



www.ijres.net

The Effects of Leveled Reading on Second Language Learners

Aisha Alowais 

Sharjah Center for Astronomy and Space Sciences, UAE

To cite this article:

Alowais, A., (2021). The effects of leveled reading on second language learners. *International Journal of Research in Education and Science (IJRES)*, 7(4), 1281-1299. <https://doi.org/10.46328/ijres.2447>

The International Journal of Research in Education and Science (IJRES) is a peer-reviewed scholarly online journal. This article may be used for research, teaching, and private study purposes. Authors alone are responsible for the contents of their articles. The journal owns the copyright of the articles. The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of the research material. All authors are requested to disclose any actual or potential conflict of interest including any financial, personal or other relationships with other people or organizations regarding the submitted work.



This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.



International Journal of Research in Education and Science (IJRES) is affiliated with the **[International Society for Technology, Education, and Science \(ISTES\): www.istes.org](http://www.istes.org)**

The Effects of Leveled Reading on Second Language Learners

Aisha Alowais

Article Info

Article History

Received:

13 February 2021

Accepted:

30 July 2021

Keywords

Leveled reading

Second language learners

Word recognition

Reading fluency

Reading accuracy

Abstract

This study examines the significance of using leveled texts in the improvement of second language learners' word recognition skills, accuracy and fluency. For this purpose, the research explores students' readings levels, word identification and decoding skills, reading accuracy and reading fluency before and after the leveled reading program. In addition, the study investigates the English teachers' perspectives about leveled reading and their outlook on parental. Lastly, the article explores parents' views towards the impact of parental involvement towards child's development. The research followed a mixed method research design, combining quantitative and qualitative data. The study was conducted in four elementary private schools in Sharjah, United Arab Emirates. The findings showed steady growth in word recognition abilities and improved automaticity. Results from running records exhibited a substantial increase in accuracy. Fluency assessments displayed a rise in fluency rate and fluency scores. Implications from this study indicate the positive effects of readings at the frustration level. Therefore, it is encouraged to explore further the impact of providing challenging reading materials.

Introduction

This article constitutes an approach that has been influential in education, and it is widely known as 'Leveled Reading'. Leveled reading involves assessing students' ability to read different texts, then assigning them reading material appropriate for them (Pondiscio & Mahnken, 2014). The proposition of the levels of reading challenge is attributed to Emmett A. Betts who was a theorist and educator specialized in the field of reading. This theory was first introduced in his published work "Foundations of Reading Instruction" in 1946. The reading levels place readers in a specific level. The goal is to identify learners' needs and provide them with the corresponding assistance. The method used to determine the reader's level of reading challenge is through an Informal Reading Inventory (IRI). An IRI is a type of assessment used to judge a reader's ability to read words in a text correctly. This assessment places the reader in one of the levels of reading challenge, which are: independent; meaning to successfully read text and comprehend 90% of it, while pronouncing 99% accurately, Instructional; referring to the maximum level of appropriate challenge, or frustration; in which the text is deemed too difficult for the child to comprehend (Stange, 2013). Then, it is encouraged for readers to be given texts at their instructional level. Some aspects of Marie Clay's implementation of Reading Recovery (RR) are also key components to this research as it focuses on how to help students read proficiently (Cazden, 2017). It is emphasized to provide sufficient intervention through the explicit teaching of skills such as word recognition to

guide students to become proficient readers.

This research examines the role of leveled reading for English as a Second Language (ESL) learner. A wide practice in some schools is the use of the same-leveled book for the whole class, ignoring individual differences in skills. The topic was chosen due to many incidents evident in government schools in the United Arab Emirates (UAE). Most of the reading done by students in the classroom was from the textbook, shared among all students. In that way, students are not receiving individually tailored material to interact with. On the other hand, schools that do use leveled readers do not utilize them adequately enough for learners to reach an independent reading level. One study done in Ireland showed that the text at many schools in the country proved to be difficult for some students because it was not at their level of instruction. After implementing a fusion of two approaches in which a phonics program and guided oral reading with appropriate texts were used with students, there were significant improvements for students who previously struggled (O'rourke, Olshtroon, and O'halloran, 2016). It is in question how well this will work with English Second Language Learners (ESL). Moreover, in the Progress Report of the International Reading Literacy Study (PIRLS) of 2016, it was revealed that the UAE received 450 points in the overall reading average scale of fourth graders, which is considered between low and intermediate (Warner-Griffin, Liu, Tadler, Herget, Dalton, and Thompson, 2017). Thus, this research aims to use leveled texts as a medium to improve UAE students' reading skills gradually. The research questions guiding the analytical process are:

- (1) Do leveled texts significantly improve English Language Learners' word recognition skills?
- (2) Do leveled texts enhance students' reading accuracy?
- (3) Do leveled texts enhance students' reading fluency?

Theoretical Framework

The basis of theorist Lev Vygotsky's theory of the Zone of Proximal Development (ZPD) highlights the importance of providing students with instructional support at a challenging learning level (O'rourke et al., 2016). Only when challenge is provided will students be reaching their full potential in attaining new knowledge and skills. In knowing the child's level, the teacher can tailor the instruction slightly above the developmental level. That way, the learner can gain independence in doing the task on their own. Teachers need to know the level of support for learning to occur (Antonacci, 2000). Adams (1990) wrote that if a reader encounters difficult words, they should not skip them; rather, they must use their decoding skills to study the words (p.103). Furthermore, texts of suitable difficulty prompt the reader to use problem-solving strategies (Cazden, 2017). As young readers attempt to decipher difficult words, their word recognition skills improve. Based on Haring and Eaton's (1978) instructional hierarchy, individuals require academic interventions to gradually increase performance (n.p.). Acquisition interventions aim to increase reading accuracy. The first phase of the instructional hierarchy is acquisition, and it involves slow and inaccurate reading performance. The learner is guided by a teacher who demonstrates the required skills and provides immediate feedback. The first phase aims to decrease the teacher's support gradually. The second phase is the proficiency phase, characterized by slow attempts at using new skills yet aiming for increased fluency. The third phase, which is generalization, is reached when the learner is significantly more fluent and can use new skills across multiple settings and

situations. The fourth phase is adaptation, and it is signified by fluent reading, the use of new skills in different contexts, and no prompting from others (Parker & Burns, 2013).

Literature Review

This literature review will provide a detailed look into the topic of leveled reading including aspects such as its background, theories, among other issues. The main components of the following bodies include: An introduction to leveled reading, theoretical background, advantages, negative criticisms and challenges, context in the UAE, and a synthesis of the literature presented in this research.

Leveled Reading

Leveled reading offers a tailored approach to reading, in which the reader is matched to the right text (Zrna, 2012). There are ways in which appropriate material to the reader are determined. The levels brought forth by Betts include independent, instructional and frustration. The independent reading level is the highest level in which a child can read without any assistance, with a criterion of more than 97% of words correctly read. The instructional reading level is indicated by reading 93% to 97% of the words correctly. The frustration reading level is apparent when less than 93% of the words are read correctly, deeming the material inappropriate for the child's level. Research shows that there is more of an achievement when students are reading at their instructional level. Reading is assessed using an Informal Reading Inventory (IRI), which is used to evaluate how accurately a child can read a text. The procedure works as follows: Students read samples of text, and the number of words they read are recorded. Afterward, the words that were correctly read are divided by the total number of words in all, multiplied by 100. This would provide the assessor with a percentage score that indicates the level of difficulty the text is considered to the child (Burns, Pulles, Maki, Kanive, Hodgson, Helman, McComas, and Preat, 2015). Each publisher's program of leveled books differs from the other, and no specific criteria as to how the levels were determined were available. For that reason, it was revealed in a publication by Rog and Burton (2001) that a group of teachers researched the aspects of many different literacy materials and set up a 10-level system for reading instruction, encompassing five different considerations for the criteria. The first is vocabulary, referring to the amount of words on a page. The second is the size and layout of print, in which the appearance of the text and font are evaluated. The third is predictability, where literary patterns, such as rhyme and rhythm, are used to make the text predictable. The fourth is illustration support, referring to the relationship between pictures and text. The last is the complexity of concepts, exploring how familiar and predictable the story's events are. The books at each level gradually contain more complex text and concepts. Level one generally has less text (one or two words a page) with clear font and familiar concepts, as well as literary patterns that make the text predictable. As the levels increase, text becomes longer, with new words, and requires readers to use cueing strategies to comprehend some aspects of the story (n.p.). There have been numerous studies to investigate proper reading intervention strategies. An analysis designed by remedial reading specialist Marie Clay in New Zealand addressed children who performed poorly in reading after their first year in school. They were given teaching sessions on how to develop their own reading and writing skills. In a Reading Recovery (RR) lesson, the learner rereads a known text. Then, a new text is introduced. Afterward,

the task difficulty increases gradually. A running record is used to provide information on reading performance accuracy (Cazden, 2017). The previous study is relevant to this research as it aims to enhance the reading accuracy of learners with texts that gradually increase in difficulty. Research done in the 21st century highlights some critical aspects of teaching reading to students nowadays. For instance, it is encouraged to incorporate digital texts to provide students with an incentive to read. Also, vocabulary development requires the use of explicit instruction to increase awareness of the details of structures (Roskos & Neuman, n.d.). These practices aim to produce readers who are capable of catering to the demands of the 21st century.

Advantages, Negative Criticisms and Challenges of Leveled Reading

Leveled texts aim to make reading an authentic experience and emphasize students' comprehension of the text. If a child was given incomprehensible text due to the high level of difficulty, then there is no point of assessing the reader's knowledge. Moreover, when readers read at their own pace, they are gaining experience to become fluent and learning new vocabulary. Leveled reading helps familiarize students with reading and ensures readers' success as they slowly build up their reading strategies, which will result in better reading skills (Zrna, 2012). In countries like the UAE, where English is a second language, English Language Learners (ELLs) can find it discouraging to come across difficulties while reading a text. Often, learners tend to give up and lose interest in learning to read in a second language. Reading instruction techniques have a significant effect on students' attitudes toward reading. Some methods that aim to assess rather than focus on teaching reading skills tend to have an adverse impact on learners (Farrell, 2008). This is where leveled texts can be beneficial. Referring back to Betts reading challenge levels, using appropriate text to the child will prevent them from getting frustrated and raise their confidence in their reading skills. Moreover, there should be a focus on the continuous assessment to check for reading accuracy.

Emmett A. Betts explained that reading above the instructional level would put learners in the frustration level of reading. However, others believe that the level of challenge provided by the instructional level (93% to 97% percent of text is read correctly) is not enough of a challenge to help students become better readers. Therefore, many other researchers believe that reading more difficult reading material is more beneficial than following Betts' levels (Pondiscio & Mahnken, 2014). However, to assess students' levels, the levelling process could be useful as a gauge. Another study showed that many schools were too focused on providing students with texts at their instructional level, valuing the numerical scores over providing students with text that will enable them to stretch their cognitive skills. Consequently, low achievers in reading would not have received the chance to practice valuable reading strategies that derive from encountering difficult text (Hastings, 2016). In this case, it is the implementation that produced negative results. Traditional leveled approaches teach students to read through a series of text that enforce reading skills. However, the instruction lacked consideration for individual literacy needs. As stated by Clay (1994) children are placed into categories due to their inability to reach their classmates' levels, but no attention is given to the methods that should be applied to help those students reach the same level of learning as the others (p. 122). Guided reading alleviates this problem as it is an instructional reading approach where students receive direct instructions as they read. Thus, a major focus in guided reading is to look at individual differences. Moreover, there is an emphasis on on-going assessment and observations,

which are used to inform future grouping changes to match the reader's level. The approach involves students reading a whole text by themselves, using appropriately leveled texts. In this method of reading instruction, the teacher assists students in developing reading strategies like self-correcting their errors (Antonacci, 2000). There are considerable challenges to the process of implementing leveled reading in schools. A significant disadvantage would be the cost of buying a vast number of graded books, as it is a large investment for some schools (O'rourke et al., 2016). Based on a literature review regarding school-based reading interventions, studies showed that there was a lack of classroom aids in some schools, in addition to a resistance from teachers due to higher workloads. It was proposed that more practical methods of intervention should be used for it to be feasible for teachers who don't have teaching assistants (Stentiford, Koutsouris, and Norwich, 2018).

Studies in the United Arab Emirates (UAE) about Leveled Reading

In 2011, a study was done in the UAE by Mohammed Salhyiah to explore the effects of a guided program on fourth graders' reading comprehension skills. The study's purpose was to enhance reading comprehension and test students' ability to read for gist, specific information, and details. The guided program aimed to gradually decrease a teacher's role in assisting the child in reading while increasing the learner's role. The results indicated a significant improvement in students' overall comprehension skills, indicating that the guided program influences comprehension skills (Salhyiah, 2011). Another study in the Emirate of Al-Ain examined the reading and assessment strategies employed by teachers in the classroom and the difficulties students encounter while reading English. The results showed that students struggled with several things while reading, including pronunciation, using features of the text, and identifying main ideas. The preceding factors were attributed to the use of traditional reading strategies and lack of engaging reading techniques. This study's recommended follow-up procedure is to cater to students' learning styles and provide them with texts that suit their level. It was encouraged to investigate the efficacy of implementing leveled reading in a similar setting (Al Nuaimi, 2018). It is evident that the research done on reading in the UAE focuses on aspects different than that of what this research proposes, which the use of leveled texts is. In addition, most schools that use leveled texts do not consider the level that the student is reading in based on Betts' three levels. Therefore, this study focuses on assessing students to find their appropriate level of instruction and checking their fluency and accuracy throughout the process.

Digital Literacy

Presently, learning materials are transitioning from traditional forms to technological modes of learning. Digital literacy refers to skillful use and navigation around digital platforms. It is a valuable skill to use technology efficiently because then students can get access to more materials. Some characteristics that make online learning fascinating for students are audiovisual information, which engages users and creates a deeper understanding of the content. To keep up with modern-day developments, it is suggested that schools incorporate electronic teaching to improve the quality of learning in schools (Santoso, Siswandari, and Sawiji, 2018). A study done to explore the impact of e-books on children's reading motivation and reading skills across the United Kingdom revealed that more than half of the participants said that they preferred to read using

electronic devices compared to reading in print (Picton, 2014, p.4). Moreover, another study investigated the impact of online storybooks on first-grade students' reading motivation, and the results revealed a significant increase in student engagement (Flynn, 2013, p.11). Various results indicate the alluringness of digital books as opposed to printed forms. Moreover, characteristics of e-books such as the animation of print aided in the improvement of children's decoding skills and print knowledge. Some e-readers also enable students to hear words that they cannot read, which serves as a guide for when they get stuck (Flynn, 2013). Many positive e-book features are not found in printed books and can be useful for beginning readers who need extra support. Other crucial reading skills are reinforced using digital books as mentioned by Short (2010), "Benefits such as increased comprehension and fluency have been linked to the use of electronic books" (p.39).

Method

This chapter covers the methods used to implement this research, including the research design, method, participants, data collection tools, and ethical considerations. The main questions informed the design and procedures of this research.

Research Site and Participants

The study at hand includes data collected from several participants. However, the main targets of the research were four students who are second graders aged seven to eight. The students are from the Arab ethnic group and their first language is Arabic. The selection of the group of students was made through the use of voluntary sampling, a sampling technique in which participants are chosen based on their willingness to participate (Murairwa, 2015). In accordance, the pupil's in question are at varying emerging, developing, and mastery levels. For the sake of protecting the participants' confidentiality, identities will not be revealed throughout the writing of this study, and pseudonyms will be employed as a replacement for students' real names. The participant at the emerging level will be referred to as "Fatima". The participants at the developing level will be identified as "Mahra" and "Sara". The participant at the mastery level will be referred to as "Reem". The research was based in an online environment, and the students came from different private schools in the emirate of Sharjah, in the United Arab Emirates (UAE). Other contributors to this research include the parents of the students and experienced English teachers who helped oversee the results of the data collection.

Data Analysis

This research follows the Plan, Do, Check, Act (PDCA) cycle, also known as the Deming Cycle, which is a model that emphasizes continuous improvement based on constructing and re-constructing the original plan following the results of an action (Johnson, 2002). The concept was first introduced by the American physicist Walter Shewhart in 1939. Later in the 1950s, W. Edwards Deming reintroduced the cycle, with the name "Deming cycle" (Moen, 2009). An article published by Tripp (1995) presented several ways in which this reflective model can be used. One of the many variations of the PDCA cycle is displayed in the diagram below. It is presented by David Tripp, who labeled this variation "The diagnostic practice cycle," as it is based on the

assessment of a situation, followed by an explanation of the diagnosis, then an intervention is presented, from which the implementation process occurs. The cycle repeats itself until satisfactory results are apparent. Tripp (1995) relates this process to the term “Action Inquiry” and defines it as a way to perform thoughtful action (Tripp, 1995).

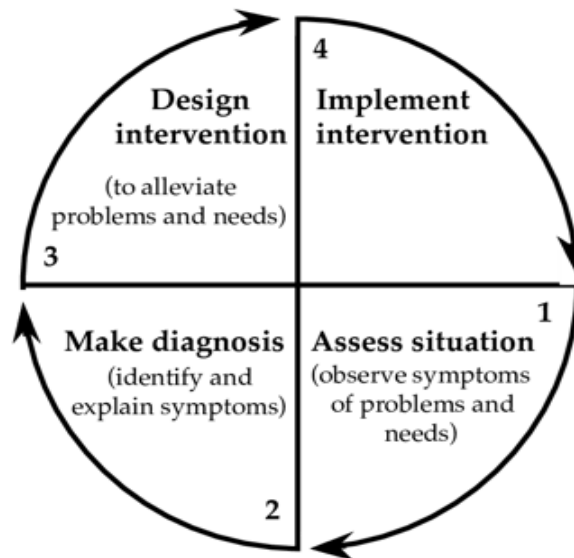


Figure 1. The Diagnostic Practice Cycle (Tripp, 1995)

This particular research cycle was utilized due to the process of diagnosis and implementation of interventions to assess students' ability to read. The same research cycle was used across both preliminary and final phases of the research. The first step began with assessing students' reading skills with a variety of leveled books from Raz-kids, a reading program that offers e-books at twenty-nine levels of reading difficulty. The first level is level aa, containing few words and recurring two-word phrases. As the level of the books increase, the amount of words and variety of phrases become more complex. The second step was to rate the students' reading skills, so that a proper diagnosis is made, to match them with a story that is at their instructional level. The measures taken include conducting a running record and recording the accuracy percentage using an informal reading inventory. The way that the instructional method was found was through the use of Clay's accuracy rate formula (Clay, 2000). The third step involved the gauging of students' needs and their areas of weakness in reading. Pupils' development areas were noted and then the appropriate activity was located on the educational application Starfall, which contains reading games, activities, short stories, and videos. The fourth step was the intervention process, in which students continued to read stories from a set level, which was their instructional level. Intervention strategies included the phonics approach and the whole language approach, depending on the child's needs. After the initial interventions, students were regularly assessed using running records to check for areas that have developed and areas needing improvement; thus, the cycle repeats itself.

Data Collection Tools

Various data collection tools were utilized throughout the course of this research. The collection techniques provide both quantitative and qualitative data results. The main tools are informal reading inventories (Betts,

1946), word recognition assessments (Jennings, Caldwell, and Lerner, 2006), running records (Clay, 2000), multidimensional fluency scales (Rasinski, 2004), oral reading fluency rates, and surveys. First of all, an informal reading inventory was used to note down the students' accuracy percentage while reading; this information indicated which level of challenge the text provided to the student and which text provides a suitable challenge to them. The formula for finding the accuracy percentage is accredited to Marie Clay, and it involves calculating the total number of words in a text, known as the Running Words (RW), minus the errors made while reading, divided by the RW, then multiplied by a hundred to find the accuracy percentage (Clay, 2000). Second of all, reading logs recorded students' errors and the teacher's intervention strategies. Third of all, word recognition assessments were administered, and they served the purpose of assessing students' word recognition skills. Fourth of all, running records were used to assess learners on a weekly basis to check on their progress. Fifth of all, multidimensional fluency scales rated readers on their fluency. A score of less than 8 indicates poor fluency. Sixth of all, oral reading fluency rates were used to test students on the Words Correct Per Minute (WCPM). Finally, two surveys were conducted. One survey investigated English teachers' perspectives about leveled reading, and their outlook about parental involvement, and whether it could affect the child's learning.

Findings and Discussion

Initial Data Collection

The initial data collection procedure included collecting data from English teachers using a survey investigating their views on leveled reading. The purpose was to identify the prominence of leveled texts, why they are not utilized enough, and what teachers think about employing the leveled reading approach. Prior to the commencement of the interventions, participants underwent diagnostic assessments using an informal reading inventory that matched each reader with the appropriate level based on their needs. Diagnostic assessments are crucial in determining what reading level a child should be in.

Teachers' Survey

A survey was conducted amongst English teachers in a government school in Sharjah to collect data about their views on leveled reading and its impacts (see Figure 2). Data was mostly close-ended with a few questions that asked teachers to explain their answers. Overall, teachers showed a positive outlook toward the concept of leveled reading and believe it plays a role in nurturing students' reading abilities.

The survey data shows that the majority of the English teachers believe that leveled texts can help improve students' fluency, word recognition skills, and overall reading abilities. However, contrary to their beliefs, when teachers were asked if they have used leveled texts before, 64 percent said yes, while 36 percent said no. There is significant evidence that schools are not utilizing leveled texts, although based on the survey results, many teachers view that it could improve students' reading skills. Studies revealed that teachers resist certain intervention strategies because they can be time-consuming and result in a higher workload. Moreover, not all teachers are equipped with the proper training that will allow them to conduct the specific reading assessments

that come with leveling reading (Stentiford, Koutsouris, and Norwich, 2018).

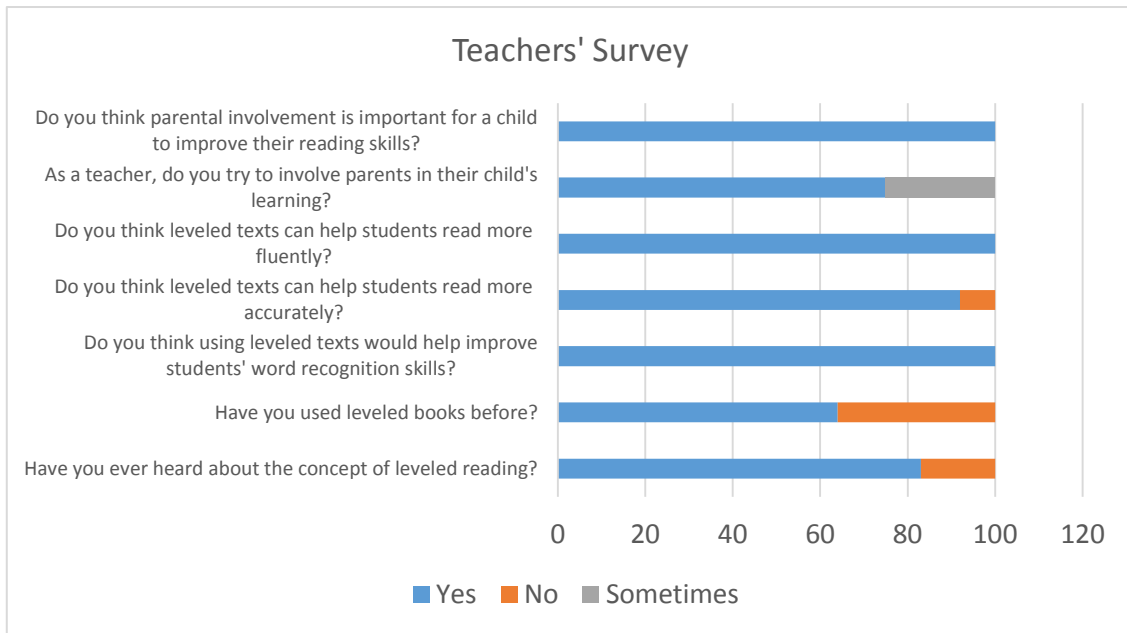


Figure 2. Teachers' Survey

Furthermore, the OECD released an evaluation report of schools in the UAE where it was revealed that school principals reported more staff shortage and less material shortage than the OECD average (Organisation for Economic Co-operation and Development, 2018). Part of the survey investigates teachers' views on parental involvement, where teachers answered that they think it's essential for parents to help their children improve their reading skills. However, not all teachers try to involve parents as much as they should.

Diagnostic Assessment

IRIs were conducted to place students in their instructional levels (see Figure 3). However, the preliminary research period proposed a few problems associated with following Betts' criteria (1946). Therefore, the criterion was not utilized. Instead, the students were given an accuracy percentage for several stories from varying levels. The level that the student could read most accurately was considered a book that was at their independent level. If the student made too many errors consistently, the book was considered at their frustrational level. The book that was read moderately accurately was chosen to be the book that was at the student's instructional level. Previously, the reading scheme used for this research was the Oxford Reading Tree. However, due to the shift to online learning, participants used the e-books from Raz-kids. In comparing the two reading schemes, it was found that Raz-kids has a much more predictable story pattern (see Appendix I, p. 74).

The Oxford Reading Tree pushes students to decode words by offering complex illustrations that don't directly express what is written in the passage (See Appendix I, p. 75), making it harder for students to resort to guessing the words. Thus, using Raz-kids to diagnose students' levels was challenging because of the predictable patterns of writing and illustrations that tell students what is written. Therefore, the assessor might doubt the student's

skills and not know if they can read fluently or not. In addition, when reading stories from an easier level, students showed signs of disinterest and disengagement. Furthermore, when looking at the correspondence of the levels with the age groups, the Oxford Reading Tree offers more difficult content for younger age groups. In contrast, Raz-kids offers easier content for an older age group (see Appendix J, p. 76). Much of the implementation of leveled reading depends on matching learners with texts suitable to their level. However, the criteria in which these levels are decided must be clarified. These findings further highlight the importance of challenging learners to read less predictable books, rather than books that are too repetitive. Moreover, educational theorists like Vygotsky emphasize the value of providing students with learning experiences, which are encountered when they are faced with challenges they must overcome (O'rourke et al., 2016).

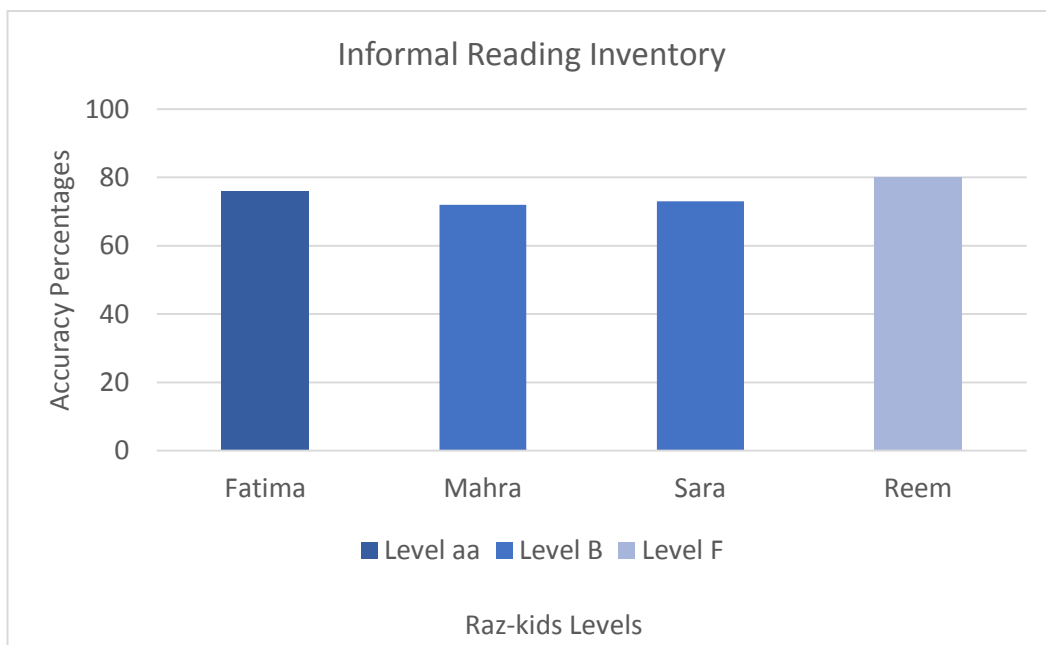


Figure 3. Informal Reading Inventory Results

Based on Betts' (1946) criteria, the accuracy percentage for the independent reading level should be 97%. The instructional reading level should be a percentage of 93% to 97%, whereas the frustrational reading level is apparent when readers have an accuracy percentage of 93% or below. Based on the results illustrated in Figure 2, one difference between the preliminary research and the current one is that students were matched with books that provide a higher level of challenge. According to Hastings (2016), students can only activate their problem-solving skills when they encounter challenging texts (p.69).

Furthermore, a study was done to see if students who read at the frustrational level with a teacher's guidance improve in reading, and the results showed a growth in reading performance (Araim, 2016). This evidence supports the theory that more challenging texts lead to the development of reading. Therefore, the percentages chosen for students as their instructional level were below what Betts considers the frustrational level. The students were at levels aa, B, and F respectively based on the levels on Raz-kids. The student at the emerging level, Fatima was placed in level aa with an accuracy percentage of 76. The students at the developing level were placed in level B, where Mahra got a percentage of 72 and Sara scored 73 percent. Finally, the more

advanced reader, Reem received a percentage of 80 at level F.

Significance of Leveled Texts on English Language Learners' Word Recognition Skills

To collect data to answer the first research question, a reading log was used to note down students' performance and errors, mainly in qualitative form, to inform instruction about which areas students need to focus on to recognize words more automatically. Another assessment tested students' word recognition abilities by reading isolated words from a list and scoring them on their accuracy for reading each word. This assessment was administered three times to check for improvements, and it gathers quantitative data (see Figure 4).

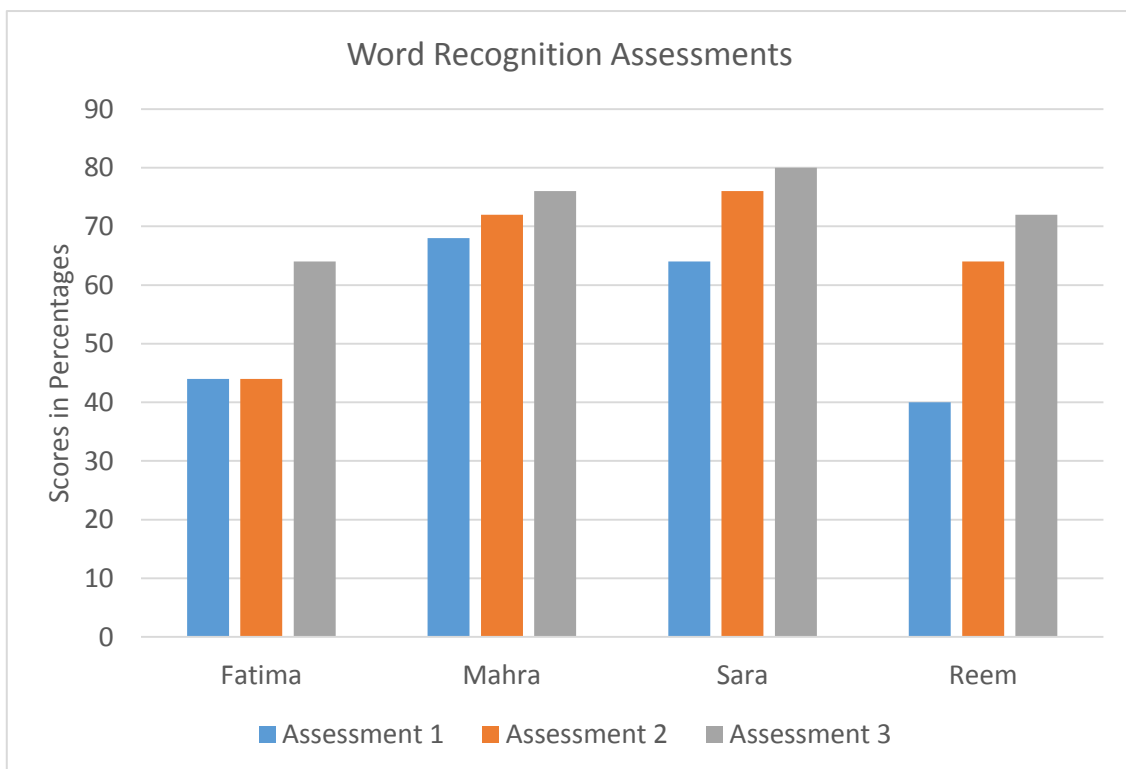


Figure 4. Word Recognition Assessments

As showcased in Figure 4, all of the students' word recognition skills increased compared to their results from the first assessment. Fatima was assessed using the pre-primer level word list, and she struggled to read sight words in the beginning. During the second assessment, her score was the same; although, it is important to note that whereas she read the words incorrectly during the first assessment, she was able to read them accurately during the second assessment. The reason her score was unchanging is due to her having a higher percentage of untimed readings, i.e. words read slowly and not automatically. The rest of the students saw a steady increase in word recognition abilities by the end of the research period and could read words with increased automaticity. Christ and Cramer (2011) state that "Assessment of word knowledge in isolation provides essential information about the extent of children's sight vocabularies and the strategies and skills used to decode words in isolation" (p.19).

Impact of Leveled Texts on the Enhancement of Students' Reading Accuracy

Students underwent eight running record assessments, one at the end of each week. In order to show students' progress across the running records, the average results of students' running records were split based on four phases (see Figure 5). The first two phases (first four weeks) were done using a lower level of books, whereas all students moved to a higher level during the last two phases (last four weeks). Thus, it wouldn't be possible to compare the running records from the first two phases with the last two as they are done using books from a different level (see Appendix K, p. 77 for raw data). As students move to a higher level, they are expected to make more mistakes until they master that level. Consequently, when they move to a higher level, their running record scores are lower until they are able to improve their skills in reading that level of books.

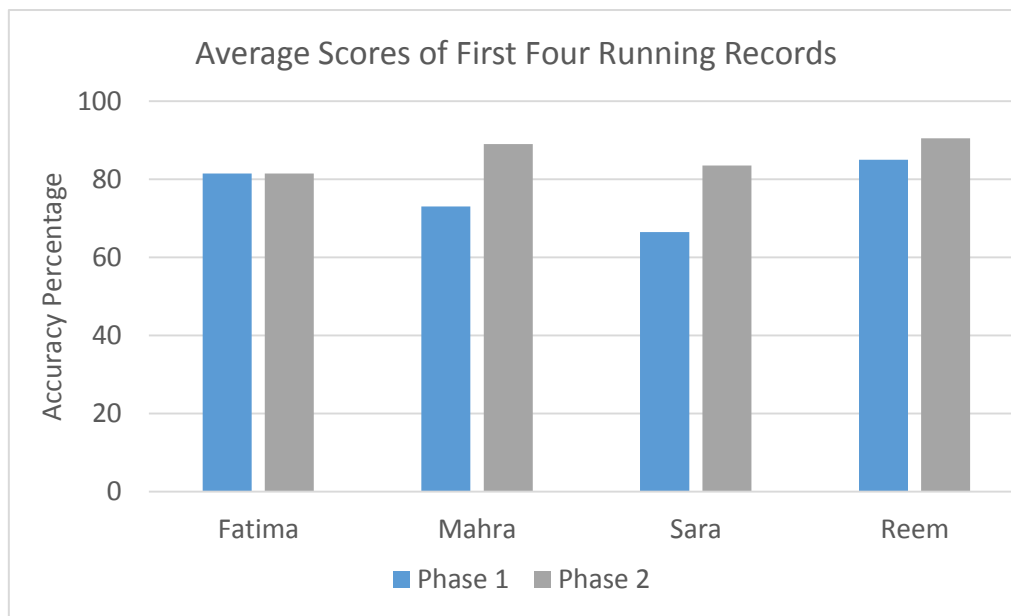


Figure 5. Average Scores of First Four Running Records

Looking at the running record averages from phases 1 and 2, there is an apparent increase in most of the students' scores. However, Fatima's average was the same due to the drastic difference in scores, where one running record was much lower, and the next being drastically higher. Fatima, being at a beginner reader, received an accuracy percentage of 95% in the fourth week, as she quickly caught on and applied the new skills, she learner, which is why she was moved to a higher level. According to Zrna (2012), "When teachers take Running Records on a regular basis to assess children's progress, they can use the information they gain to move children from one text level to the next, through the gradient of text difficulty" (p.6). Thus, enabling the teacher to know when to move the child to a higher level is crucial.

The results from the last two phases were gathered using a higher level of books from when students started the leveled reading program. Figure 5 exhibits learners' substantial growth when comparing phase 3 with phase 4. These findings support the findings of researchers (Clay, 1991; Fountas & Pinnell, 1999; Hiebert, 1999; Peterson, 1990) who support the use of leveled texts due to their positive effects on students' reading accuracy and skills in general.

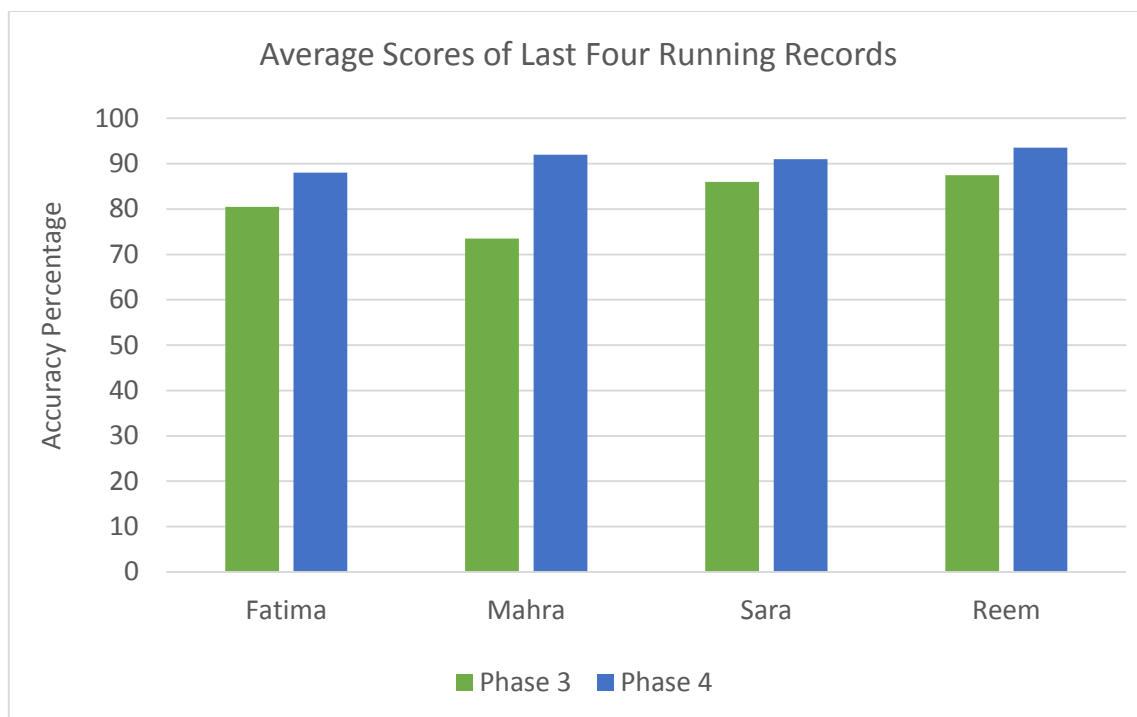


Figure 6. Average Scores of Last Four Running Records

Impact of Leveled Texts on the Enhancement of Students' Reading Fluency

Students' reading fluency was assessed using two tools, one being the oral reading fluency rate, and the other is the multidimensional fluency scale. The oral reading fluency rate recorded students' WCPM across the eight weeks, and a steady improvement was seen. Additionally, students' fluency in reading has seen an improvement compared to their first reading performance.

It is apparent from Figure 7 that all of the students experienced an increase in WCPM, which is the fluency rate, after the implementation of leveled reading. While most of them made an increased number of errors in the beginning, with an average fluency rate of 74 percent, their average fluency rate by the end was 93 percent. This substantial evidence highlights the impact of leveled reading on fluency. Additionally, it shows that matching learners with texts that provide an appropriate challenge will allow learners to reap more benefits than just assigning all students the same text based on their grade level.

According to O'rourke et al. (2016), there is a growing use of the 'one size fits all' approach in schools, where all learners are given the same text, which ultimately leads to adverse effects (p.151). Learners find it difficult to engage with the texts, let alone cultivate reading fluency skills that can only be practiced if the child is able to decipher the text. One study showed that after assessing over 3000 students in the United States from kindergarten through grade 12, it was revealed that there was a wide range of reading skills in each classroom, indicating a concern that students are assigned books that are not appropriate for their skills and level (O'rourke et. al, 2016, p.152).

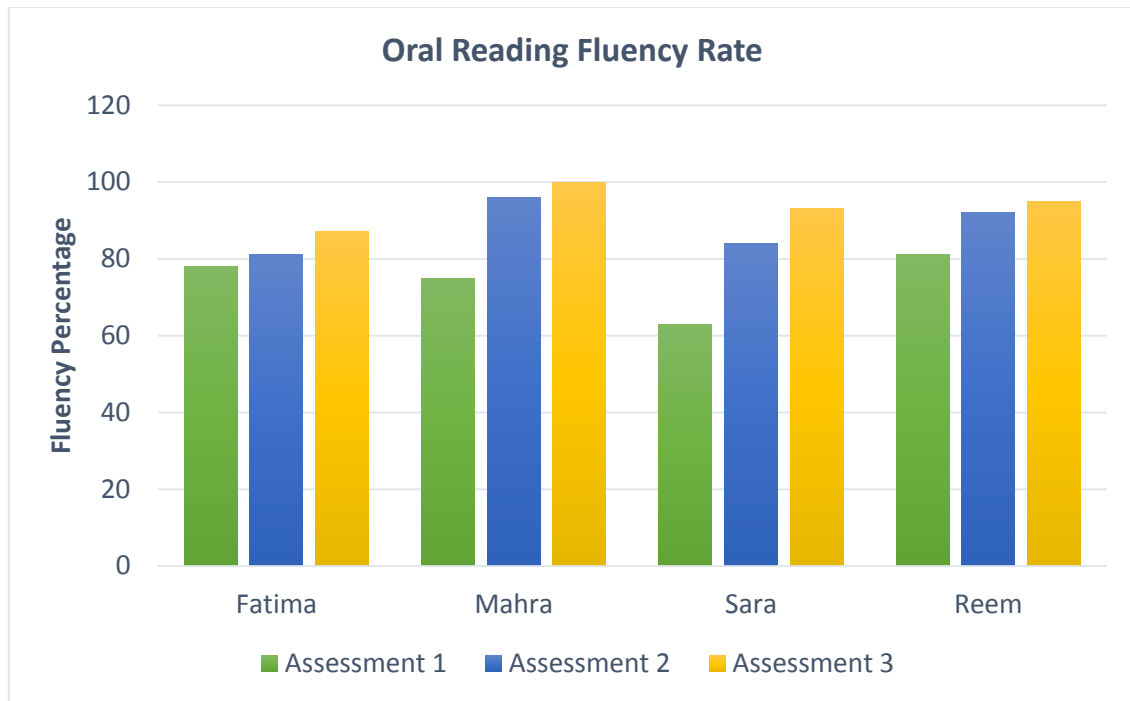


Figure 7. Oral Reading Fluency Rate

Furthermore, there are significant consequences to setting grade-level standards. In an article, Hargis (2006) wrote that “Some students enter a grade already exceeding the grade-level standards; others enter a grade without having reached the standards of previous grades” (p.394). Therefore, students must receive assessments to ascertain their levels so that content is tailored to their needs. To check for students’ fluency performance, they were assessed based on four categories on the multidimensional fluency scale: Expression and volume, Phrasing, Smoothness, and Pace. Rater reliability is essential when rubrics are used. It ensures that multiple raters perform assessments producing similar scores. Studies proved that the multidimensional fluency scale is a highly reliable assessment technique. However, multiple assessors’ ratings must still be taken into account (Smith & Paige, 2019). The fluency scale provided both quantitative and qualitative data. Three people used the rubric to score the reading performances of the four participants. One assessment was conducted prior to implementing leveled reading, and one was conducted at the end of the research period. The first observer was the researcher, the second was an acquaintance, who is an English teacher, and the third is an English teacher, whom the researcher is not acquainted with.

Figure 8 highlights students’ fluency scores before they underwent the research program. As the bar graph illustrates, after implementing the leveled reading program, all students’ fluency scores increased based on the average scores provided by the three assessors (see Appendix L, p. 78 for raw data). Moreover, Fatima, who had first scored very low, has received a score of eight and above across the observers, indicating the achievement of a higher level of fluency. The inclusion of other observers accomplishes triangulation, in which various perspectives are regarded to extend and validate findings (P. Turner & S. Turner, 2009). Thus, it further validates the results.

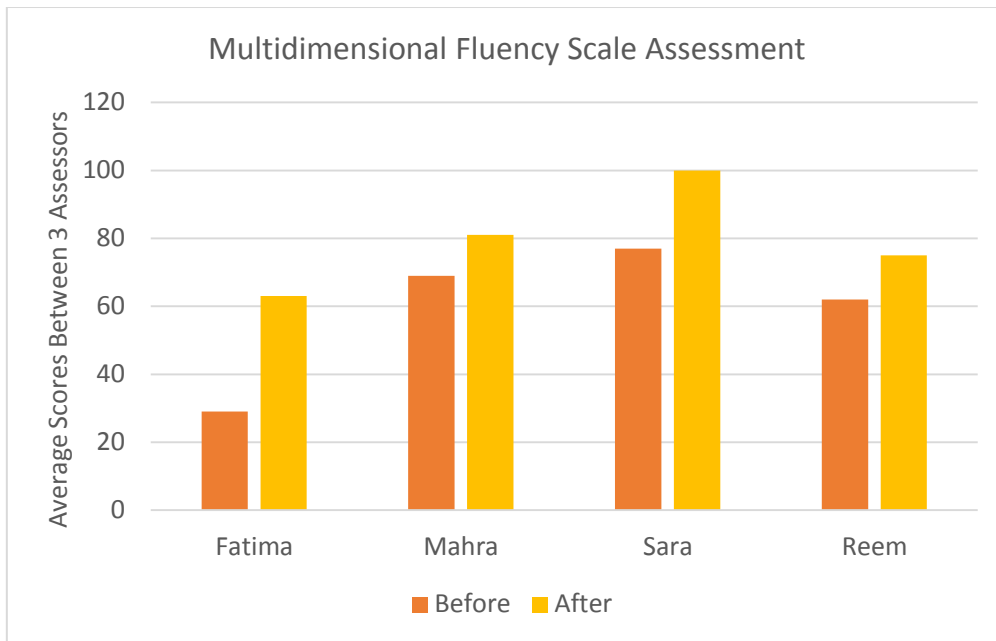


Figure 8. Students' Average Multidimensional Fluency Scale Assessment Scores between Three Assessors

Parental Involvement

The parents of children who participated in this research were asked to complete a survey to gain feedback and insight into their views after the leveled reading program. Throughout the research period, parents were being involved in various ways, such as receiving comments about their child's performance, weekly reports, and recommendations on how they can help their child enhance their reading performance.

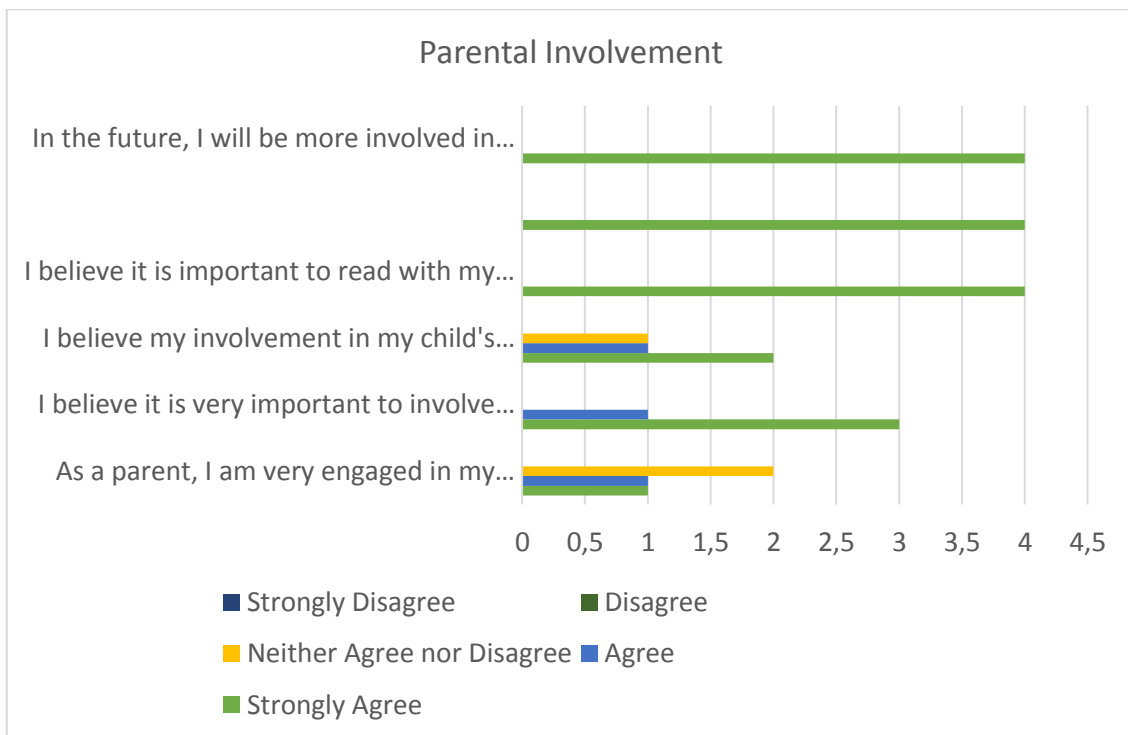


Figure 9. Parental Involvement Survey

Parents conveyed that before the research implementation, their views on parental involvement were generally average. However, after the leveled reading program, they feel more involved in their child's learning experiences. Throughout the study, parental involvement resulted in an increase in student activity, as parents provided encouragement to their children and reminded them to do their assigned tasks. This discovery is supported by studies that revealed how parental involvement is directly related to improved academic performance (Topor, Keane, Shelton, and Calkins, 2010). Bandura's theory about self-efficacy refers to an individual's belief about their abilities to reach a goal. Adimora, Onyishi, and Helen (2019) state that "When parents are apparently concerned or involved in children's activities, it appears to energize the child's academic self-efficacy" (p.70). Therefore, self-efficacy, parental involvement, and academic success go hand in hand.

Conclusions

Analysis of the results found several significant implications for the leveled reading approach. First of all, the findings implicate that students experience reading growth when faced with challenging reading material. The conclusions of researchers Hastings (2016) and Araim (2016) support the same notion that this study presents. Concerning the first research question, findings from the word recognition assessments showed that participants' word recognition skills were at a consistent increase throughout the research. Students were able to apply new reading skills taught and practiced through the use of Haring and Eaton's (1978) Instructional Hierarchy. In regards to the second research question, based on running record results, students' reading accuracy grew substantially across the four phases of the research, further affirming the findings of researchers who support the use of leveled reading to increase students' reading performance (Clay, 1991; Fountas & Pinnell, 1999; Hiebert, 1999; Peterson, 1990). Looking at the final research question, all students experienced an increase in oral reading fluency, whereby their average scores by the end of the study were at 93 percent. This shows that when students engage with texts that are suitable to their needs, they can cultivate and hone their reading fluency (O'rourke et. al, 2016). Additionally, results from the multidimensional fluency scale revealed students' scores across three assessors, and it was apparent that all the participants' fluency scores.

This study confirms previous findings, whereby the use of IRIs must be cautioned in terms of various variables affecting the results (Burns et al., 2015). Therefore, future IRIs should be more flexible in deciding students' instructional levels. An important finding that emerged from this study is that students must be provided with challenging material to help them activate their problem-solving and decoding skills. Overall, this study substantiated the use of leveled texts alongside reading interventions to enhance students' word recognition abilities, reading accuracy, and fluency.

References

- Adimora, D. E., Onyishi, C. N., & Helen, U. N. (2019). Parental involvement as a correlate of academic self-efficacy of secondary school students. *International Journal of Secondary Education*, 7(3), 69-76. <https://doi.org/10.11648/j.ijsedu.20190703.12>
- Al Nuaimi, F. M. (2018). *Investigating the instructional and assessment strategies that teachers use in reading*

- classes in elementary schools: A UAE Study* [Master's thesis]. uaeusolarworks.
- Antonacci, P. A. (2000). Reading in the zone of proximal development: Mediating literacy development in beginner readers through guided reading. *Reading Horizons, 41*(1).
- Araim, A. (2016). *Guided reading at the frustration level*.
- Betts, E. A. (1946). *Foundations of reading instruction*. American Book Company.
- Burns, M. K., Pulles, S. M., Maki, K. E., Kanive, R., Hodgson, J., Helman, L. A., McComas, J. J., & Preast, J. L. (2015). Accuracy of student performance while reading leveled books rated at their instructional level by a reading inventory. *Journal of School Psychology, 53*(6), 437-445. <https://doi.org/10.1016/j.jsp.2015.09.003>
- Cazden, C. B. (2017). *Communicative competence, classroom interaction, and educational equity*.
- Christ, T., & Cramer, R. (2011). Assessing word recognition and fluency using an informal reading inventory. *Michigan Reading Journal, 43*(1).
- Clay, M. M. (1991). *Becoming literate: The construction of inner control*. Auckland [N.Z.]: Heinemann.
- Clay, M. M. (1994). Reading recovery: The wider implications of an educational innovation. *Literacy, Teaching and Learning, 1*(1), 121-141.
- Clay, M. M. (2000). *Running records for classroom teachers*. Heinemann.
- Eells, J. M. (2013). Informal reading inventory. In C. R. Reynolds (Ed.), *Encyclopedia of special education: A reference for the education of children, adolescents, and adults with disabilities and other exceptional individuals*.
- Farrell, T. S. C. (2008). *Teaching reading to English language learners*. https://us.corwin.com/sites/default/files/upm-assets/27685_book_item_27685.pdf
- Flynn, A. (2013). *Ebook exploration: How ebooks support emergent literacy* [Master's thesis, State University of New York College at Brockport]. Digital commons. https://digitalcommons.brockport.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1187&context=ehd_theses
- Fountas, I. C., & Pinnell, G. S. (1999). *Matching books to readers: Using leveled books in guided reading, K-3*. Heinemann.
- Hargis, C. H. (2006, January). Setting standards: An exercise in futility? *Phi Delta Kappan, 87*(5), 393-395.
- Hastings, K. (2016). Leveled reading and engagement with complex texts. *Reading Improvement, 53*(2), 65-71.
- Hiebert, E. (1999). *Selecting texts for beginning reading instruction*. Center for the Improvement of Early Reading Achievement, University of Michigan School of Education.
- Haring, N. G., Lovitt, T. C., Eaton, M. D., & Hansen, C. L. (1978). *The fourth R: Research in the classroom*. Charles E. Merrill Publishing Company.
- Jennings, J., Caldwell, J., & Lerner, J. (2006). *Reading problems: Assessment and teaching strategies. 5. ed*. Munich: Pearson, A and B.
- Johnson, C. N. (2002). The benefits of PDCA. *Quality Progress, 35*(5), 120.
- Moen, R. (2009, September). *Foundation and history of the PDSA cycle* [Paper presentation]. Asian Network for Quality Conference, Tokyo, Japan. https://deming.org/uploads/paper/PDSA_History_Ron_Moen.pdf
- Murairwa, S. (2015). Voluntary sampling design. *International Journal of Advanced Research in Management and Social Sciences, 4*(2), 185-200.


- Organisation for Economic Co-operation and Development. (2018). Programme for international student assessment (PISA) results from PISA 2018. OECD. https://www.oecd.org/pisa/publications/PISA2018_CN_ARE.pdf
- O'Rourke, D., Olshtroon, A., & O'Halloran, C. (2016). The Limerick reading initiative: a reading intervention targeted at struggling readers in primary school. *Support for Learning, 31*(2), 148-163. <https://doi.org/10.1111/1467-9604.12123>
- Peterson, B. (1990). *Selecting books for beginning readers*. Martha L. King Language and Literacy Center,
- Picton, I. (2014, September). *The impact of ebooks on the reading motivation and reading skills of children and young people* [PDF]. <https://files.eric.ed.gov/fulltext/ED560635.pdf>
- Pondiscio, R., & Mahnken, K. (2014, September 29). *Leveled reading: The making of a literacy myth*. Education next. Retrieved February 1, 2020, from <https://www.educationnext.org/leveled-reading-making-literacy-myth/>
- Raz Kids. (n.d.). Raz Kids reading level correlation [Photograph; JPG]. <https://www.razkidslogin.net/raz-kids-reading-level-correlation/>
- Rog, L. J., & Burton, W. (2001). Matching texts and readers: Leveling early reading materials for assessment and instruction. *The Reading Teacher, 55*(4), 348-356.
- Roskos, K., & Neuman, S. (n.d.). *Best practices in reading: A 21st century skill update*. Readingrockets. Retrieved February 10, 2020, from <https://www.readingrockets.org/article/best-practices-reading-21st-century-skill-update>
- Salhyyah, M. K. (2011). *The effects of a guided program on improving fourth grade English reading comprehension skills in the UAE* [Master's thesis]. uaeuscholarworks.
- Santoso, T. N., Siswandari, & Sawiji, H. (2018). The effectiveness of ebook versus printed books in the rural schools in Indonesia at the modern learning era. *International Journal of Educational Research Review, 3*(4), 77-84.
- Smith, G., & Paige, D. (2019). A study of interrater reliability: A study of reliability across multiple raters when using the NAEP and MDFS rubrics to measure oral reading fluency. *Reading Psychology, 40*. <https://doi.org/10.1080/02702711.2018.1555361>
- Stange, T. V. (2013). Exploring text level difficulty and matching texts for reading achievement. *Education matters, 1*(2).
- Stentiford, L., Koutsouris, G., & Norwich, B. (2018). A systematic literature review of the organisational arrangements of primary school-based reading interventions for struggling readers. *Journal of Research in Reading, 41*(1), 197-225. <https://doi.org/10.1111/1467-9817.12264>
- Topor, D. R., Keane, S. P., Shelton, T. L., & Calkins, S. D. (2010). Parent involvement and student academic performance: A multiple mediational analysis. *Journal of Prevention & Intervention in the Community, 38*(3), 183-197. <https://doi.org/10.1080/10852352.2010.486297>
- Tripp, D. (1995). Action inquiry. In *Action Inquiry*.
- Tripp, D. (2005). Action research: A methodological introduction. *Educ. Pesqui, 31*(3). <https://doi.org/10.1590/S1517-97022005000300009>
- University of Oregon. (n.d.). *Assessing fluency using DIBELS measures*. University of Oregon. Retrieved September 14, 2020, from http://reading.uoregon.edu/big_ideas/flu/flu_assess.php

Warner-Griffin, C., Liu, H., Tadler, C., Herget, D., Dalton, B., & Thompson, S. (2017, December). *Reading achievement of U.S. fourth-grade students in an international context*. The National Center for Education Statistics. <https://nces.ed.gov/pubs2018/2018017.pdf>

Zrna, J. (2012, October). *Why use levelled texts* [White paper]. capstonepub. Retrieved February 7, 2020, from https://www.capstonepub.com/classroom/sites/PDFs/engage-literacy/Engage-Literacy_white-paper.pdf

Author Information

Aisha Alowais

 <https://orcid.org/0000-0002-9362-2014>

Sharjah Center for Astronomy and Space Sciences

UAE

Contact e-mail: aalowais08@gmail.com
