges faced during the first weeks that limited in-person classes are held in the country. Teachers are also concerned about pupils' reading literacy because it has been observed that their reading level does not match their grade level. Pupils' writing, reading, and problem-solving abilities were also an issue.

According to Destatis (2018), elementary school specifically, Grade 4 level are pivotal moment in pupils' educational biographies. At this point, reading literacy should be developed to the point where pupils can acquire further knowledge through reading in all subjects and continue their educational biography through independent learning (Ludewig Kleinkorres et al., 2022). Academic achievement is essential for young people's successful development in society. Pupils who perform well in school are better prepared to enter adulthood and achieve occupational and economic success. So, teachers should promptly address pupils' reading literacy for better academic performance (Ludewig Kleinkorres et al., 2022).

The researcher is curious about the factors that impact positively and negatively the level of reading literacy of the pupils at home during Modular Distance Learning (MDL). Because the researcher believes that a child attains further knowledge if he knows how to read. The main purpose of this study is to identify Pupils' Level of Reading Literacy during Modular Distance Learning and to apply an action plan to address the problem. Added to it is to determine the relationship of Modular Distance learning on the level of reading literacy of the pupils.

This study was anchored on Vygotsky (1978) theory of child development as cited in the research of Pempek and Lauricella, in *Cognitive Development in Digital Contexts*, (2017). Research has demonstrated the importance of positive parent-child interactions across the first few years of life for cognitive development as well as social and emotional growth. Vygotsky's theory is reflected in modern research findings demonstrating that interactions with a parent can provide "scaffolding" to enhance the child's cognitive abilities. In this approach, the parent-child connection is crucial for the growth of young language and reading abilities.

Another moment when parent-child interaction can be quite beneficial is during playtime for young children. Play is a crucial activity that fosters development in the brain, social interaction, emotional stability, and in physical health. Playing with their kids can be beneficial for both parents and kids. Indeed, research has shown that the parent-child relationship enhances both the number and quality of young children's play. Active parental involvement has also been associated with longer play episodes and more complex symbolic play, including paying attention to the kid, showing interest, and initiating or prolonging play. Early cognitive development, therefore, seems to be improved to the extent that parents actively include their children in play, enhancing it.

While some parental behaviors directed toward children appear to be beneficial for their early development, others lead to negative outcomes. For instance, behaviors by parents such as intrusiveness and questioning or instructing in a way that directs the child's attention have been associated with decreases in children's symbolic play. Likewise, restricting children's behavior by terminating their activity or redirecting their attention to a new task has been associated with slower rates of cognitive and social development, which contrasts with supportive behaviors, such as maintaining children's focus on an activity, that are associated with faster rates of cognitive and social development.

The researcher anchors her study with this theory because parental involvement is very important in

the pupil's learning development, especially in their reading practices at home. Parental support is highly encouraged to improve pupils' reading ability especially since we experience a two-year distance learning where face-to-face instruction and teaching are not possible, and parents can be a great help to continue their child's learning at home.

The study also anchored in the Department of Education's (DepEd) effort known as the Philippine Informal Reading Inventory (Phil-IRI) aims to make every Filipino kid a reader. It is based on the department's flagship initiative, "Every Child A Reader," which aims to develop reading and writing skills in every Filipino child at the grade level appropriate for their age (DepEd Order No.014, s.2018).

A student's performance in oral reading, silent reading, and listening comprehension is assessed using the Phil-IRI, an informal reading inventory made up of graded passages according to 2018 Updated Phil-IRI Manual by Llego, (2018). These three sorts of evaluations—*independent, instructional, and frustration*—seek to establish the student's reading proficiency. The data from these measurements may be employed to tailor classroom, small-group, or personalized instruction to the needs and capabilities of the pupils. The Phil-IRI is not the sole assessment method that gauges a student's overall reading ability; it only provides a rough idea of the student's aptitudes and is best used in conjunction with other trustworthy assessment methods. Because the department used various reading assessment tools aside from Phil-IRI for instance the EGRA-ARATA used by the lower grades from 1-3. EGRA stands for "Early Grade Reading Assessment." The assessment is used to measure children's development toward learning to read. And it is administered orally by an assessor/teacher, one -on-one with a child.

Teachers can use the Phil-IRI Group Screening Test (GST) to determine whether their pupils are reading at, above, or below grade level. The Phil-IRI Graded Passages, which are administered individually, can be used to assess pupils' Oral Reading, Silent Reading Comprehension, and/or Listening Comprehension levels. The Phil-IRI can be used to describe decoding and word recognition, fluency and comprehension when used to assess oral reading skills. A Reading Miscue Inventory is used to assess the pupils' performance in decoding (the ability to read isolated words using phonics knowledge) and word recognition (the ability to automatically identify words on sight) (Phil-IRI Form 3A and 3B: Grade Level Passage Rating Sheet). The child is asked to read a passage, and each incorrectly read word is noted and marked. In terms of fluency (the ability to read with speed, accuracy, and prosody), the time it takes the child to read a passage is recorded, as is the number of words he or she can read per minute. A checklist is also used to provide a qualitative description of the child's reading style. Finally, after reading the graded passage, test takers' comprehension skills (the ability to create meaning) can be assessed by having the child answer five to eight questions of varying difficulty based on it. On the other hand, Phil-IRI is also used to describe reading speed and comprehension when used to assess Silent Reading Comprehension. The time it takes the child to read each passage completely is used to determine the student's reading speed. After reading a passage, silent reading comprehension is assessed by asking the student to answer five to eight questions of varying difficulty (Llego, 2018).

According to the DepED Order No. 014 Series of 2018, Phil-IRI data shall serve as one of the bases for planning, designing/redesigning the reading instruction of the teachers and the school's reading programs or activities to improve the overall school's reading performance. Informal reading inventories are designed to provide greater insight into an individual learner's reading level vis-à-vis a specific passage to allow teachers to customize instruction to the needs of their students. The underlying assumption is that an approximation of the student's literacy abilities is best shown through his/her performance in actual reading and writing tasks. This is in contrast to formal reading tests that are standardized and often conducted for the purpose of comparing a student's performance with that of others (Weaver, 2014).

2. Methodology

This study used descriptive specifically survey and correlation research design. Siedlecki (2020) suggested that descriptive methods are methods that aim to create descriptions; describe images, and paintings systematically, factually, and accurately about the data, properties, and relationships of the phenomena studied. In the survey research design, questionnaires were used to acquire information about a particular group. The aim of the survey research design was to obtain a more accurate representation of the characteristics of the participants. A correlational research design was also used, it investigated relationships between variables without the researcher controlling or manipulating any of them. A correlation reflected the strength and/or direction of the relationship between two (or more) variables. The direction of a correlation can be either positive or negative (Bhandari, 2021). In short, it simply describes the relationship between the variables.

Since the researcher used secondary data which is the PHIL-IRI Assessment Tool, the document analysis method was one of the research designs used. According to the Indeed Editorial Team, (2021) Document analysis is a qualitative research technique used by researchers. The process involved evaluating electronic and physical documents to interpret them, gain an understanding of their meaning and develop upon the information they provided. These methods involved description, recording, analysis, and interpretation of prevailing conditions. The investigation of the Pupil’s Level of Reading Literacy during Modular Distance Learning of Grade IV pupils of San Martin Integrated School as the focus of this study.

The statistical tool used to analyze the data gathered in this study involved Mean and Standard Deviation for Problem 1 while Frequency and Percentage were utilized in Problem 2. Pearson Product Moment Correlation Coefficient was used to determine the significant relationship between pupils’ practices at home during the Modular Distance Learning and level of reading literacy.

3. Results and Discussion

Problem 1. What were pupils’ practices at home during Modular Distance Learning (MDL) in terms of:

- 1.1 Reading
- 1.2 Parenting
- 1.3 Gadgets

Table 1

Pupils’ Practices at home during Modular Distance Learning.

Pupils’ Practices during MDL	Mean	SD	Description
Reading	2.76	0.26	Often
Parenting	2.73	0.25	Often
Gadgets	2.80	0.42	Often
Overall	2.76	0.99	Often

Note: 3.26-4.0=Always; 2.51-3.25=Often; 1.76-2.50=Occasionally; 1.0-1.75=Never

Table 1 shows the Pupils’ Practices at home during Modular Distance Learning (MDL). It has an Overall Mean of 2.76 with 0.99 SD which is described as Often. It means that all the practices stated in the research variables are mostly done by the respondents at home during Modular Distance Learning. It implies that despite the absence of face-to-face classes and the personal assistance of the teachers to the respondents still they responsibly do their modules and still continue their reading practices with the aid of their parents even if not all the time but they still do it oftentimes.

It reveals that the respondents spend most of their time in using gadgets with a mean of 2.80 with 0.42

SD. It means that during modular distance learning the respondents often used gadgets in their homes. It implies that gadgets play an important part in the modular distance learning journey of the respondents. According to Griffith, Janning et al., (2020) this pandemic forced many parents and children to remain at home around the clock just to save lives through physical distancing while keeping social interactions (i.e., communicating through technological gadgets). Keeping social interactions reduced stress and helped them to cope with the negative effects of physical isolation during the lockdown. In such a situation how to engage in activities has been, probably, one of the top priorities for everyone. Thus, technological gadgets have been one of the most important tools of engagement, for example, most parents un/willingly have managed to engage themselves with technology to reduce their burnout as well as their children with technological gadgets to engage them with learning and playing games.

It also reveals that parenting is present during Modular Distance Learning with a mean of 2.73 and 0.25 SD which is described as Often. This means that most of the time parents spent time in helping and supporting their children during MDL. It implies that parenting is a great factor in the respondent's learning, and it helps them cope and adjust to the new mode of learning. According to Karki et al. (2020), parents should provide a conducive environment at their home to ensure their children's mental well-being and healthy developmental trajectory. It is normal for parents to feel overwhelmed during this pandemic but steps to carry out positive parenting with children during this time could benefit both. Striving to ensure appropriate care of children, parents may tend to neglect their well-being. Parents should master to strike a balance between their job, household chores, and quality time with children.

Problem 2. What is the Reading level of the Grade IV pupils based on the Phil- IRI Assessment?

Table 2

Reading Level of Grade IV Pupils

Reading Level of Grade IV Pupils	Frequency	Percentage
Independent	9	5.08%
Instructional	91	51.41%
Frustration	52	29.38%
Non-Readers	25	14.12%
Total	177	100%

Table 2 shows the Reading Level of the Grade IV Pupils based on the result of the Phil-IRI Assessment Tool for the school year 2022-2023 of San Matin Integrated School with a total number of respondents of 177 enrolled pupils. This table reveals that most of the respondents belong to the Instructional level with 91 frequencies with a percentage of 51.41%. It means that out of 177 total respondents, there are 91 of them belong to the Instructional Level, who scored 90-96% in word recognition and 59-79% in Comprehension and classified as the average reader. This implies that most of the respondents can read but are not classified as fast readers. According to DepEd Order No.014, s.2018, The Philippine Informal Reading Inventory (Phil-IRI) is a Department of Education (DepEd) initiative that directly addresses the Department's goal of making every Filipino child a reader. It is based on the Department's flagship program, "Every Child A Reader," which aims to make every Filipino child a reader and writer at his or her grade level. The department continues to implement programs that help the pupils to improve their reading level so that we can produce fast and independent reader pupils. This is also the aim of the teachers to have graduates with equip

knowledge and reading skills.

It also reveals that there are only 9 out of 177 pupils who belong to the Independent Level which means that only 5.08% of the total number of respondents, who score 97-100% in Word recognition and 80-100% in comprehension are classified as fast readers. It implies that the 2 years of Modular Distance Learning really affect the respondent's reading level because of the very low percentage of the pupils who are classified as fast readers and there are more non-readers compared to fast readers. Modular learning, according to Estrada (2021), may not operate at all. It is further stated that there is a lack of feedback and that there are numerous issues with modular learning, but that this is not the fault of the kids or the teachers because the pandemic is still ongoing. Even they will find it difficult to adjust to the new normal. She also mentioned that it's hard to absorb new information when no one is there to guide you (or at least empathize with you) when the lessons become too much. Learning is hard when done on our own (you are being left in the dark). This contributes to their anxiety and depression.

Problem 3. Is there a significant relationship between the pupil's practices at home during Modular Distance Learning and the Grade IV Pupil's Reading Level based on the Phil-IRI Assessment?

Table 3

Relationship of the Pupils' Practices at Home during Modular Distance Learning and the Reading Level

Pupils' Practices at home during MDL	r value	P value	Decision	Interpretation
Reading	0.938	0.0000	Reject Null Hypothesis	Significant Relationship
Parenting	0.937	0.0000	Reject Null Hypothesis	Significant Relationship
Gadgets	0.899	0.0000	Reject Null Hypothesis	Significant Relationship

Table 6 shows the relationship between the Pupils' Practices at Home during MDL and the Reading Level of Grade IV Pupils. It reveals that there is a significant relationship between the two variables and the null hypothesis is rejected. It implies that Modular Distance Learning affects the reading level of Grade IV pupils. The variables have significant relationship with the reading level of the pupils during the Modular Distance Learning, these variables contributes to the reading level of the pupils after distance learning because of the absence of the face to face instruction, these variables and practices become an aid to continue the pupils learning and practices in reading at home. Reading practices at home have significant relationship to the pupils reading level because it helps the pupils to continue their reading habits and enhance their reading skills. Also the parenting contributes a lot to the reading level of the pupils because this practice help the department continue the teaching-learning process amidst of distance learning, parents are responsibly teach and support their child at home in their learnings. Used of gadgets also a great help although not in optimal level because it helps the students to cope with the new trends of learning without the assistance of a teacher, the gadgets motivate them to learn independently and do practice their reading at home. According to Stanford Graduate School of Education researchers (2021), results from a reading assessment given to first-through fourth graders nationwide show that students' development of oral reading fluency - the ability to read aloud quickly and accurately - slowed significantly in spring 2020 following the abrupt school closures caused by COVID-19.

Problem 4. Based on the findings of the study, what action plan should be made to improve the reading level

of Grade IV pupils of San Martin Integrated School?

Based on the findings of the study, the researcher’s action plan to improve the reading level of Grade IV pupils of San Martin Integrated School is to have differentiated remedial reading. The researcher will assess the learning styles of the respondents so that he can identify a strategy that can fit the pupil’s needs. After assessing their learning styles, the researcher will call the concerned parents to discuss the program and ask for their full support for the improvement of their child’s reading level, after that the researcher will plan the schedule for the respondent according to their group (based on their learning styles). Every day the researcher will have a 1-hour remedial reading for one group of respondents with the same learning style this schedule will be done during the vacant periods of the researcher since in grade 4 we have departmentalized instruction. After each session, the researcher will provide reading materials to be read at home with the support of the parents since based on the findings of the study that most of the respondents read the reading materials given by the teacher and the parents are willing to support their children in reading at home.

OBJECTIVE	ACTIVITIES	DATE	HUMAN RESOURCES NEEDED	FINANCIAL RESOURCES NEEDED	MATERIALS RESOURCES NEEDED	MEANS OF VERIFICATION
Pre-Implementation						
1.To scaffold pupils with difficulty in reading. 2.To enhance pupils reading level.	Teacher-parent meeting Assessment of pupils learning styles (Pupils will be group according to their learning styles)	August 2023- October 2023	School Advisers Parents Pupils	None	None	Minutes of the meeting and assessment, pictures
During Implementation						
1.To actively participate on the remedial classes schedule. 2. To teach pupils reading using the marungko approach. 3.To encourage parents to do follow-ups in their homes with their children reading activities 4. To provide formative assessment every end of the session.	Scheduled remedial classes Remedial reading session Formative Assessment Distribution of reading materials	October 2023- March 2024	School Head Teacher Parents Pupils	none	Bond paper Ink printer	Pictures
Post Implementation						
1.To evaluate pupils reading level	Assessment using PHIL-IRI	March 2023- June 2023	School Head Teacher Pupils	None	None	Minutes, pictures

4. Conclusions and Recommendations

Based on the findings of the study, the following conclusions are drawn:

1. Used of gadgets at home help the pupils to continue their reading practices even if they have distance learning where teachers face-to-face instruction is not possible. It provides them enjoyment and motivation to learn amid the pandemic. Also parenting is a great help for the pupils to make the learning and the reading practices possible at home.

2. Due to Modular Distance Learning most of the pupil’s reading levels belong to the Instructional Level where the pupils have adequate background knowledge for a topic and can access text quickly and with

no or few errors and need a guidance from a teacher or someone. This implies that most of the pupils after the two-year modular distance learning can read and comprehend but with guidance and supervision of the teacher even if they are already in grade four.

3. Reading practices at home are very important for the pupils to improve their reading level. Pupils need to have enough time to practice their reading skills at home for them to enhance their reading and comprehension skills to easily learn their lessons in school.

Based on the finding and conclusions presented, the following recommendations are suggested:

1. Parenting at home may be encouraged and practiced. Parents should give time to scaffold their children at home in their reading as well as in their lessons for the children to be more motivated to do better in school if they feel that they are supported by their parents. Support from parents is essential, so teachers may encourage the parents to be actively involved in their child's activities in school. During the parent-teacher meeting, this matter should be emphasized, and encourage parents to always do follow-ups with their child's progress in school. Teachers constantly communicate with the parents regarding the pupils' status in school for the parents to be updated.

2. It is wise for teachers to do a remedial class for those pupils who struggle in reading to increase the number of pupils who belong to the independent level. The teacher may conduct the remediation according to the pupils' learning styles and provide reading materials to be read at home. Involve the parents in the remediation process to help the reading level of the pupils.

3. Although gadgets are great help in the pupil's learning and reading practices parental supervision is highly recommended to guide the pupils in using gadgets. So, parents may minimize the screen time or use of gadgets for the pupils and monitor their screen activities. Gadgets can motivate pupils to learn reading especially if they watch videos and pictures so parents and teachers should use this strategy to teach reading to the pupils. The teachers should integrate gadgets or technology in teaching reading to catch pupils' attention and for them to understand more and can learn more about how to read and enhance their reading level.

According to the Organization for Economic Cooperation and Development, one of the key objectives of early childhood education is to teach children to read fluently and comprehend texts because the main purposes of reading are to attain one's goals, develop one's knowledge and potential, and participate in society (Bigozzi and Tarchi et. al. 2017). Reading is essential to everyone because if the pupils know how to read and comprehend, they can easily understand their lesson. So, it is the main goal of the teachers to make every pupil an independent reader.

REFERENCES

- Alcala and Castroverde, 2021 Modular distance learning modality: Challenges of teachers in teaching amid the Covid-19 pandemic Modular-distance-learning-modality-Challenges-of-teachers-in-teaching-amid-the-Covid-19-pandemic.pdf (researchgate.net)
- Andayani and Maryam, 2018 The Portrait of Reading Habit and Interest of Tangerang City's Community. *Advances in Social Science, Education and Humanities Research*. Vol. 2
- Bhandari, 2022 Correlational Research | When & How to Use
[https://www.scribbr.com/author/pritha/page/3/#:~:text=Correlational%20Research%20%7C%20When%20%26%20How%20to%20Use&text=by%20Pritha%20Bhandari.,Revised%20on%20December%205%2C%202022.,two%20\(or%20more\)%20variables.](https://www.scribbr.com/author/pritha/page/3/#:~:text=Correlational%20Research%20%7C%20When%20%26%20How%20to%20Use&text=by%20Pritha%20Bhandari.,Revised%20on%20December%205%2C%202022.,two%20(or%20more)%20variables.)
- Bigozzi and Tarchi et al. 2017 Reading Fluency as a Predictor of School Outcomes Across Grades 4-9 *Frontiers | Reading Fluency As a Predictor of School Outcomes across Grades 4–9* (frontiersin.org)

- Brody, J. (2015). Screen Addiction Is Taking a Toll on Children - The New York
<https://archive.nytimes.com/well.blogs.nytimes.com/2015/07/06/screen-addiction-is-taking-a-toll-on-children/>
- Coffelt, 2017 Confidentiality and Anonymity of Participants. <https://core.ac.uk/download/pdf/141669909.pdf>
- Department of Education, 2018 DepEd Order No.014, series of 2018
[https://www.deped.gov.ph/2018/03/26/do-14-s-2018-policy-guidelines-on-the-administration-of-the-revised-philippine-informal-reading-inventory/#:~:text=DO%2014%2C%20s.-,2018%20E2%80%93%20Policy%20Guidelines%20on%20the%20Administration%20of,Revised%20Philippine%20Informal%20Reading%20Inventory&text=The%20Department%20of%20Education%20\(DepEd,at%20his%20Fher%20grade%20level.](https://www.deped.gov.ph/2018/03/26/do-14-s-2018-policy-guidelines-on-the-administration-of-the-revised-philippine-informal-reading-inventory/#:~:text=DO%2014%2C%20s.-,2018%20E2%80%93%20Policy%20Guidelines%20on%20the%20Administration%20of,Revised%20Philippine%20Informal%20Reading%20Inventory&text=The%20Department%20of%20Education%20(DepEd,at%20his%20Fher%20grade%20level.)
- Department Order No. 34, Series 2022. On the issuance of an Amendatory DepEd Order to DO 34, s. 2022 | Department of Education
- Deslandes- Martineau et al., 2020 Curriculum Response to the Crisis Curriculum response to the crisis | SpringerLink
- Destatis (2018). Allgemeinbildende Schulen - Fachserie 11 Reihe 1 – Schuljahr 2016 [General education schools - Section 11 Subsection 1 - Year 2016]. Statistisches Bundesamt.
 Available at: https://www.statistischebibliothek.de/mir/receive/DEHeft_mods_00071539
- Dhawan, 2020 Online Learning: A Panacea in the Time of COVID-19 Crisis Online Learning: A Panacea in the Time of COVID-19 Crisis - Shivangi Dhawan, 2020 (sagepub.com)
- Domingue, 2021 The Effect of Covid on Oral Reading Fluency During the 2020-2021 Academic Year. The Effect of COVID on Oral Reading Fluency During the 2020–2021 Academic Year - Benjamin W. Domingue, Madison Dell, David Lang, Rebecca Silverman, Jason Yeatman, Heather Hough, 2022 (sagepub.com)
- D'SOUZA, 2021 What Impact will the Pandemic Have on Early Literacy? What impact will the pandemic have on early literacy? | EdSource
- Estrada, L. (2021, January 12). Are self-learning modules effective? [News Article]. Rappler.
<https://www.rappler.com/voices/imho/opinion-are-self-learning-modules-effective.>
- Gillespie, 2019 Rocking and Rolling, Reading with Babies Matters. National Association for the Education of Young Children Rocking and Rolling. Reading with Babies Matters! | NAEYC
- Griffith, 2020 Parental Burnout and Child Maltreatment During the COVID-19 Pandemic Parental Burnout and Child Maltreatment During the COVID-19 Pandemic - PubMed (nih.gov)
<https://www.google.com/maps/place/San+Martin+Integrated+School>
- Indeed Editorial Team 2023 Document Analysis Guide: Definition and how to perform it Document Analysis Guide: Definition and How To Perform It | Indeed.com
- Janning, M. (2020). Positioning Children's Agency in Everyday Home Spaces and Objects: Linking Theory and Research. In Bringing Children Back into the Family: Relationality, Connectedness and Home. Emerald Publishing Limited.
- Karki et al., 2020 Parenting During the COVID-19 Pandemic Parenting During the COVID-19 Pandemic - PMC (nih.gov)
- King et al., 2020 Problematic Online Gaming and The COVID-19 Pandemic. Journal of Behavioral Addictions. Problematic online gaming and the COVID-19 pandemic - PubMed (nih.gov)
- Levin and Lira, et. al 2019 Parents' early book reading to children: Relation to children's later language and literacy outcomes controlling for other parent language input Parents' early book reading to children: Relation to children's later language and literacy outcomes controlling for other parent language input - PMC (nih.gov)
- Llego, 2018, 2018 Updated PHIL-IRI Manual 2018 Updated Phil-IRI Manual - TeacherPH
- Llego, 2021, DepEd Learning Delivery Modalities for School Year 2021-2022 DepEd Learning Delivery Modalities for School Year 2021-2022 - TeacherPH

- Ludewig, and Kleinkorre, et. al (2022) COVID-19 Pandemic and Student Reading Achievement: Findings From a School Panel Study *Frontiers | COVID-19 Pandemic and Student Reading Achievement: Findings From a School Panel Study* (frontiersin.org)
- Magsambol, B. (2020) 8.8 Million Parents Prefer Modular Learning for Students—DepEd[Web Log Post]. <https://www.rappler.com/nation/deped-says-parents-prefer-modular-learning-students> Martin and Furey, 2018 AI Education Matters: Modular Approach to AI Ethics Education
- MCCLAIN, AND VOGELS, ET AL, 2021 Parents, their children and school during the pandemic Parents, their children and school during the pandemic | Pew Research Center
- McDevitt and Omrod, 2020 Child Development and Education (7th ed). Pearson Education Inc. Child Development and Education (pearson.com)
- Mendelssohn et al., 2018 Reading Aloud, Play, and Socio-emotional Development Reading Aloud, Play, and Social-Emotional Development | Pediatrics | American Academy of Pediatrics (aap.org)
- Morin, 2018 5 Reasons Student's Aren't Engaging in Distance Learning 5 Reasons Students Aren't Engaging in Distance Learning - Child Mind Institute
- Nardo, 2017 Modular Instruction Enhances Learner Autonomy Modular Instruction Enhances Learner Autonomy (sciepub.com)
- Omnibus Guidelines on the Implementation of Community Quarantine in the Philippines, Section 2, number 2 20200429-Omnibus-Guidelines-on-the-Implementation-of-Community-Quarantine-in-the Philippines.pdf (officialgazette.gov.ph)
- Pempek and Lauricella, 2017 Cognitive Development in Digital Context The Effects of Parent-Child Interaction and Media Use on Cognitive Development in Infants, Toddlers, and Preschoolers — Northwestern Scholars
- Rodriguez, 2018 Science Says: A Book-Filled Home Has Benefits Beyond Reading for Kids Importance of Having Books at Home (scholastic.com)
- Schalardi, 2020 Five reasons why struggling readers benefit from using technology Five reasons why struggling readers benefit from using technology | Texthelp
- Siedlecki, 2020 Understanding Descriptive Research Design and Method Download citation of Understanding Descriptive Research Designs and Methods (researchgate.net)
- Sigdel, 2017 Technology and Learning Capacity of Children: A Positive Impact of Technology in Early Childhood "Technology and Learning Capacity of Children: A Positive Impact of Tec" by Sajana Sigdel (jwu.edu)
- Sikora and Evans et al 2019 Scholarly culture: How books in adolescence enhance adult literacy, numeracy and technology skills in 31 societies. (PDF) Scholarly culture: How books in adolescence enhance adult literacy, numeracy and technology skills in 31 societies (researchgate.net)
- Stanford Graduate School of Education (GSE), 2021 New Stanford Study Finds Reading Skills Among Young Students Stalled During Pandemic. Reading skills of young students stalled during pandemic | Stanford News