



Final Report for the Sandra Deal Center for Early Language and Literacy: Research Grant Initiative for Early Language and Literacy Practices 2021

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An Inclusive and Responsive Approach to Decoding Print with Young Learners in Hybrid and Virtual Learning Environments

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Abstract

This research study investigated shared and guided reading practices employed during virtual and hybrid instruction during the Covid-19 pandemic with first and second grade students in the southeastern United States. Five elementary schools with diverse populations of students that included large numbers of students learning English as a new language served as research sites. Forty-seven teachers and 401 students participated across three waves of 2021 data collection including spring, summer, and fall. After participating in virtual professional development sessions, teachers attempted to employ research-based decoding and comprehension strategies. Many barriers arose during the school year which impacted the success of the professional development on student reading growth. Analyses of iReady data show statistically significant increases in all but one (i.e., reading comprehension for literature) subscales between the spring and summer data waves. However, the change in subscale scores was not significant between the second and third waves. Additional qualitative data identifies specific barriers for teachers, parents/families, and students and offer insight into digital resources and strategies to support

reading development of young children in digital learning environments. The results have the potential to inform how schools navigate the new normal of teaching reading which is fluctuating between face-to-face, hybrid, and virtual instruction.

Literature Review

This project sought to understand conditions and processes needed to safely and successfully implement shared and guided reading among first and second grade students in schools with high populations of English learners. Shared reading scaffolds the reading process by inviting emergent readers to choral read the text followed by teaching specific skills that aid in decoding (using both verbal and nonverbal references) (Gonzalez et al., 2014; Holdaway, 1979). Guided reading teaches students to take words apart while attending to the meaning of the text. Students are challenged to read increasingly challenging texts with instructional guidance. Students learn to become efficient readers who monitor their behaviors and use multiple sources of in-text information (Fountas & Pinnell, 2012).

Literacy-based professional development was a need prior to the pandemic as Georgia Milestones scores indicate that only about 28% of the nearly 3,000 third grade students in Savannah Chatham County Public School System (SCCPSS) achieved at the Proficient or Distinguished levels in English Language Arts. Further, the focus on large numbers of English learners is important because this group was more negatively impacted by the move to virtual learning due to language barriers and access to technology. In addition to providing information about the conditions and processes of moving shared and guiding reading practices to virtual and hybrid environments, the project examined ways to equip family members to support their children in virtual learning environments.

Shared and guided reading practices have been implemented for decades across the U.S. According to research (Gámez, González, & Urbin, 2017; Zucker et al., 2013). Shared reading allows students to learn the coalition of cues needed for decoding and comprehending texts. Piasta et al., (2012) studied shared reading lessons finding a causal relationship between early print knowledge and later reading skills, which prevented some reading problems. This was substantial for students considered at risk socially and economically. The National Center for Educational Evaluation and Regional Assistance's panel of experts (Shanahan et al., 2010)

recommended shared reading as a tool for making meaning of texts and learning higher level thinking skills that lead to the integration of skills for decoding and comprehension.

Young's (2019) study of guided reading focused on implementation in terms of social dimensions, scaffolding, internalization, and zone of proximal development. He found increasing the time spent on guided reading had a positive effect on students' reading abilities. A crucial component was the quality of lesson plans intentionally geared towards the needs of individual students. Further, Ascenzi-Moreno and Quiñones' (2020) work documented the success of this practice with ELs. Their investigation revealed word solving and comprehension growth when students were able to move fluidly across languages to make meaning. The teachers were explicit about strategies to figure out unknown words and capitalized on linguistic and cultural resources. Burkins and Croft (2017) remind us not to use a standardized approach to guided reading that eliminates individual student needs. Instead, a responsive approach is needed to tap into specific needs of students.

Covid-19 increased the need for virtual literacy instruction. Research in virtual learning is particularly limited for young learners. However, Li (2012) found the role of community to be powerful for online learning environments. Marsh et al., (2017) investigated children's use of digital tools and recommends building on these experiences. The key is to notice the learner and adjust literacy and instructional practices in ways that support student growth (D'warte, 2020). Arianto (2020) reports the need for a well-developed approach to using digital tools, which has not happened in the rush of the pandemic. This project targeted this need.

Methodology

Participants and Sampling

Participants included both teachers ($N = 47$) and their students ($N = 401$) who were selected to participate via a convenience sampling approach. All teachers of 1st and 2nd grade students at the five elementary schools were invited to participate in the professional development and research project. Teachers in the first cohort ($N = 32$) were invited to participate in subsequent cohorts providing they continued to work with students in 1st or 2nd grade. The second cohort ($N=4$) consisted of three new teachers and one teacher from the first cohort. The final cohort ($N = 11$) consisted of two new teachers and nine teachers from Cohort 1. No

teachers participated in all three cohorts. The total student sample consisted of 169 females (42.2%) and 232 males (57.8%), of whom 146 (36.4%) were in first grade and 255 (63.6%) were in second grade. Two hundred-forty-eight (61.8%) students identified as White, 29 (7.2%) identified as Asian, 93 (23.3%) identified as Black/African American, 23 (5.7%) identified as Hispanic/Latin(x), 5 (1.2%) identified as Native Hawaiian or Other Pacific Islander, and 3 (0.07%) as Other. One hundred-fifty-one students (37.7%) were identified as English learners (ELs), 31 (7.8%) were identified as students with a documented learning disability, and 241 (60.3%) were identified as economically disadvantaged.

The central research questions were:

- (1) What is the impact of virtual and hybrid shared and guided reading on standardized reading and language measures among first and second grade students in schools with high populations of English learners?*
- (2) What are the barriers and affordances of implementing and replicating shared and guided reading in virtual and hybrid learning environments among first and second grade students in schools with high populations of English learners?*
- (3) What ways can families be supported when their child is learning to read virtually or in a hybrid format in the midst of a pandemic and beyond?*
- (4) In what ways does the professional development of this project prepare teachers to capitalize on their new expertise to sustain and upscale shared and guided reading practices in virtual and hybrid learning environments among first and second grade students?*

Instruments

iReady

i-Ready Reading diagnostic scores were developed by Curriculum Associates to assess students' reading comprehension skills. It is a standardized adaptive assessment with both a norm-referenced and criterion-referenced components. Its adaptive nature allows tailoring to individual student needs, as difficulty is determined by students' performance as they complete the assessment. i-Ready reading scores are in ranges that allow for placement of students in English Language Arts. Scores are interpreted such that higher scores indicate more proficient

reading comprehension skills whereas lower scores represent the lower proficiency. Information regarding psychometric information and other validation procedures for i-Ready can be found at the Curriculum Associates [website](#).

Procedure

The study adhered to all research ethics guidelines regarding research with human subjects and university IRB approval was obtained prior to data collection (approval #H21140). However, because quantitative data were deidentified upon receipt, there was no need to solicit participants' informed consent. After the professional development was completed, researchers requested the deidentified quantitative reading comprehension scores of students whose teachers participated in the professional development from SCCPSC. Deidentified data were obtained from SCCPSC for relevant students for the Fall 2020 (baseline data prior to implementation of professional development), Winter 2020, and Spring 2021. It is important to note, however, that this was not the initial plan, as we intended to also collect students' MAP (Measurements of Academic Progress) data. The research team was advised not to employ MAP scores due to the potential for academic dishonesty because students completed the test at home due to the SARS-Covid-2 pandemic. Hence, to maximize the trustworthiness of the findings, researchers received and analyzed only i-Ready reading comprehension scores.

Quantitative Data Analysis

Data were tested for requisite statistical assumptions and screened for univariate outliers using box-and-whisker plots prior to data analysis. Data met the assumption of normality (all skew and kurtosis values were less than the absolute value of 2), linearity (trend analyses showed that only the linear trends were significant), and sphericity (all Mauchly's Test of Sphericity results were less non-significant). Screening for outliers showed no extreme outliers present in the data across variables and waves, and hence, no cases were eliminated from the analysis. Due to the longitudinal nature of the data, attrition was evident across all waves of data, with the following proportions of missing data: wave 1 (Fall 2020), 12.3%; wave 2 (Winter 2020), 20.8%; and wave 3 (Spring 2021), 23.8%. However, to mitigate any bias due to missing data, listwise deletion was employed across all analyses, leaving 106 complete cases across the three waves of data.

The first research question was answered by conducting a series of repeated measures analyses of variance (RM ANOVAs), with wave (Fall 2020, Winter 2020; and Spring 2021) serving as the within-subjects factor. Practical significance of the findings were evaluated via the effect size η^2 . Cohen (1988) provided the following interpretive guidelines for η^2 : 0.010-0.059 as small; 0.060-0.139 as moderate; and ≥ 0.140 as large. The Bonferroni adjustment to statistical significance was employed to obviate familywise Type I error rate inflation (0.05/5 analyses = 0.01).

Qualitative Analyses

Qualitative data was gathered from extended survey responses, focus groups and individual interviews. All qualitative data sources were analyzed using basic thematic analysis (Merriam, 2009; Saldaña, 2021). Specifically, the analytical process included (a) iterative analysis of the data to uncover fundamental meaning units, (b) the combining of similar meaning units into codes and codes into categories, (c) identifying broad patterns to develop themes, and (d) selection of representative participant quotes to document the findings and support each selected theme. Qualitative analysis resulted in themes related to three research questions: 1) what are barriers and affordances of virtual and hybrid shared and guided reading? 2) how can families be supported, and 3) in what ways did professional development support teachers?

Quantitative Results

Descriptive Analyses

Zero-order, bivariate correlations are displayed Tables 1 and 2 and Table 3 presents descriptive statistics for the various waves of data collection.

Table 1

Zero-Order Correlation Matrix of Measures at Wave 1 (Fall 2020) and Wave 2 (Winter 2020)

Variable	1	2	3	4	5
1. Phonics Scale Score	-	.69*	.74*	.68*	.59*

2. High Frequency Words Scale Score	.71*	-	.70*	.70*	.66*
3. Vocabulary Scale Score	.77*	.70*	-	.83*	.75*
4. Reading Comprehension Literature Scale Score	.72*	.67*	.81*	-	.85*
5. Reading Comprehension Informational Text Scale Score	.70*	.64*	.78*	.84*	-

Note. Correlations above the diagonal are for wave 1 measures and those below the diagonal are for wave 2 measures.

$N = 106$ * $p < .01$ (one-tailed test of significance)

Table 2

Zero-Order Correlation Matrix of Measures at Wave 3 (Spring 2021)

Variable	1	2	3	4	5
1. Phonics Scale Score	-	.74*	.79*	.69*	.71*
2. High Frequency Words Scale Score		-	.72*	.66*	.67*
3. Vocabulary Scale Score			-	.83*	.80*
4. Reading Comprehension Literature Scale Score				-	.84*
5. Reading Comprehension Informational Text Scale Score					-

$N = 106$ * $p < .01$ (one-tailed test of significance)

Table 3

Descriptive Statistics of Literacy Variables across Wave 1 (Fall 2020), Wave 2 (Winter 2020), and Wave 3 (Spring 2021)

Variables	Wave 1		Wave 2		Wave 3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Phonics Scale Score	441.2 7	56.6 3	472.6 6	58.2 2	471.9 6	57.5 3
High Frequency Words Scale Score	445.5 7	67.8 0	471.0 8	52.5 5	471.5 1	54.7 6
Vocabulary Scale Score	453.1 3	70.2 7	475.5 3	66.5 5	482.6 4	70.3 2
Reading Comprehension Literature Scale Score	458.7 3	72.3 3	475.9 1	64.8 6	478.8 1	60.9 6
Reading Comprehension Informational Text Scale Score	450.2 7	68.4 4	476.1 0	63.3 8	478.2 1	58.6 1

$N = 106$

At first glance, the correlation coefficients remained consistently strong across all three waves, ranging from $r = 0.59$ to $r = 0.84$, with all associations between variables being positive. Interestingly, results from all literacy scale scores show a steady incline from one to the next successive wave. Further, the correlations were all in the theoretically-expected direction (i.e., positive) and moderate-to-strong. The descriptive statistics in Table 3 demonstrate that the change in iReady subscale scores was greater between baseline (wave 1) and wave 2 than between wave 2 and wave 3, and that scores were similar between wave 2 and wave three, except vocabulary and reading comprehension. The results of the change across time follows.

Main Analyses of Change across Time

Results of the RM ANOVAs revealed that results were statistically significant for four of the five outcomes, as follows: phonics scale score, $F(2,104) = 10.45$, $p < .001$, $\eta^2 = 0.149$; high frequency words scale score, $F(2,104) = 5.25$, $p = 0.006$, $\eta^2 = 0.097$; vocabulary scale score, $F(2,104) = 5.49$, $p = 0.005$, $\eta^2 = 0.094$; and reading comprehension for informational text scale score, $F(2,104) = 7.44$, $p = 0.001$, $\eta^2 = 0.113$. The results for reading comprehension for

literature did not achieve statistical significance, $p = 0.06$. Post hoc tests with the Bonferroni adjustments for multiple comparisons (Tabachnick & Fidell, 2013) revealed a consistent pattern of growth across all statistically significant analyses, such that the change in scale scores from wave 1 to wave 2 was statistically significant across the four variables that reached significance in the omnibus test described previously, but not between wave 2 and wave 3. Interestingly, whereas the scale scores for phonics and high frequency words stayed practically the same between waves 2 and 3, the scale scores rose for vocabulary and reading comprehension, albeit this change was not statistically significant.

Qualitative Results

Challenges and Affordances of Virtual/Hybrid Shared and Guided Reading

During virtual and hybrid learning due to the pandemic, teachers felt “inadequate” and several made statements “it’s like everyone is a first-year teacher all over again”. The strategies and structures they utilized for effective in-person instruction were difficult to emulate in virtual and hybrid formats due to three key challenges: time, resources, and the learning environment. Challenges related to time included a loss of instructional time due to “students not logging in on time” for whole class instruction, and more importantly small group instruction for guided reading activities. As the pandemic continued, instructional time for reading was decreased as there was a push from the school system to limit screen time, particularly for the younger students in first and second grades. Even with the move to hybrid learning with some students in person, the reduced time for literacy instruction required teachers to reduce the number of small groups they worked with each day. With much of the instruction at these grade levels being teacher-facilitated/supervised, it was challenging for teachers to develop independent literacy activities for students to engage in off screen, particularly when many students lacked resources at home, or were in learning environments with minimal academic supervision.

Both teachers and students lacked resources for effective online instruction, specifically during the fall of 2020. During fall 2020, when the school system was fully virtual, there was a lack of access to the internet for or a slow internet connection and lag time. The lag time proved especially problematic during choral reading as the out loud reading of the students was not synchronized. Further, teachers lacked “access to digital copies of leveled readers”. Choral

reading is a cornerstone of shared reading and leveled readers are essential for supporting small groups in guided reading. In the spring of 2021, teachers were provided access to multiple online resources to support literacy instruction. However, it was “too much all at once”. Teachers had to learn multiple new platforms and explain to parents and students how to utilize those platforms. Many parents were not comfortable with technology and were “fearful” of new platforms. Parents of English learners struggled to access and understand online platforms as explanations and platforms were only in English. This challenge was exacerbated as the platforms looked different on Chromebooks and tablets. Some students used a tablet at home and a Chromebook at school, so needed to learn both versions. Finally, teachers noted the importance of students needing to “physically hold a book, or cut and glue” in learning. The lack of manipulatives such as magnetic letters where students can move letters and make connections between letters, sounds and words hindered the teaching/learning process.

In spite of these challenges, teachers found ways to capitalize on the virtual learning environment. They utilized technology to “control the amount of words students see at a time” which helped to focus on specific sounds, patterns or words. Using YouTube read alouds allowed in person and virtual students in hybrid environments the ability to access the same text at the same time. Most beneficially, teachers informally reported that kindergarten and first grade English learners who regularly attended class on Zoom, had higher listening scores on the ACCESS test.

Family Support

The most pressing area of support for parents was assistance in navigating virtual environments and translation support to communicate the logistics and expectations of virtual learning. Once teachers began using the Talking Points app that translated home/school communications, this communications barrier was somewhat alleviated. As noted above, many parents lacked experience and comfort with technology and were unsure of how to support their children at home. Some parents struggled to support learning at home.

In order to further support caregivers in working with their children on school-based literacy practices, researchers developed Book Buddy bags with art supplies and skill sheets (compare and contrast, sequencing, cause and effect, and inference) for students to take home

with a book from the school or classroom library. Researchers received feedback about these resources from a small pilot group of parents and found that parents appreciated the clear format of the skill sheets, it was “good that there aren’t too many words and things on the page”, as well as ideas to practice the literacy skill in other daily activities. This data yielded insight into the need for physical materials and not just digital resources. Families may be more apt to engage when there are simple materials and resources that they fully understand how to use with their child/ren.

Impact of Professional Development

Overall, participants indicated that the professional development was informative. They repeatedly made reference to technology resources that they found useful, citing the Fast Scanner app for scanning in books students didn’t have access to as well as digital libraries (e.g. Stora and Epic!Books), and potential ways to organize online student reading groups (i.e. breakout rooms). In addition to the technology resources, participants also shared that sample lesson plans, tips on selecting books, writing activities, and mini lessons proved helpful and many were incorporated into their classes. Several teachers began regularly incorporating shared reading into instruction in ways they did not prior to the pandemic. They began to differentiate shared reading practices from a read aloud. They also began using shared reading and repeated reading of the same text throughout the week. This practice supported comprehension, helped students notice new details each day, and helped get students caught up who were absent. Most importantly, for many teachers, professional development “provided time for us to focus on what we already know about best practices and apply them in this new setting”.

Teachers also shared their recommendations on ways to improve their professional development. Responses show that many would have appreciated the professional development prior to the school beginning and then continuing with more sessions throughout the course of the year. That way, they could have been able to incorporate it into their instruction instead of trying to make changes and revisions midway through the school year. With the PD being extended across the year, they would have been able to have had more opportunities to implement the different strategies and utilize the materials that were shared.

Quantitative Discussion

In the present study, we sought, among others, to examine the influence of a professional development training program for teachers on students' reading comprehension as measured by iReady. Descriptive analyses demonstrated an upward trend between the first and second waves of data collection, but a steady trend between the second and third waves. Further, correlational patterns showed a consistent positive and moderate-to-strong associations between the iReady subscales both intra-wave and interwave, suggesting that all of the subscales tap into the various dimensions of reading comprehension. Our main analyses showed statistically significant increases in all but one (i.e., reading comprehension for literature) subscale between the first (i.e., baseline) and second waves. However, the change in subscale scores was not significant between the second and third waves. Thus, the professional development training for teachers was effective in improving the reading comprehension of students enrolled in classes of teachers who participated in the training. This is congruent with recent research that has shown the positive effects of professional development training on students' reading comprehension (Gutierrez de Blume et al., 2021). The lack of significant change in scores between the second and third wave may be explained by a lack of persistence or motivation between the middle and end of the academic year experienced by students (Zimmerman & Moylan, 2009) and the effects of educational shifts caused by the COVID-19 pandemic.

Overall, the present study tentatively demonstrates the utility and effectiveness of a comprehensive professional development training program for teachers regarding guided reading in hybrid and virtual environments. Others can tailor the training program we present here to their respective contexts. Beyond the enhancing effects of the training for teachers and their professional practice, results of the present study reveal the positive effects of the training for students' reading comprehension skills. We encourage other teacher-researchers to replicate our findings with larger sample sizes and by incorporating a comparison group to allow for causal inferences to be drawn from the data.

Qualitative Discussion

The qualitative analyses provide insight into barriers impacting the literacy development of first and second grade students during virtual instruction. By identifying these barriers, action

may be taken to overcome them. As a result of the focus groups and interviews, the researchers were able to develop a cascade of resources to address some of the barriers (see Appendix A). These offer a plethora of ideas for more effective virtual literacy experiences and can be utilized in hybrid practices as well. In addition, a website was created for teachers that houses all of the resource links as well as the professional development materials created as part of this grant. It is our hope that educators will continue to access and use these materials to support their literacy instruction of young readers (<https://sites.google.com/georgiasouthern.edu/deal-grant/home>).

These are still uncertain times, and school systems need to be respectful of and responsive to the cultures and languages of students and families. Hattie's (2021) review of Covid research reports that successful students during the Pandemic and virtual instruction were self-regulated. In other words, they were able to work independently. This practice was facilitated by a gradual release of responsibility by their teachers. In this case, teachers provided explicit, guided instruction early then began to release more of the responsibility to learning to the students as time progressed. Short periods of learning appear to be the most effective structure for engaging students, especially younger ones. Thirty minutes or less seems to be optional for one sitting. This was consistent with our findings. Students needed materials that were engaging and short periods of instruction spread throughout the day. This model may be one way for parents and teachers to support students as they learn to be independent.

The Pandemic has also highlighted the importance of families and parents as they play an extended teaching role in virtual instruction. While deficit perspectives of family involvement continue to prevail, it is even more critical for us to value families and work together to support students. With the appropriate resources, families can effectively support virtual and hybrid learning in meaningful ways. As teachers attend to ways families can engage, new learning possibilities are opened (Chen & Greenwood, 2021).

Teachers also needed relevant professional development with significant amounts of planning time. Given the newness of a fully digital world of teaching, lesson plans required numerous hours to develop because so much of the instruction was vastly different from their face-to-face teaching. Time was key in developing high-quality instruction that engaged students

in meaningful ways. This needed to be embedded in offline, independent learning activities that engaged students in appropriate ways.

Specifically, reading practice was of concern by all of the teachers. This was the focus of the professional development provided to teachers in the form of guided and shared reading where the teacher plays an invaluable role in facilitating reading instruction and offering students time to practice. However, there were insurmountable barriers that caused many teachers not to be able to fully enact these practices which ultimately led to loss in reading growth (Engzell, Frey, & Verhagen, 2021). This was not due to any neglect of the teachers or the students themselves. Rather, it was part of the larger challenge of the unexplored territory of virtual and hybrid reading instruction for young children. Further, the students were not reading at home during the pandemic and therefore, losing valuable practice with decoding skills and comprehension. By adding more choices to digital reading across reading levels and paying attention to texts that are relevant to students' background experiences, independent reading time can increase at home. As teachers are more prepared and experienced at managing virtual and hybrid shared and guided reading practices, they will become more effective. Ongoing professional development in this area is needed (Johnson et al., 2022).

Limitations

One limitation of the present study is the use of only a longitudinal quantitative research design without the inclusion of a true, active control group. This makes it impossible to make causal inferences regarding the effects of the professional development training program for teachers. Further, the implementation of a convenience sampling approach makes it difficult to generalize our findings to other samples of the population. Finally, our initial objective was to analyze MAP reading scores along with the iReady data. However, due to the COVID-19 pandemic, and in consultation with agents from the school district in which data were collected, we opted only to use iReady data because of concerns regarding untrustworthy MAP data.

Despite these limitations, however, we want to highlight some of the strengths of the present study. First, the present study used objective standardized assessment scores as outcomes rather than relying on self-report data. Second, the study occurred in an ecologically valid setting

rather than a laboratory setting, making the results more contextually valid. Thus, we think the present study makes a worthwhile contribution to the literature on these topics.

Conclusion

The comprehensive picture from this grant funded study highlights the invaluable impact of daily reading practice whether students read independently or through support with the teacher (shared and guided reading). It is through these activities that students learn decoding skills which support reading comprehension of complex texts. Accurate, valid, and reliable assessment data are needed as we move forward into the 2022-2023 school year. Covid caused disruption and uncertainty which impacted the school system's ability to measure student reading progress (Kuhfield & Tarasawa, 2020). Therefore, it is important to document where students are now in order to effectively help them move forward as readers. Covid-19 changed the way reading is taught and there is a new normal (Dorn et al., 2020).

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Appendix A

African Storybook	<p>African Storybook is an open-access website that has over 2300 children's storybooks available in over 200 languages. The storybooks are available both digitally or can be printed. There are options to create new storybooks, create a collection, and adapt existing stories for various reading levels. Emergent bilinguals can have stories translated into their native language. African Storybook is available for use on computers, tablets, and smartphones.</p> <p>Website Link: https://www.africanstorybook.org/</p>
Big Brown Bear	<p>Big Brown Bear is a website featuring hands-on literacy learning activities related to early reading. The Letter Tile Free Play provides magnetic letters for manipulation, offering practice in letter identification, learning sight words, and changing word families. There is also the opportunity for students to identify nouns, verbs, and adjectives and manipulate prefixes and suffixes to combine with root words. While students cannot access it in real-time, teachers can share their screens with students during instruction. Students can then explore the various activities included in Big Brown Bear independently. It can be accessed and used with tablets or cell phones, helping support students who may not access a computer.</p> <p>Website Link: http://www.bigbrownbear.co.uk/letters/</p>

Epic! Books	<p>Epic! Books is a free space where teachers and parents can access digital books for independent reading. Teachers may create individualized reading lists for students based on their reading level and interests. The 40,000 books are offered in English, Spanish, French, and Chinese with formats such as picture books, chapter books, graphic novels, and audiobooks. Teachers can track students' progress and reading habits. Teachers can provide parents with home access to their child's account. It is accessible on computers, tablets, and smartphones.</p> <p>Website Link: https://www.getepic.com/</p>
Fast Scanner	<p>Fast Scanner is a free smartphone app that allows teachers to scan in paper-based books for digital use. The scanned books can easily be saved as PDF files and sent via email. The app automatically identifies the page edges and allows the user to edit the document quickly. These scanned texts can also be projected in the classroom in instances such as shared reading where an enlarged text would be beneficial but is not available. This app is available from both Apple's App Store and Google Play.</p> <p>Website Link: https://apps.apple.com/us/app/fast-scanner-pdf-doc-scan/id586167688</p>

Little Bird Tales	<p>Little Bird Tales is a digital storytelling site that allows students a variety of ways to compose digital stories. Students can type the written portion of their stories using a keyboard and illustrate the book using photographs, digital images, or drawing their pictures using the drawing tools. Another option is for students to record their stories using the voice recorder. The various forms of storytelling support emergent bilinguals who may use this website to represent their thoughts and ideas in multiple languages, both written and oral. Teachers can also record verbal instruction for lessons and activities, create and share their own digital stories, and develop individualized lessons for students.</p> <p>Website Link: https://littlebirdtales.com/</p>
Picktime	<p>Picktime is an online event digital scheduler. Teachers can use this application to schedule small group reading sessions and one-on-one reading conferences. It offers support for various languages, including English, Spanish, Portuguese, Russian, Italian, German, French, Dutch, Greek, Malay, and Romanian. It allows teachers to send out customized reminders via emails and texts to students and family members. PickTime can be synced across multiple calendars and various video conferencing apps (e.g., Microsoft teams, Google Meet, and Zoom).</p> <p>Website Link: https://www.picktime.com/</p>

Puppet Pals	<p>Puppet Pals inspires students of all ages to create their animated puppet show videos with voiceover in real-time. When students create these puppet shows, they are actively engaged in language learning. This app is available for both Apple's App Store and Google Play.</p> <p>Website Link: http://www.polishedplay.com/puppetpals1</p>
Really Great Reading	<p>Letter Tile by Really Great Reading is a resource where students and teachers select, manipulate, and move letters to develop phonemic awareness and phonics skills. Teachers can utilize this app virtually in real-time to help teach sound-letter correspondence, phoneme blending, word families, blends, and diagraphs. Students can also use Letter Tile Free Play independently and extend what they have learned during class. It can be accessed and used with tablets or cell phones, helping support students who may not access a computer.</p> <p>Website Link: https://www.reallygreatreading.com/lettertiles/?fbclid=IwAR1RBVqj3vizU_gAGFA1xpfSHnK6SvF2AhwCQUxtgxXk2-j5jglwZvRoRnc</p>

Sankifa Channel	<p>The Sankifa Channel on YouTube provides opportunities for students to encounter a variety of short stories written to them by fantastic authors. These stories are culturally diverse and tap into students' cultural experiences. Teachers can use the videos for instructional purposes in their classrooms, during virtual learning, or students can view them at home.</p> <p>Website Link: https://youtube.com/c/Sankofaread aloud</p>
Screencastify	<p>Screencastify is a free Chrome extension that teachers can download to record their voice and face (if desired) while they demonstrate or discuss anything on their computer screen. The final recording can be shared as a YouTube link making it very easy for families to access.</p> <p>Website Link: https://www.screencastify.com/</p>
Shared and Guided Reading Website	<p>This website contains professional development resources for shared and guided reading practices in various settings. It features lesson plans, student samples, videos, and other planning resources.</p> <p>Website Link: https://sites.google.com/georgiasouthern.edu/deal-grant/home</p>

Story Books Canada	<p>Story Books Canada is a free resource for teachers and parents that supports multilingualism. There are over forty stories available in 19 languages, including English, French, and Spanish. The books can be selected according to reading level, themes, and curricular content. Many of the books have audio read-aloud options in English and French.</p> <p>Website Link: https://www.storybookscanada.ca/</p>
Talking Points	<p>Talking points is a free app that helps teachers communicate with families in their home languages. It is a two-way communication system that translates in more than 100 home languages. The teacher writes her message in English, and the message is translated for the family. Then, the family messages back in their language, which is translated back into English for the teacher. This app is available for Android/iOS users.</p> <p>Website Link: https://talkingpts.org/</p>
Text Project	<p>Text Project is a hub for strategies, tools, and texts for beginning readers with pdf copies of books listed according to reading levels. Teachers and parents can download books for independent reading both online and offline. There are also features like comprehension guides and tips for teaching reading and spelling.</p> <p>Website Link: http://textproject.org/</p>

Toy Theatre	<p>Toy Theater helps students learn and practice skills and concepts through games and interactive activities. These activities can be assigned to students to work on independently.</p> <p>Website Link: https://toytheater.com/category/language-arts/</p>
Unite for Literacy	<p>Unite for Literacy is a website that is a free repository of children's picture books. The texts are available in English and Spanish, with audio narrations available in over 50 languages. Books are grouped into various themes (e.g., animals, technology, and communities) for ease of access by students.</p> <p>Website Link: https://www.uniteforliteracy.com/</p>
Word Work Blending Board	<p>Word Work Blending Board, created by the University of Florida Literacy Institute (UFLI), provides tools for identifying initial, medial, and final sounds and blending. Teachers can customize blending boards for students in order to focus on specific letters and sounds. The Blending Board can be used virtually with a screen share from the teacher, or students may engage with it independently. This resource is accessible on computers, tablets, and smartphones and includes a video tutorial on creating blending boards.</p> <p>Website Link: https://education.ufl.edu/ufl/virtual-teaching/main/instructional-activities/decoding-and-encoding/word-work/</p>