

Fuller Method as Remediation on the Reading Comprehension of Elementary Learners: A Review of Related Studies

Cristel Joy V. Dejito

Graduate School of Education, Cebu Roosevelt Memorial Colleges, Bogo City, Cebu 6010

Danao City Central School, Poblacion, Danao City 6004

Email address: cjoydejito[at]gmail.com

Abstract—This literature review aimed to determine the effects of Fuller Method on the reading comprehension of Early Grade learners. It showed that an intervention is required to improve the reading performance of the of the learners and teach them how to read and understand the concepts. Using Fuller method leads to an improvement on the reading performance of the students. It means that this approach is effective to use in the classroom. It is recommended that these students must be quickly referred for evaluation and given special education assistance. In order to identify individuals who are at risk for learning difficulties and to track the results of intervention programs, reading fluency evaluation is highly advised. As a result, it is recommended that there should be a specific action that teachers must take in order to deal with the situation at hand. Providing those learners are assisted by task repetition and scaffolding at the pre-task stage as a language input, particularly at the teaching of beginner or elementary level, really aids learners' oral fluency development so that learners will be able to execute at the task-cycle stage.

Keywords— EGRA, pretest, and posttest, literacy, oral fluency, and oral comprehension.

I. INTRODUCTION

The goal of the Early Grade Reading Assessment (EGRA) was to provide a valid and reliable way to gauge the abilities that support learning to read. The included policy guidelines on the utilization of the EGRA are provided by the Department of Education (DepEd) as a basis for monitoring and assessing the implementation of MTB-MLE and Kindergarten to Grade 3 reading and numeracy programs under RA 10533 An Act Enhancing the Philippine Basic Curriculum also known as K to 12 Curriculum. To ensure effective MTB-MLE adoption, do this (Teacherph, 2020). The conceptual foundation of EGRA is supported by research on reading skill development, which has enhanced understanding of the reading process. In order to understand the reading process in both generally achieving and struggling readers, this research has focused on establishing the foundational literacy skills that can be consistently tested. The goal of EGRA's creation was to collect timely information for use in low-income nations to promote learning (August & Shanahan, 2017). The purpose of this study is to determine the determine the effects of EGRA or early grade reading assessment result on the pupils reading ability.

Since its creation in 2006, EGRA has been translated into more than 100 languages and used in more than 65 nations (Force, 2014). Existing versions are accessible through an open-source platform with instructions for adaption based on the unique features of a specific language and nation. EGRA's broad use has given users a common language to discuss outcomes and track system-level changes, recognizing that direct comparisons between contexts should be avoided (Badian, 2016). This is true despite the disparities in instrument development between contexts and countries (primarily due to linguistic differences). EGRA can be utilized for program evaluation as well as system-level progress monitoring. EGRA is not a program or an intervention. There are many detractors and supporters of the early grade reading assessment (EGRA), thanks to its popularity and extensive adoption. The possible applications of EGRA and comparable early learning oral evaluations for guiding the assessment of the post-2015 educational levels (Dubeck & Gove, 2015).

This study evaluates the impact of EGRA's use and intended use on students' reading abilities will take center stage. It was mostly worried about some critics who might be giving it uses that weren't intended. For instance, it is believed that motivation has a role in a person's interest in and perseverance with reading. EGRA doesn't evaluate drive. The choice of subtasks for some intervention designs, for which EGRA is not sensitive, also caused concern. Most EGRA subtasks are unlikely to demonstrate improvements for an intervention that intends to enhance social and emotional development, a factor in school preparation. Like any evaluations, EGRA has several limitations. It's not designed to be a greater accountability measure to decide whether a kid should move on to the following grade, as indicated in the EGRA's founding documents. Additionally, it shouldn't be used to assess particular teachers. Instead, teachers can modify the EGRA subtasks to help them inform their lessons (Guthrie, 2014). Teachers can either use the complete EGRA as a formative assessment or choose certain subtasks to track classroom development, identify performance trends, and modify instruction to match the requirements of the students-a gap that this study is trying to look into particularly in a public school in Danao City Division.

This study also offers the conceptual framework that supports the assessment, as well as a description, justification,

and targeted developmental level for each subtask. A number of surveys' key findings offer realistic examples of how the assessment results are being used to guide classroom practice and policy. A brief discussion of the potential applications of EGRA and comparable oral early learning evaluations for informing the creation that can serve as its conclusion (Muter et al., 2016).

II. REVIEW OF RELATED LITERATURE AND STUDIES

This study aims to determine the effect of EGRA or Early Grade Reading Assessment result on the pupils reading ability. The key themes presented in this work were embodied in the review of literature and related studies. Administrators, teachers, researchers and all other stakeholders benefit through the findings from the literature review of this current study, providing them an opportunity to systematically and collectively view and how it affects the learning of students as the future depends on them.

The literature review is arranged as follows. The first part revolves around literatures in connection with early grade reading assessment (EGRA) result on the pupil's reading ability and its important aspects. The review proceeds to discuss the important information to what is the effect of early grade reading assessment in any aspect followed by a series of literature and studies about it. Presented also in the related literature are the effect of early grade reading assessment from previous years to present. Finally, a review of related literature on efficacy was also presented. The current set up is difficult but the need to revive the reading ability of the learners is a must since it poses a risk in the literacy level in the country and at the same compromise the economy.

Early Grade Reading Assessment and Its Important Aspect

The Early Grade Reading Assessment (EGRA) is a useful instrument for assessing how well early grade reading programs are working to improve students' basic literacy outcomes. When conducting evaluation studies, it's common practice to introduce a reading program in one location and then contrast the reading abilities of the pupils there with those of students in a nearby, comparable area where no programs is being utilized (called the control area). The reading proficiency gap between program participants and non-participants can be evaluated using EGRA. Oral reading fluency, often known as "ORF," is the most frequently used EGRA score metric to evaluate this. This difference in ORF is a measure of the program's effectiveness (UP NISMED, 2015).

EGRA serves a number of objectives, some of which are more general than the individual subtasks that assess discrete skills. One is that it can act as a benchmark for learning to read early. Large donors (UNESCO, 2014), NGOs (Concern Worldwide, 2014), and academia have all demonstrated this (Halliday et al., 2013). Two, it can direct the material that is presented in a teaching program. The Early Grade Reading: Igniting Education for All report (Gove & Cvelich, 2013) summarized the zero scores (i.e., the proportion of pupils who were unable to read a single word in a grade-level passage) for numerous languages and nations (Gove & Cvelich, 2013).

These kinds of findings formed the basis for the program material supported by significant funders. Three, EGRA is able to assess programs. We have observed this in both academic research from multiple fields and pilots to inform national scale-up (Piper et al., 2014). For each of the aforementioned reasons, EGRA offers valid and reliable information because of its well-informed theoretical framework and consistent procedures. Additionally, EGRA offers a consistent vocabulary for discussing children's literacy skills; for instance, when presenting the findings of the passage reading subtask, we have a way to gauge how well the kids can read text that is on a grade-level (Halliday et al., 2014).

Education scholars have categorized pupils based on their aptitudes and talents for a long time. This study can assist teachers and curriculum designers in better understanding how students move through the overlapping stages of reading acquisition. It can also present opportunities for targeted instruction and interventions for students who are having difficulty with particular reading acquisition skills. We have created a new method for classifying pupils into learning profiles that are closely related to their unique instructional needs using data from the Early Grade Reading Assessment (EGRA) on a nationally representative sample of second grade students in Indonesia. According to their reading proficiency, students were divided into five learning profiles (Grade 3 Ready, Fluent, Instructional, Beginner, and Nonreader), and we looked at the connections between these profiles and their reading abilities on a range of EGRA subtasks to determine the instructional support needed to advance students from one profile to the next. The methodology presented in this research is related directly to two EGRA subtasks so that it may be readily modified for use regardless of the language or country, even if the precise cutoff points will vary by orthography. As a result, this strategy significantly boosts the value of EGRA results in terms of their application, and it can be used to give researchers, ministry representatives, aid organizations, and policymakers clear direction as they work to address educational shortcomings and raise student performance internationally (Stern et al., 2018).

The purpose of this study is to determine whether teacher competency affects third-grade kids' reading achievement in public and private schools in Sweden. 10,000 pupils made up the data from Sweden's participation in PIRLS 2001. On the reading test, independent school children outperformed public school students, but this difference vanished when the parents' educational levels were taken into account. While no significant impacts of teacher experience, age, gender, in-service training, or cooperation could be identified, teacher certification for early grades instruction had a significant impact on kids' mean reading test results in both school types. Despite having no independent effect, school type acted as a mediation factor for both parents' and teachers' educations. However, these outcomes were at odds with one another (Myrberg, 2017).

In low-income nations, the number of children attending primary school has risen recently. However, there is still cause for concern over the quality of education. To raise the standard

of education, it has been argued that early reading development should be better measured. As a basis for evaluation and comparison, even in cases where languages and orthographies are different, benchmarks based on the amount of "words per minute" (WPM) that pupils can read accurately have been proposed. According to the findings, different WPM rates were correlated with identical comprehension ratings. Given that linguistic and orthographic characteristics can vary greatly and are likely to have an impact on the reading acquisition process, it is suggested that WPM is not a trustworthy comparative measure of reading development. We contend that the pursuit of high-quality education requires an in-depth knowledge of literacy languages (L1 and/or other) and how they affect reading development (Graham & van Ginkel, 2014).

Development of Pupils Reading Acquisition

By the time they enter third grade in Haiti, 49% of pupils are illiterate in Creole, which is indicative of a larger crisis in education in underdeveloped and unstable environments. With the goal of enhancing kids' reading abilities, Reading to Learn, an early-grade literacy treatment, was implemented and assessed from fall 2014 through spring 2016. In addition to providing teachers with training and instructional coaching, and establishing numerous supports for program implementation, students received learning materials in their home tongue. The authors tested the reading abilities of pupils in treatment and control schools at the start of first grade and at the conclusion of first and second grades in a randomized evaluation. With effect sizes ranging from 0.19 to 0.79, the authors used a hierarchical linear model to evaluate the program's impact at the end of grades 1 and 2, and they discovered that it had a favorable impact on oral reading fluency and emergent reading skills. The findings of this study make a significant advance to our understanding of what helps kids in Haiti and other vulnerable environments achieve better reading outcomes (Guzmán et al., 2021).

Using the then-recently created Early Grade Reading Assessment (EGRA) instrument, the World Bank supported the country of Liberia's first-ever reading evaluation. The Liberian Ministry of Education and reading specialists had contributed to the adaptation of EGRA for the nation earlier that month (MOE). In contrast to being used to evaluate an intervention, this EGRA, according to the analysis report based on the data gathered, "was used to make, with local data, suggestions as to how to improve reading that could then be evaluated with an intervention project which has an experimental element" (Crouch & Korda, 2018).

The EGRA is indeed an oral assessment tool that gauges students' pre-reading and reading abilities, which lay the groundwork for later reading and support academic success. The EGRA test is given to a student for about 15 minutes. In order to help explain some of the results of the reading outcome analysis, EGRA is frequently used in conjunction with a questionnaire to examine a range of student background characteristics. Results from the EGRA are provided for the following subtasks: orientation to print, knowledge of letter names, phonemic awareness (initial letter sounds),

identification of familiar objects, simple unfamiliar (nonword) decoding, passage reading (ORF), reading ability, and listening skills (Davidson et al., 2017).

Children's reading abilities are crucial to their academic success and strong performance in a variety of courses. Thus, early reading instruction for kids is essential for encouraging reading development. Children who do not develop these reading skills in their early grades fail to gain more advanced skills typically absorbed through reading. More advanced skills learned in later grades depend on early grade learning. Boys had marginally higher mean reading scores for the two topics than girls, according to the results. In order to encourage children to read, it has been discovered that having access to reading materials both at home and at school, as well as having supportive parents and instructors, is essential (Mwoma, 2017).

This section discusses and draws inferences about the effects of EGRA on oral reading fluency skills of Standard 2 and 4 learners in Malawi. From 2013 to 2016, EGRA was implemented in 11 education districts throughout Malawi. The main activities included enhancing the caliber and accessibility of textbooks and instructional materials, providing teachers with training and coaching to enhance their teaching, and organizing a number of initiatives to strengthen community and household support for students. This impact evaluation using a quasi-experimental design was carried out in three rounds, with baseline in 2013, midline in 2015, and endline in 2017, in order to gauge the impact of EGRA on learners' reading abilities. At each round of the evaluation, Standard 2 and 4 students were randomly selected from a panel of 320 EGRA treatment and comparison schools spread across the 11 districts, their homes were contacted, and their class teachers' classroom management techniques were observed (Dorsey, 2015).

Impact of Early Grade Reading Assessment on MTB-MLE

The purpose of this study is to determine the extent to which mother-tongue-based multilingual education (MTB-MLE), as it is widely practiced in the Philippines, affects students' reading and writing abilities in both English and Filipino by the end of Grade 3. The Early Grade Reading Assessment (EGRA), conducted by RTI, the Philippines Department of Education (DepEd), and a local research organization, was used in a 2013 study to assess the reading abilities of a representative sample of students from around the Philippines. In both situations, the study was carried out by RTI-trained assessors made up of local educational officials and expert survey researchers. The Grade 3 students evaluated for the 2013 study had finished lower primary using the pre-MTB-MLE curriculum, which exclusively utilized English and Filipino as the instruction language. The Grade 3 kids participated in this 2019 study after three years of instruction under the MTB-MLE curriculum, which was created to teach lower primary pupils in their mother tongue before switching to learning in Filipino and English as the primary instruction languages in upper primary (Nakamura et al., 2018).

This result is comparable to the pre-MTB-MLE EGRA results from 2013, when many students were learning to read

in English but were having trouble comprehending what they were reading. Less pupils in 2019 achieved the same level of fluency as in 2013, although about the same percentage of kids were reading comprehension. We can't say for sure where the tradeoff is, but it's possible that students in 2019 spent more time learning Filipino, improving their proficiency in their mother tongue, or studying other subjects in a language they knew. If true, this would be viewed as a positive development. Additionally, it is encouraging because, if the policy were followed, kids would have had fewer hours of English teaching in 2019 than they had in 2013, yet the same proportion of students would have met the comprehension goal. Understanding whether there is a set level of first language proficiency after which L2 and L3 literacy acquisition is more effective, as well as additional study focused specifically on English language education, may be of interest. The larger percentage of zero scores, lower average fluency, and low understanding may be caused by the quick introduction of Filipino and English before pupils attained fluency in reading in their native tongue (Pouzevara et al., 2014).

With the assistance of the United States Agency for International Development (USAID), the Philippines Department of Education gathered information over a three-year period on the reading proficiency of 8,877 early primary school students in English, Filipino, and four mother tongue languages, depending on the region. These tests provided a chance to modify and improve the widely used Early Grade Reading Assessment (EGRA) to account for regional linguistic differences and informational requirements. Data from the collaboration between the Philippines Department of Education (DepED), USAID, and the main implementation partner, RTI International, helped DepEd analyze significant curricular revisions and define its national assessment strategy. RTI was able to research assessment implementation and design in settings with a lot of linguistic diversity. To attain a balance of rigor, utility, and effectiveness of the assessment for repeated, widespread use over the course of three years, some assessment subtests were deleted and others added (Dubeck & Gove, 2015).

In the Philippines, there are other reading proficiency tests besides EGRA. Other teaching and learning assessment tools, such as the Philippine Informal Reading Inventory (Phil-IRI) or Language Assessment for Primary Grades, administered at the national or classroom level, respectively, provide data on reading proficiency in the early grades. In mapping the different evaluation mechanisms, the Department of Education has stated that EGRA should be utilized for system level surveillance in specific languages/regions, while other assessment instruments provide information on reading ability in the early grades (McEachern, 2013).

EGRA is not intended for intricate language mapping, but it can only do so much to measure achievement in the LOI. Additionally, EGRA does not accurately reflect the complete spectrum of academic and social language because it tends to measure a fairly simple register that is frequently employed in short stories and familiar terms. This is suitable for EGRA's objective, which is to identify the most fundamental early

reading abilities. To guarantee that pupils are adequately prepared for entering grade 4, where English and Filipino are the only two languages used for content instruction, further types of evaluations, including classroom monitoring and maybe grade 3 exit exams, will be necessary in the Philippines (Pouzevara et al., 2013).

The problem that language in education must solve is preserving cultural heritage while establishing a cohesive national civil society. In the Philippines, the government is promoting multilingualism by encouraging the development of fundamental language skills in the early grades using mother tongue as the language of instruction (LOI) and progressively introducing and integrating the two main official languages—Filipino and English. EGRA has shown itself to be well-suited as a sample-based evaluation to broadly educate national leaders about progress toward that transition despite the aforementioned constraints (Lewis et al., 2013).

Adaptation of EGRA in the Department of Education

In order to maintain comparability between assessments from year to year and an emphasis on feasibility and efficiency, the adaptation processes have carefully analyzed numerous choices, adjusted overall subtest composition in accordance with findings. While other assessment instruments (such as informal reading inventories, etc.) provide information at the classroom or national levels, the Department of Education has said that EGRA should be utilized for system level monitoring in a few languages/regions (e.g., LAPG). This judgment, which was made public towards the end of 2015, displays awareness that there are various evaluation formats used for various objectives, with EGRA being just one of them (Sorhagen, 2013).

Impact assessment of individual interventions is one of EGRA's unique goals. EGRA has the disadvantage of having "greater technical requirements and more effort in developing equal or alternative forms; sample size needs to be larger," despite being fine-grained enough to be able to detect changes in reading ability over time, according to Gove and Wetterburg (2011). (p. 20). In the Philippines, we discovered for the first time a workable method to fulfill both face validity (not administering the same test again) and equating rigor (having a wholly equivalent passage) by having all students read two separate reading passages (Schaefer & Kotze, 2019).

We came to the conclusion after comparing the two passages that we could compare the results from 2014 and 2015 while still obtaining complete equivalence without worrying that the passage had been leaked or that the students had been unjustly prepared. It is advised to use the exact same reading passage or, at the very least, make sure the first phrase (or the number of words leading up to the "autostop") are same while conducting an impact evaluation. The method of employing two reading passages each year and switching them every two years allows for a mechanism to compare overall ability (Ardington et al., 2021).

Other subtests were dropped in order to make time for the added reading and comprehension subtest. The results of this

experiment also yielded a variety of supplementary data that may be used to analyze how students perform on passages of various grade levels and to determine whether general definitions of "reader" and "non-reader" remain accurate when the measurement is shifted even slightly. In fact, it proved that the "zero score" or "nonreader" calculation is heavily reliant on test design, and reading passages that may be broadly regarded as equivalent in difficulty or grade level may actually result in significant differences in zero scores if there is one word in the passage that is an instantly recognizable sight word (Milankou et al., 2021).

The EGRA implementation team has learned valuable lessons about the creation of the EGRA instrument in multilingual contexts and situations where EGRA will be utilized in the future to measure implementation changes as a result of these meticulous content adaptations over time. Particularly, the subtasks' advantages and disadvantages in the context of the Philippines were noted. A sensible trade-off for all languages is to omit familiar words and promote non-word decoding to evaluate lower-order reading skills. For agglutinative languages, for instance, it is more crucial to have robust and reliable measurements of word reading in context than in isolation (i.e., those that are highly correlated to reading fluency and comprehension). Data input systems must be able to record the "last thing read" throughout the 60-second period, not just the overall number of right items read, as evaluating accuracy is crucial in multilingual environments because it can help us understand linguistic characteristics and explain comprehension ratings (Domingue et al., 2021).

Assessments Using the EGRA Protocol

On the contrary hand, reducing the amount of subtasks is really only appropriate when the majority of students exhibit measurable reading skills; in the case of ARMM, where there are still significant percentages of zero scores, more subtasks, such as orientation to print and listening comprehension, could be added to help explain poor performance. In this way, EGRA is still being modified and enhanced around the globe. After being tested in Kenya as part of a pilot project and being found to be reliable and valuable, the syllable-naming task was included in the battery of core tests. They have tested a quick naming exercise in Malawi. Future testing of this would also be worthwhile in the Philippines, particularly in regions with a high percentage of zero results (Asri et al., 2021).

Barlett and Dowd, two EGRA critics, frequently view the evaluation as equivalent to a comprehensive definition of reading, one that disregards outside variables, the development of oral language, writing, and the realities of multilingual situations. The Philippines is a prime example of how three years of meticulous planning, instrument design innovations, and in-depth data analysis can enable EGRA to make a contribution to constructive national and regional policy and meet this requirement that is in line with the best understood in the context of this highly multilingual nation with a bold reform agenda. Since 2012, EGRA has been extensively modified in order to take into account the linguistic peculiarities of each language and utilized to establish distinct developmental standards for each language, in line with the

suggestions of Schroeder (2013, cited in Bartlett and Dowd). These criteria for each language have been established by assessments over the course of three years using numerous and substantial datasets (Pouezevara & McEachern, 2017).

The project responded by altering the classroom curriculum to help pupils learn the missing reading abilities. This featured pedagogical coaches who provided ongoing classroom assistance visits at least once a month, as well as teachers' guides with structured lesson plans and updated student books that were first introduced during teacher training. Users can examine the findings for kids in the lowest performing group to learn more about which core abilities are problematic thanks to the diagnostic aspect of EGRA. In this instance, oral reading fluency and the non-word reading test had a strong correlation; students who could decipher non-words could also read connected material fluently and with understanding (Prioritas, 2017).

According to the results, the Project "Parents Facilitate Reading At Home" (PFRATH) is proven to be successful in enhancing the reading abilities of 46 Grade One students at Tuban Elementary School who were classified as Non-decoders, Beginning Readers, and Developing Readers in the Mother Tongue Based-Multilingual Education (MTBMLE) and who were enrolled in this school year 2020–2021 as shown by the significance of the differences of the means between the groups. The study's findings will be shared with the researchers' peers through SLAC sessions, or School Learning Action Cells. Teachers will receive training on how to use Project PFRATH to help their students who struggle with reading. After several months of implementation, instructors and parents will be subject to ongoing monitoring and evaluation (Hubag et al., 2021).

Additionally, Wolof-learning students showed greater floor effects in reading than French-learning students, particularly at the first-grade level. Therefore, there are two alternative directions for policy: either Wolof writing culture development or continuing to teach reading skills to Senegalese kids in a language that is not their home tongue but for which written materials are abundant, varied, and simple to find. The attendance of nursery school, regardless of the language of instruction, had no positive impact on the results produced by Senegalese children, contrary to what was anticipated and what was shown in The Gambia. This discovery should motivate the Senegalese government to look for a cause and potentially alter the curricula taught in infant schools. Last but not least, this study offered a fresh method for evaluating reading and associated abilities as early as the conclusion of the first grade in primary school. Teachers should be able to identify students who have severe reading difficulties using the EGRA methodology and work with these students on specialized pedagogical initiatives. And these activities need to be carried out as soon as feasible in order to be truly effective (Ehri et al., 2015).

Long-term learning improvement for the estimated 250 million children worldwide who are not mastering fundamental skills depends on strengthening country capacity to use information to inform instruction (UNESCO, 2014). The international community should push all nations to

strengthen their assessment capacities and utilization of assessments, especially those that are most appropriate for their requirements (Wagner, 2015). The learning measurements and indicators will advance in quality over time, just as the access metrics and indications have (Chabbott, 2015).

III. CONCLUSION

Through a series of smaller exercises, the early grade reading assessment evaluates some of the abilities required for learning to read. Some of the subtasks are included to provide explanations for other subtasks, depending on the study issue. Research that outlines the abilities that can be measured with accuracy to forecast both early and later reading acquisition served as the foundation for EGRA's theoretical framework. It focuses primarily on the print, phonological, and orthographic skills readers need to master in order to read successfully in alphabetic languages. These abilities take into account the developmental aspect of learning to read, making them reliable indicators. The EGRA findings for more than 65 nations are helpful for assessing current reading abilities or monitoring long-term development. Its primary goal is to deliver pertinent information in a timely manner to help people understand their skills and to inform system-level policy and program creation that can be influenced by classroom education. EGRA and comparable evaluations ought to be taken into account as workable, comparable measurements for monitoring against global indicators. At the end of the day, EGRA wants to enlighten so that learning to read and write will be adequate to support further study and active citizens.

IV. RECOMMENDATIONS

After carefully examining the findings, it is provided with some recommendations for enhancing the child's reading proficiency. Teachers should be aware of the difficulties that students with higher-order reading comprehension issues face while reading and should assist these students in resolving these issues by demonstrating successful reading techniques, such as inference-making techniques. Additionally, teachers should educate struggling readers about the local reading tactics they use and urge them to switch to global reading techniques. In addition, they should build their students' background topic knowledge and invite them to employ tactics that activate this information before, during and after reading.

REFERENCES

- [1]. Chabbott, C. (2015). *Institutionalizing health and education for all: Global goals, innovations, and scaling up*. Teachers College Press.
- [2]. Force, L. M. T. (2014). *Toward Universal Learning*.
- [3]. Horkheimer, M. (1982). *Critical Theory Selected Essays*. New York: Continuum Publishing.
- [4]. Miller, P. H. (2014). *Piaget's theory: Past, present, and future*.
- [5]. Morgan, M. (2015). *Kierkegaard and Critical Theory*. New York: Lexington Books.
- [6]. Piaget, J. (1972). *Origins of intelligence in the child*. London: Routledge & Kegan Paul.
- [7]. Worldwide, C. (2014). *EGRA Instruments: Somalia*.
- [8]. Ardington, C. Wills, G. & Kotze, J. (2021). COVID-19 learning losses: Early grade reading in South Africa. *International Journal of Educational Development*, 86, 102480.
- [9]. Asri, D. N. Cahyono, B. E. H. & Trisnani, R. P. (2021). Early reading learning for special needs students: challenges on inclusive primary school during COVID-19 pandemic. *Linguistics and Culture Review*, 5(51), 1062-1074.
- [10]. August, D. & Shanahan, T. (2017). *Developing literacy in second-language learners: Report of the National Literacy Panel on Language-Minority Children and Youth*. Routledge.
- [11]. Badian, N. A. (2016). Phonological and orthographic processing: Their roles in reading prediction. *Annals of Dyslexia*, 51(1), 177-202.
- [12]. Badian, N. (2018). Dyslexia: A validation of the concept at two age levels. *Journal of Learning Disabilities*, 29, 102-112.
- [13]. Baker, S. K. Smolkowski, K. Katz, R. Fien, H. Seeley, J. R. Kame'enui, E. J. & Beck, C. T. (2018). Reading fluency as a predictor of reading proficiency in low-performing, high-poverty schools. *School Psychology Review*, 37(1), 18-37.
- [14]. Cayabyab, N.J. (2011). Remedial Reading Intervention Activities of Grade III Teachers for Hard of Reading Ability, Grade III pupils of Sta. Barbara District II, Pangasinan I DepEd Order No. 8 series of 2015
- [15]. Crouch, L., & Korda, M. (2008). EGRA Liberia: baseline assessment of reading levels and associated factors. Report prepared as part of a process of collaboration between USAID and the World Bank. Research Triangle Park, North Carolina: RTI International. Retrieved from <https://www.eddataglobal.org/documents/index.cfm?fuseaction=pubDetail&ID=158>
- [16]. Davidson, M. Korda, M. & Collins, Ollie White. (2017). Teachers' use of EGRA for continuous assessment: The case of EGRA Plus: Liberia. In A. Gove & A. Wetterberg (Eds.), *The Early Grade Reading Assessment: Applications and interventions to improve basic literacy* (pp. 113-137). Research Triangle Park, North Carolina: RTI Press. Retrieved from <http://www.rti.org/pubs/bk-0007-1109-wetterberg.pdf>
- [17]. Department of Education. (2013). *Care for the non-readers program*. Department of Education-Zamboanga del Sur Division.
- [18]. Domingue, B. W. Hough, H. J. Lang, D. & Yeatman, J. (2021). Changing Patterns of Growth in Oral Reading Fluency during the COVID-19 Pandemic. *Working Paper. Policy Analysis for California Education, PACE*.
- [19]. Dorsey, W. (2015). Balanced Reading Basals and the Impact on Third-Grade Reading Achievement. *Journal of Organizational and Educational Leadership*, 1(2), 2.
- [20]. Dubeck, M.M. and Gove, A. (2015). The early grade reading assessment (EGRA): Its theoretical foundation, purpose, and limitations. *Int. J. Educ. Dev*
- [21]. Ehri, L. C. Nunes, S. R. Stahl, S. A. & Willows, D. M. (2015). Systematic phonics instruction helps students learn to read: Evidence from the National Reading Panel's meta-analysis. *Review of Educational Research*, 71(3), 393-447.
- [22]. Gove, A. K. & Cvelich, P. K. (2013). *Early reading: Igniting education for all. A report by the early grade learning community of practice*. Research Triangle Park, NC: RTI International. Retrieved from <http://www.rti.org/pubs/early-reading-report-revised.pdf>
- [23]. Graham, B. E., & van Ginkel, A. J. (2014). Assessing early grade reading: the value and limits of 'words per minute'. *Language, Culture and Curriculum*, 27(3), 244-259.
- [24]. Guthrie, J. T. (2014). Teaching for literacy engagement. *Journal of literacy research*, 36(1), 1-30.
- [25]. Guzmán, J. C. Schuenke-Lucien, K. D'Agostino, A. J. Berends, M. & Elliot, A. J. (2021). Improving reading instruction and students' reading skills in the early grades: Evidence from a randomized evaluation in Haiti. *Reading Research Quarterly*, 56(1), 173-193.
- [26]. Halliday, K. E. Karanja, P. Tumer, E. L. Okello, G. Njagi, K. Dubeck, M. M. & Brooker, S. J. (2013). Plasmodium falciparum, anaemia and cognitive and educational performance among school children in an area of moderate malaria transmission: baseline results of a cluster randomized trial on the coast of Kenya. *Tropical medicine & international health*, 17(5), 532-549.
- [27]. Hubag, D. Elona, E. & Felisilda, M.J. (2021). Effectiveness of project PFRATH on reading performance of grade one pupils in mother tongue based-multilingual education. *International Journal of Interdisciplinary Studies*.

- [28]. Kelly, C. & Campbell, L. (2014) Helping struggling readers John Hopkin School of Education. Retrieved October 2, 2014, from <http://education.jhu.edu/PD/newhorizons/strategies/topics/literacy/articles/helping-struggling-readers/>
- [29]. Lewis, M.P. Simons, G.F. & Fennig, C.D. (2013). *Ethnologue: languages of the world*, 17th edition. Dallas, US: SIL International.
- [30]. Lovett, M. W. (2019). A developmental approach to reading disability: Accuracy and speed criteria of normal and deficient reading skill. *Child Development*, 58, 234–260
- [31]. Lubuguin, S. (2015). Effects of Fuller Method in Enhancing the Reading Ability of Struggling Readers in Grade Two at Lecheria Elementary School. Vol. 3 No. 2D (2019): *Ascendens Asia Journal of Multidisciplinary Research Abstracts*.
- [32]. Macaranas, M.S. (2014). Remedial Reading Activities in English for Grade One Pupils at Risk for Reading Failure, Dagupan City
- [33]. Manlincon, E.M. (2014). The Effectiveness of Oral Reading Activities in English for Grade II. Dagupan City
- [34]. McEachern, (2013). Local languages and literacy in the Philippines: Implications for early grade reading instruction and assessment. Prepared in behalf of RTI International for USAID under the EdData II project, Data for Education Programming in Asia and Middle East, Task Order No. AID-492-M-12-00001 (RTI Task 17). Research Triangle Park, NC: RTI International.
- [35]. Milankov, V. Golubović, S. Krstić, T. & Golubović, Š. (2021). Phonological awareness as the foundation of reading acquisition in students reading in transparent orthography. *International Journal of Environmental Research and Public Health*, 18(10), 5440.
- [36]. Muter, V. Hulme, C. Snowling, M. J. & Stevenson, J. (2016). Phonemes, rimes, vocabulary, and grammatical skills as foundations of early reading development: evidence from a longitudinal study. *Developmental psychology*, 40(5), 665.
- [37]. Mwoma, T. (2017). Children's reading ability in early primary schooling: Challenges for a Kenyan rural community. *Issues in Educational Research*, 27(2), 347-364.
- [38]. Myrberg, E. (2017). The effect of formal teacher education on reading achievement of 3rd-grade students in public and independent schools in Sweden. *Educational Studies*, 33(2), 145-162.
- [39]. Nakamura, P. R. de Hoop, T. & Holla, C. U. (2018). Language and the learning crisis: Evidence of transfer threshold mechanisms in multilingual reading in South India. *The Journal of Development Studies*, 55(11), 2287–2305. doi:10.1080/00220388.2018.1493192
- [40]. Piper, B. Zuilkowski, S. S. & Mugenda, A. (2014). Improving reading outcomes in Kenya: First-year effects of the PRIMR Initiative. *International Journal of Educational Development*, 37, 11-21.
- [41]. Pouzevara, S. R. Cummiskey, C. P. & DeStefano, J. (2013). Strengthening Information for Education Policy, Planning and Management in the Philippines. Component 2: Early Grade Reading Assessment Results. Prepared for USAID. Research Triangle Park, NC: RTI International.
- [42]. Pouzevara, S. DeStefano, J. Cummiskey, C. & Pressley, J. (2014). Early Grade Reading Assessment Results: A crosslanguage look at MTB-MLE implementation in the Philippines. Prepared for USAID under the Education Data for Decision Making (EdData II) project, Task Order No. AID-492-M-12-00001. Research Triangle Park, NC: RTI.
- [43]. Prioritas, U. (2017). Endline monitoring report, Volume 3: An assessment of early grade reading. Research Triangle Park, North Carolina: RTI International.
- [44]. Reschly, A. L. Busch, T. W. Betts, J. Deno, S. L. & Long, J. D. (2019). Curriculum-based measurement oral reading as an indicator of reading achievement: A meta analysis of the correlational evidence. *Journal of School Psychology*, 47, 427-269. doi: 10.1016/j.jsp.2009.07.001
- [45]. Rollins, L. H. Sanders, S. Jolivet, K. & Virgin, A. S. (2022). Assessment of strategy instruction and self-regulation in reading comprehension: A review of the literature. *Preventing School Failure: Alternative Education for Children and Youth*, 1-11.
- [46]. Schaefer, M. & Kotzé, J. (2019). Early reading skills related to Grade 1 English Second Language literacy in rural South African schools. *South African Journal of Childhood Education*, 9(1), 1-13.
- [47]. Sorhagen, N. S. (2013). Early teacher expectations disproportionately affect poor children's high school performance. *Journal of Educational Psychology*, 105(2), 465.
- [48]. Stem, J. M. Dubeck, M. M. & Dick, A. (2018). Using Early Grade Reading Assessment (EGRA) data for targeted instructional support: Learning profiles and instructional needs in Indonesia. *International Journal of Educational Development*, 61, 64-71.
- [49]. Teacherph. (2020). Utilization of the Early Grade Reading Assessment (EGRA) tools for system assessment.
- [50]. Tinapay, A., & Tirol, S. (2021). Social Learning Perspectives on School Policies in A Higher Educational Institution. NVEO-NATURAL VOLATILES & ESSENTIAL OILS Journal NVEO, 9666-9686.
- [51]. Tinapay, A. O., & Tirol, S. L. (2021). Teachers' Primary Roles in the New Normal: Through the E-Learning Perspective. *International Journal of Innovative Science and Research Technology* 6 (10). 90 – 91.
- [52]. Tinapay, A., Tirol, S., Cortes, J. A., & Punay, M. (2021). Attitude of learners towards science and their science process skills in the case of the spiral curriculum: A. *International Journal of Research*, 10(15), 13-24.
- [53]. Tinapay, A. O., & Tirol, S. L. (2022). Social Cognitive Development on the Implementation of Student Manual in a Higher Education Institution: A Literature. *International Journal of Science and Management Studies (IJSMS)*, 5, 54-63.
- [54]. Tirol, S. L. (2021). Spiral Progression of Biology Content in the Philippine K to 12 Science Curriculum. *International Journal of Multidisciplinary Research and Publications (IJMRAP)*, 4(6), 20-27.
- [55]. Tirol, S. L. (2022). Spiral progression approach in the K to 12 science curriculum: a literature review. *International Journal of Education (IJE)*, 10(4).
- [56]. Tirol, S., Cortes, S. T., Tinapay, A., & Samillano, J. (2022). A teacher training program on designing participatory educational action research proposal. *Ho Chi Minh City Open University Journal of Science-Social Sciences*, 12(1), 23-39.
- [57]. Tirol, S. L. (2023). Science Teachers' Competence on Model-Based Inquiry: A Review of Related Literature. *Eur. Chem. Bull*, 12(5), 2886-2902.
- [58]. Zhang, W. (2013). The use of “mixing” procedure of mixed methods in health services research. *Medical Care*, 51, 51-57.
- [59]. UNESCO, G. (2014). Teaching and learning: Achieving quality for all. (Education for All Global Monitoring Report 2013/4).
- [60]. UP NISMED. (2015). Results of the Field Validation of the Early Grade Reading Assessment Tools in Five Philippine Mother Tongues.
- [61]. Wagner, D. A. (2015). Smaller, quicker, cheaper: Improving learning assessments for developing countries.
- [62]. Wayman, M. M. Wallace, T. Wiley, H. I. Tichá, R. & Espin, C. A. (2017). Literature synthesis on curriculum-based measurement in reading. *The Journal of Special Education*, 41(2), 85-120. doi: 10.1177/00224669070410020401
- [63]. Wolf, M., & Bowers, P. (2019). The “Double-Deficit Hypothesis” for the developmental dyslexic. *Journal of Educational Psychology*, 91, 1–24.
- [64]. Zhong, Q. M. (2018). The evolution of learner autonomy in online environments: A case study in a New Zealand context. *Studies in Self-Access Learning Journal*, 9(1), 71-85. <https://doi.org/10.37237/090106>