



Evidence-Based Literacy Instruction within Remote Learning Environments



Executive Summary

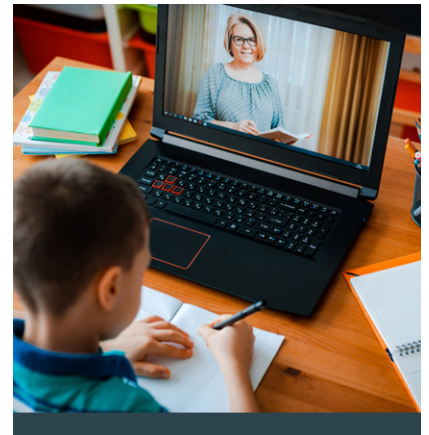
The purpose of this white paper is to provide the Ohio Department of Education and regional technical assistance staff with a multidisciplinary perspective on the challenge of providing all prekindergarten through grade 12 students with appropriate, standards-aligned, and evidence-based literacy instruction within the context of blended/hybrid learning environments. It is an initial attempt to integrate multidisciplinary information that may be relevant for addressing this challenge. Information was retrieved from individual research studies, research syntheses and meta-analyses, reports, briefs, and books. Findings, conclusions, and implications for practice are based on the best available research evidence. These include the importance of relational interaction, instructional interaction, and learning interaction, and meeting the individualized needs of special populations. This white paper also specifies implications for practice across different contexts (state and regional leadership systems, districts and schools, and educators and families) and disciplines (designing and delivering remote literacy instruction, new literacies in online research and reading comprehension, and home-school partnerships for literacy learning, likely impacting remote literacy instruction and learning).



Introduction

Due to current public health concerns, the Ohio Department of Education (ODE), like many state education agencies, is addressing the challenge of how to provide all prekindergarten through grade 12 students this fall with appropriate, standards-aligned, and evidence-based literacy instruction within the context of remote learning environments. ODE (2020b) defines *remote learning* as “learning that occurs when the learner and educator, or source of information, are separated by time and distance and, therefore, cannot meet in a traditional classroom setting; it is a broader term that can include distance learning, online learning, virtual instruction or remote training” (p. 5).¹ Remote learning can be fully remote or some combination of a traditional in-person classroom setting and remote learning (e.g., a hybrid/blended format). In making the request to the Region 8 Comprehensive Center for assistance, the ODE Literacy Team identified several issues, mainly pertaining to how best to support students’ different learning needs, that may impact actualizing this endeavor, including the following:

- How can schools best support students with learning needs who require more face-to-face time?
- How can schools deliver face-to-face instruction well while wearing masks?
- How can schools effectively provide all students with personalized learning opportunities?
- How can schools best engage and motivate grade 6–12 students?
- How can schools effectively employ learning strategies for emergent readers?
- How can schools successfully engage families as partners in children’s literacy learning?
- How can schools best address inequities in opportunities for disadvantaged students?



¹This challenge is informed by ODE’s (2020b) *Remote Learning Resource Guide During the Coronavirus Pandemic Ordered School-Building Closure and Ohio’s Plan to Raise Literacy Achievement* (ODE, 2020a). Moreover, it aligns with priority strategies in *Each Child, Our Future*, Ohio’s 5-year strategic plan for education (2019–2024): Strategy 3: Improve targeted supports and professional learning so teachers can deliver excellent instruction today, tomorrow and throughout their careers, and Strategy 9: Develop literacy skills across all ages, grades and subjects (ODE, 2019).

The purpose of this white paper is to provide ODE and regional technical assistance staff with a multidisciplinary perspective on the challenge of providing all prekindergarten through grade 12 students with appropriate, standards-aligned, and evidence-based literacy instruction within the context of blended/hybrid learning environments. As such, it builds knowledge and serves as a framework from which to ground and organize ODE's efforts to support districts, schools, and families in collectively attending to students' literacy and social and emotional outcomes under atypical learning conditions. This paper should be considered alongside the remote literacy learning resources for schools and families developed by the National Center on Improving Literacy that provide actionable strategies and tips.



To inform this challenge appropriately, it is useful to synthesize research and scholarship from across the fields of (1) instructional design and delivery in remote/distance literacy learning, (2) home-school partnerships for children's literacy and social and emotional learning, and (3) new literacies of online research and reading comprehension. Jointly, these fields may provide a fruitful start for addressing this multifaceted challenge.

Consequently, the theory of action, which is aligned to the one in Ohio’s Plan to Raise Literacy Achievement (ODE, 2020a), is as follows:

IF	THEN
IF ODE and regional technical assistance staff build the capacity of districts to promote evidence-based literacy instruction for all learners and continuous family engagement and partnerships to support language and literacy development in blended/hybrid learning environments,	THEN districts can provide schools with appropriate systems that enable all learners to access high-quality literacy instruction to meet their individual needs and equip families to partner well in blended/hybrid learning environments.
IF districts provide schools with appropriate systems that enable all learners to access high-quality literacy instruction to meet their individual needs and equip families to partner well in blended/hybrid learning environments,	THEN schools can provide educators and families with the necessary structures, processes, and resources to effectively partner to support students’ literacy, social, and emotional development in blended/hybrid learning environments.
IF schools provide educators and families with the necessary structures, processes, and resources to effectively partner to support students’ literacy, social, and emotional development in blended/hybrid learning environments,	THEN students will become more proficient readers.

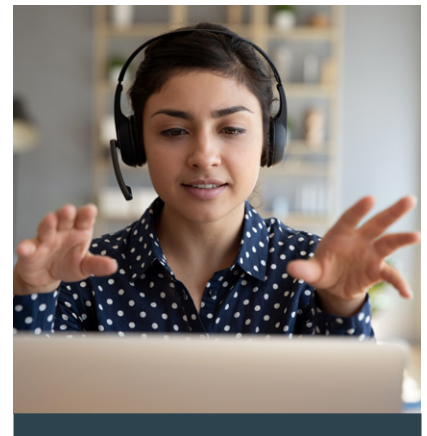


This white paper is not a comprehensive or exhaustive review of the literature across the identified fields, but rather an initial attempt to integrate multidisciplinary information that may be relevant to addressing this challenge. Information was retrieved from individual research studies, research syntheses and meta-analyses, reports, briefs, and books. Likewise, it is probable that other fields, in addition to those identified, may be equally germane to informing this challenge and should be considered. Since the research and scholarship address a variety of age ranges and populations, any findings and implications for practice identified in this paper should only be considered valid for the age range and population addressed by the relevant study. Findings, conclusions, and implications for practice are based on the best available research evidence.

Research in Designing and Delivering Literacy Instruction for Remote Learning

The reviewed research and scholarship in designing and delivering literacy instruction for remote learning mostly involved or discussed issues pertinent to older students. Nevertheless, it provides insight into key characteristics of successful online learning experiences for all students. These characteristics include giving immediate feedback, providing virtual tutoring, or offering support services; other promising strategies are having interactive instruction, providing additional resources, and encouraging student choice (REL Mid-Atlantic, 2020). Also, online learning that integrates some independent and project-based learning experiences for students appears to improve success as well (REL Mid-Atlantic, 2020). Evidence-based and promising practices to support virtual instruction for students with disabilities include (1) content, task, and material scaffolding; (2) instructional accommodations, incorporating accessible instructional materials, and incorporating assistive technology; (3) modifications; (4) building social, emotional, and behavior skills; (5) virtual explicit instruction; and (6) self-regulation support (OSEP, 2020a).

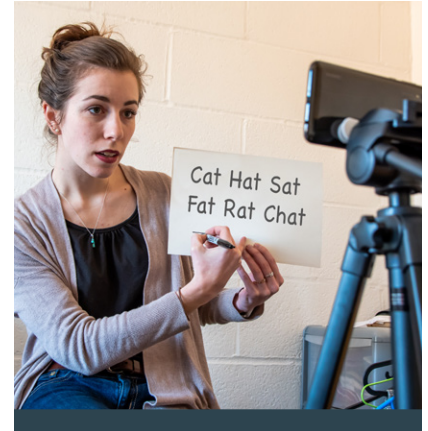
When delivering remote literacy instruction, clearly identifying and conveying the learning objectives to families and students are essential (Guernsey, Levine, Chiong, & Severns, 2012; Mayer, Kalil, Oreopoulos, & Gallegos, 2015). Moreover, just having students watch educational videos or participate in courses delivered entirely online—without interaction—is not likely to help them retain information. Whether with teachers, caregivers, or peers, student interaction with others when using technologies for literacy learning is key. For students with disabilities, three strategies appear to be critical for supporting online course accessibility for their literacy learning: (1) clearly articulating learning objectives, (2) promoting personalized and contextualized learning, and (3) planning for visual and audio representation of concepts (Rice, 2018). To make disciplinary text comprehensible in online courses for students with disabilities or those who have reading comprehension difficulties, it is important to assess and address the degree to which words can



be made concrete, and whether the connections within text support inference making (Rice, 2017), that is, the level of semantic (word meaning) and syntactic (grammatical structure) complexity and how it affects the cognitive load placed on students' attention span and working memory (Rice, 2017).

Although the integration of traditional in-person reading instruction and computer-assisted reading instruction (e.g., video, computer content, embedded multimedia) as part of beginning reading instruction shows promise, teachers should use technologies to enhance rather than replace their instruction (Cheung & Slavin, 2012a). This is because supplementary computer-assisted reading instruction, which provides additional instruction at students' assessed levels of need, has not produced meaningful effects on K–12 student reading outcomes and just a modest effect on the reading skills of struggling readers (Campuzano, Dynarski, Agodini, & Rall, 2009; Cheung & Slavin, 2012a; Cheung & Slavin, 2012b). Moreover, when integrating traditional and computer-assisted reading instruction, consider also integrating students' use of print and digital books. Print books appear to have an advantage over digital books regarding students' reading comprehension as they seem to understand longer texts better in print than they do digitally (Delgado, Vargas, Ackerman, & Salmerón, 2018).

To effectively design and deliver online literacy instruction, teachers need to be prepared effectively. Literacy teachers identified four factors that they believe would contribute to their professional development regarding integrating technology into instruction: (1) time to explore, practice, and prepare for literacy instruction into which they integrate technology; (2) access to equipment during and after professional development; (3) access to higher level knowledge, knowledgeable presenters, and relevant background knowledge; and (4) ongoing follow-up and small group support (Hutchison, 2012).



Research in Home-School Partnerships for Remote Literacy Learning

Decades of empirical research support the positive effects of family engagement practices on young children’s language development and elementary students’ reading achievement, including with vulnerable student groups. Efforts to engage families in literacy education should reflect the multidimensional nature of family engagement, directing efforts to both home and school while considering families’ cultural values and routines (Christenson & Reschly, 2010). A range of family engagement strategies work to promote children’s reading development. Evidence-based family engagement strategies for promoting children’s reading outcomes are (1) home-based family engagement and reading, (2) home literacy environments and family training/teaching, and (3) home-school and school-based activities (Christenson & Reschly, 2010). Examples of home-based family engagement and reading for all children include home visits with preschoolers; dialogic, shared, partner reading; and teaching families specific reading skills (Christenson & Reschly, 2010). Evidence-based and promising literacy practices to support continuity of learning for all children at home, but particularly for children with disabilities, include retelling, dialogic reading, phonological awareness activities, partner reading, asking and answering questions, and identifying the main idea (OSEP, 2020b).

Schools can lay the foundation for strong home-school partnerships for remote literacy learning by focusing on two-way communication; developing children’s social, emotional, and behavioral skills; shared decision making; and building relationships (OSEP, 2020b; REL Mid-Atlantic, 2020).

Regarding communication, families and teachers in one study primarily used email and phones to communicate with one another, yet many families and teachers listed communication as a benefit of the adopted learning management system (LMS) (Laho, 2019). Furthermore, these families liked having the ability to monitor their child’s progress through the LMS and recommended using it for additional information sharing (Laho, 2019).

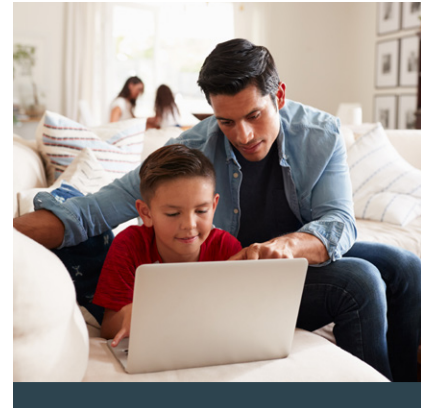


Communication technologies also have been used effectively for conveying literacy learning information to families. For example, using text messages to give literacy tips and reminders to families is a powerful strategy for promoting children’s literacy development at home (Doss, Fahle, Loeb, & York, 2019; Mayer, Kalil, Oreopoulos, & Gallegos, 2015; York, Loeb, & Doss, 2019).

When text reminders to families were combined with goal-setting, social rewards, and information about the importance of reading to children, it more than doubled the amount of time low-income families spent reading to their children using an e-book app on a tablet (Mayer, Kalil, Oreopoulos, & Gallegos, 2015).

Families say that the most helpful resources for learning at home are personal technology, personal guidance for how to best support their child, regular access to their child’s teacher, and the option for remote one-on-one time/tutoring with a teacher (Learning Heroes, 2020). Many families do not feel confident with technologies or have the support to find high-quality literacy content to use with their children on their own (Rideout & Katz, 2016). In fact, 90 percent of families say that their child is using materials or resources provided by the school to learn at home compared with resources that families found on their own (Learning Heroes, 2020). Therefore, training families on how to use technologies and educational television with their children can help improve adult-child interactions during book reading (Guernsey, Levine, Chiong, & Severns, 2012).

Access to reading material may only be part of the equation for promoting literacy development at home, especially with younger children. At-home reading seems to be most effective when reading material closely matches children’s reading ability and interests, and families provide reading guidance to ensure that children understand what is being read (Kim, et al., 2016; Kim & White, 2008). Specifically, when families provide oral reading and comprehension scaffolding to their children when reading at home, their children’s reading comprehension improves (Kim, et al., 2016; Kim & White, 2008).



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There is an emerging body of mostly small-scale research which shows that families' technology use, such as electronic tablets, literacy apps, and educational media, has a positive impact on children's early literacy outcomes (Cook, 2016; Guernsey, Levine, Chiong, & Severns, 2012; Mayer, Kalil, Oreopoulos, & Gallegos, 2015; Samurda, Wong, & Neuman, 2019).

There are benefits when families interact with children during literacy learning at home (Senechal & Young, 2008). When adults talk and interact with children as they use digital media, they promote their language development, background and world knowledge, and comprehension (Guernsey, Levine, Chiong, & Severns, 2012).



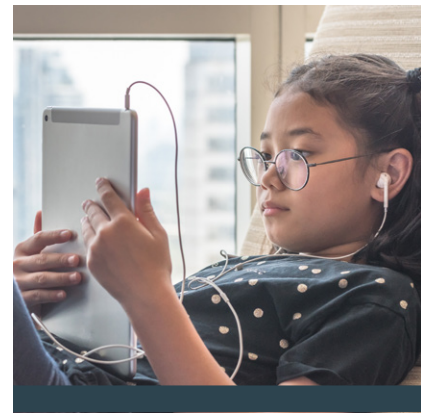
It is important to note that families appear to use print books and e-books differently with their young children. Families seem to use print books for reading with their children, even in homes where e-books are available. E-books, on the other hand, often are used when families are not present with their children and therefore likely play an indirect role in fostering children's literacy development (Vaala & Takeuchi, 2012). Furthermore, print or basic e-books appear better suited for parental reading with preschool children to build their literacy skills than enhanced e-books (e.g., ones with interactive features), which can distract children and adults alike (Chiong, Ree, Takeuchi, & Erickson, 2012).

Research in New Literacies of Online Research and Reading Comprehension

Research in the new literacies of online research and reading comprehension has mainly been conducted with students in fourth grade and up. Less research has been conducted in this area with younger students or students with reading difficulties (Leu, Kili, & Forzani, 2016). The new literacies of online research and reading comprehension are an inquiry process using the skills, strategies, dispositions, and social practices that occur as students read information online in order to learn (Leu, Kili, & Forzani, 2016). This also is referred to as *digital literacies*, or finding, consuming, and creating digital content and communicating or sharing it with others. Essentially, online reading comprehension is online research (Zawilinski, Forzani, Timbrell, & Leu, 2019). In fact, the Common Core State Standards significantly emphasize digital literacy to promote disciplinary literacy in middle and high schools (Hutchison & Colwell, 2014). While findings from the new literacies of online research and reading comprehension are applicable regardless of whether students are reading in a remote learning context, they likely are even more noteworthy when students, including younger students, are expected to engage in online learning. Because the comprehension cost associated with reading on a screen, especially with lengthier e-textbooks, is modest but large enough to discourage students, instruction for online reading and research should be carefully planned for and implemented with this issue in mind (Willingham, 2017).

Online reading is characterized by its embedded interactivity (e.g., hyperlinks, videos, graphics, comments) that is customizable and unique to each reader's experience based on their interests, preferences, or purpose.

In this manner, online reading differs from offline reading because it is nonlinear and requires readers to make frequent exploratory decisions as they read and use these embedded features. As readers make decisions about what to read online, they not only are making meaning, they are building the text, including communicating with others as they



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make sense of information (Leu, Kili, & Forzani, 2016; Pytash & O’Byrne, 2014; Zawilinski, Forzani, Timbrell, & Leu, 2019). When these online reading decisions are poor, readers can get distracted and led astray from their original purpose (Willingham, 2017). Furthermore, online reading is situated within technologies that have their own operational features to learn in order to use them effectively (Leu, Kili, & Forzani, 2016; Zawilinski, Forzani, Timbrell, & Leu, 2019).



Consequently, it is important to understand these reading differences when designing literacy instruction that requires online researching and reading by students in order to better anticipate and support their reading comprehension. Although some online reading skills and strategies may be uniquely new, others may reflect similar and more complex versions of those that students use offline (Coiro, 2011).

When students read and research online, they use typical and new reading comprehension skills and strategies to make sense of information (Coiro, 2011; Leu, et al., 2015). Students likely need at least five cognitive processing practices when reading and researching online, each with new skills and strategies. These practices are the ability to (1) identify important questions, (2) locate information, (3) evaluate information critically, (4) synthesize information, and (5) communicate information (Coiro, 2011; Leu, et al., 2015; Zawilinski, Forzani, Timbrell, & Leu, 2019).



Reading online also may require greater amounts of metacognitive processing than reading offline because of the task complexities and text structures inherent online (Leu, Kili, & Forzani, 2016). Each new online reading experience, therefore, increases the likelihood that students will employ reading comprehension skills and strategies that are increasingly dissimilar to those used offline (Coiro, 2011). In fact, some researchers advocate early teaching of the metacognitive skills needed to counteract digital reading threats to children’s deep reading processes (Wolf, 2018). Thus, it is important to teach students how to search effectively online because it promotes their online researching skills and reading comprehension (Zawilinski, Forzani, Timbrell, & Leu, 2019; Wolf, 2018). Others, however, claim that the focus on teaching digital literacy skills may be exaggerated, except for with disadvantaged students (Willingham, 2017). Teaching these skills may be especially critical when internet accessibility and use are considered because research suggests that a separate and independent student achievement gap exists for online research and reading comprehension (based on income inequality), and may be greater than achievement gaps found in offline reading (Leu, et al., 2015). In the end, the goal is to develop a *biliterate brain* that can devote the time and attention to deep-reading skills regardless of the medium (Wolf, 2018).

Conclusions

An early theme among the identified areas is the importance of interaction—specifically, the quality and frequency of (1) relational interaction between teachers and students, students and peers, teachers and families, and caregivers and their children; (2) instructional interaction between teachers and students, and students and peers; and (3) learning interaction between students and peers, and caregivers and their children.

Taken together, research and scholarship reveal emerging research in the design and delivery of literacy instruction for remote and online learning, and in new literacies in online research and reading comprehension. Even less is empirically known about evidence-based reading interventions within blended/hybrid learning settings. A more robust body of research, including experimental studies, exists for home-school partnership for literacy. However, research is limited on home-school partnerships for literacy within the context of blended/hybrid learning environments. It is likely that the findings from research in these areas interact with one another in complex and mutually reinforcing ways. It is unclear, however, the degree to which they do so. More research is needed that is specifically designed to study how best to provide evidence-based literacy instruction in the context of blended/hybrid learning. Findings from the research and scholarship reviewed in this paper suggest preliminary implications for practice that, when combined, may aid in addressing the challenge.



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Implications for Practice

For State and Regional Leadership Systems

Designing and Delivering Literacy Instruction for Remote Learning

- Provide guidance to districts in the selection of evidence-based literacy instructional materials, including their applicability to remote learning.
- Assess the strength of district remote learning plans/strategies to (1) set high expectations for sustained literacy instruction, (2) track student engagement in literacy learning, and (3) monitor student literacy progress. Consider reviewing and providing feedback on districts' remote learning plans/strategies (Gross & Opalka, 2020).
- Continue to emphasize to districts issues of equity for literacy learning, with increased guidance for addressing special populations. Develop guiding principles or reflection tools that help districts evaluate digital divides, accessibility issues, and all elements of remote literacy learning practice (Reich, et al., 2020).
- Consider how guidance reflects whether to pursue only literacy enrichment and review, or also to teach new standards-aligned literacy content. If encouraging districts to teach new material, consider suggesting critical literacy standards or topics that are important to subsequent courses. Share example literacy schedules, units, lessons, and plans from across the state (Reich, et al., 2020).
- Acknowledge to districts the challenges and constraints of remote literacy learning at home in instructional guidance (Reich, et al., 2020). Convey to districts the importance of digital equity and digital learning opportunities for families in early learning efforts (Cook, 2016).
- Communicate information on literacy learning clearly, with multiple target audiences in mind, particularly the literacy learning goals and priorities. Consolidate key information into a small number of documents or webpages, consider checklists and templates to help schools and districts attend to important literacy issues, and continue to collect feedback from key stakeholders (Reich, et al., 2020).





- Create public engagement efforts for stakeholders on the need for critical thinking about media (Guernsey, Levine, Chiong, & Severns, 2012).
- Aid districts in creating spaces where children, families, and educators can experiment with and discuss online and offline literacy materials together (Guernsey, Levine, Chiong, & Severns, 2012).

Home-School Partnerships for Literacy

- Use a research-based family engagement framework to situate home-school partnerships for literacy.
- Specify for districts what effective home-school partnerships for literacy look like in relation to the family engagement framework and promote the practices.
- Strategize a variety of channels and tactics for communication and resource sharing for literacy among districts, schools, families, and the community (Cook, 2016).
- Identify and disseminate to districts information on professional learning in effective family engagement practices for remote learning (generally and specific to literacy) (Cook, 2016).
- Offer online support groups for families to network with one another and share challenges, successes, tips, and resources.

New Literacies of Online Research and Reading Comprehension

- Identify and disseminate information on professional learning opportunities for districts and schools on the integration of digital tools into literacy instruction and the development of digital literacy in students.
- Help districts address digital literacies in state English language arts standards by integrating new literacies instruction into traditional and disciplinary literacy instruction (Hutchison & Colwell, 2014; Zawilinski, Forzani, Timbrell, & Leu, 2019).
- Help districts address critical thinking in state English language arts standards by using online reading experiences to develop critical thinking and appropriate skepticism (Zawilinski, Forzani, Timbrell, & Leu, 2019).



For Districts and Schools

Designing and Delivering Literacy Instruction for Remote Learning

- Establish a district and/or school interdisciplinary team to address the effective design and delivery of literacy instruction for remote learning.
- Develop a systematic process or framework for addressing remote literacy learning issues and clearly convey it to all staff to support their identification of personnel and material resources for problem solving.
- Assess disparities in technology access and the capacity to use technology for literacy outreach (Guernsey, Levine, Chiong, & Severns, 2012).
- Strengthen the professional capacity of staff by connecting them to new resources for literacy instruction and active learning, and to professional development opportunities in literacy (Guernsey, Levine, Chiong, & Severns, 2012).
- Consider creating new staff positions or redefining existing ones that function to support educators in designing and delivering remote literacy instruction, especially when online.
- Use technology only as a supplement to positive adult-child interactions during literacy learning (Cook, 2016).
- Evaluate literacy efforts and use data, including families' feedback, for continuous literacy improvement (Cook, 2016).

Home-School Partnerships for Literacy

- Develop goals and objectives for LMS adoption early in the adoption process (Laho, 2019).
- Clearly articulate the purpose, goals, and objectives of LMS adoption to all families through multiple communication channels (Laho, 2019).
- Address LMS technical challenges promptly (Laho, 2019).
- Provide multiple, ongoing training opportunities for all families in the LMS (Laho, 2019).



- Include numerous avenues for training in the LMS, including video tutorials, face-to-face sessions, informational documents, and opportunities for one-on-one guidance (Laho, 2019).
- Develop a plan early in the LMS adoption process to ensure that teachers have enough time to learn how to use the tool, as well as sufficient time and support to integrate the tool into their practice (Laho, 2019).
- Utilize teachers within each site as teacher-leaders to provide support and training for staff in the LMS (Laho, 2019).
- Promote and support both formal and informal opportunities for peer teaching in the LMS (Laho, 2019).
- Ensure sustained support for new users within the district, such as through a coaching model of support in which teacher-leaders work directly with new staff to train and support their use of the LMS (Laho, 2019).
- Regularly highlight the benefits of LMS use for all families. Showcase effective LMS use within the district (Laho, 2019).
- Recognize that not all families have regular internet access. Develop a plan to ensure that LMS-initiated communications also reach this population (Laho, 2019).
- Regularly evaluate the LMS adoption process. Build on adoption strengths and address adoption challenges (Laho, 2019).

New Literacies of Online Research and Reading Comprehension

- Understand how students comprehend when reading and researching online, and the ways that it is similar and dissimilar from reading offline (Pytash & O’Byrne, 2014).
- Use the understanding of how students comprehend online to design and deliver literacy lessons and assignments that account for these skills, strategies, and processing practices, including scaffolds and supports (Pytash & O’Byrne, 2014).
- Address digital literacies in state English language arts standards by integrating new literacies instruction into traditional and disciplinary literacy instruction (Hutchison & Colwell, 2014; Zawilinski, Forzani, Timbrell, & Leu, 2019).



- Address critical thinking in state English language arts standards by using online reading experiences to develop critical thinking and appropriate skepticism (Zawilinski, Forzani, Timbrell, & Leu, 2019).
- Use online resources/digital tools to support foundational offline reading skills for emergent readers to foster new literacies development early (Zawilinski, Forzani, Timbrell, & Leu, 2019).
- Use online resources/digital tools to complement and enhance the instruction of traditional literacy skills for middle and high school readers to teach existing content in more meaningful ways (Hutchison & Colwell, 2014).
- Integrate online communication tools into literacy lessons to promote online information use among students and adults (Zawilinski, Forzani, Timbrell, & Leu, 2019).

For Educators and Families

Designing and Delivering Literacy Instruction for Remote Learning

- Promote personal connection among families and educators via social media, cell phones, texting, and the development of hybrid (online and offline) learning communities (Guernsey, Levine, Chiong, & Severns, 2012).
- Establish a social context in supporting students' literacy and in literacy tasks (e.g., working together to create and understand new information, creating a digital project to communicate with others) (Hutchison & Colwell, 2014; Pytash & O'Bryne, 2014).
- Reinforce literacy skills by vetting and making available to families and educators literacy apps, e-books, and online and offline literacy games to play with their children (Guernsey, Levine, Chiong, & Severns, 2012).
- Build students' background knowledge in literacy instruction by leveraging digital content from libraries, museums, e-books, high-quality games, and multimedia "field trips" (Guernsey, Levine, Chiong, & Severns, 2012).



Home-School Partnerships for Literacy

- Teach several lessons before the end of the school year that model the use of comprehension strategies and oral reading practice with families. Provide at least eight books for remote learning at home that are closely matched to each student's reading ability and interests. Send a postcard with each book to remind the students of what they should be doing. Send a letter to families asking them to listen to and provide feedback on the student's reading. Ask that the postcards be returned so that you can see whether the effort is being implemented as intended (White & Kim, 2008).
- Provide evidence-based information to families on how to support their children's literacy learning at home, including through everyday activities using materials found at home.
- Share literacy resources with families, especially ones that are easy to implement, and have clear explanations and scaffolds for children, if needed.
- Reinforce the importance of positive adult-child interactions during literacy learning, including when using technologies and educational media.
- Develop a variety of ways for families to give and receive feedback, including on the successes and challenges of remote literacy learning at home. Promptly address concerns together.
- Offer regular opportunities for families and students to connect with teachers one-on-one for literacy and/or social and emotional learning/support.

New Literacies of Online Research and Reading Comprehension

- Teach online search skills first because they are a prerequisite to success in online research and comprehension (Zawilinski, Forzani, Timbrell, & Leu, 2019).
- Preview and explicitly teach a new technology to lower-achieving readers before others to empower them and position them as experts (Zawilinski, Forzani, Timbrell, & Leu, 2019).

References

Campuzano, L., Dynarski, M., Agodini, R., and Rall, K. (2009). *Effectiveness of reading and mathematics software products: Findings from two student cohorts—executive summary* (NCEE 2009-4042). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

Cheung, A., Slavin, R.E. (2012a, April). *The effectiveness of educational technology applications for enhancing reading achievement in K-12 classrooms: A meta-analysis. Educator's summary*. Baltimore, MD: Center for Research and Reform in Education, Johns Hopkins University. Retrieved from http://www.bestevidence.org/word/tech_read_April_25_2012_sum.pdf

Cheung, A., Slavin, R.E. (2012, June). *Effects of educational technology applications on reading outcomes for struggling readers: A best evidence synthesis. Educator's summary*. Baltimore, MD: Center for Research and Reform in Education, Johns Hopkins University. Retrieved from http://www.bestevidence.org/word/tech_strug_read_Jul_19_2012_sum.pdf

Chiong, C., Ree, J., Takeuchi, L., & Erickson, I. (2012, Spring). *Print books vs. e-books*. A Cooney Center QuickReport. The Joan Ganz Cooney Center at Sesame Workshop. Retrieved from http://www.joanganzcooneycenter.org/wp-content/uploads/2012/07/jgcc_ebooks_quickreport.pdf

Christenson, S.L., & Reschly, A.L. (Eds.). (2010). *Handbook of school-family partnerships*. New York: Routledge.

Coiro, J. (2011). Predicting reading comprehension on the internet: Contributions of offline reading skills, online reading skills, and prior knowledge. *Journal of Literacy Research*, 43(4), 352–392.

Cook, S. (2016). *Integrating technology in early literacy: A snapshot of community innovation in family engagement*. Washington, DC: New America. Retrieved from <https://files.eric.ed.gov/fulltext/ED570877.pdf>

Delgado, P., Vargas, C., Ackerman, R., & Salmerón, L. (2018). Don't throw away your printed books: A meta-analysis on the effects of reading media on reading comprehension. *Educational Research Review*, 25, 23–38.



Doss, C., Fahle, E.M., Loeb, S., & York, B.N. (2019). More than just a nudge: Supporting kindergarten parents with differentiated and personalized text messages. *Journal of Human Resources, 54*(3), 567–603.

Gross, B., & Opalka, A. (2020, June). *Too many schools leave learning to chance during the pandemic*. Center on Reinventing Public Education. Retrieved from https://www.crpe.org/sites/default/files/final_national_sample_brief_2020.pdf

Guernsey, L., Levine, M., Chiong, C., & Severns, M. (2012). *Pioneering literacy in the digital wild west: Empowering parents and educators. A primer for communities*. The Campaign for Grade Level Reading. Retrieved from https://joanganzcooneycenter.org/wp-content/uploads/2012/12/GLR_TechnologyGuide_final.pdf

Hutchison, A. (2012). Literacy teachers' perceptions of professional development that increases integration of technology into literacy instruction. *Technology, Pedagogy and Education, 21*(1), 37–56.

Hutchison, A.C., & Colwell, J. (2014). The potential of digital technologies to support literacy instruction relevant to the common core state standards. *Journal of Adolescent & Adult Literacy, 58*(2), 147–156.

Kim, J.S., Guryan, J., White, T.G., Quinn, D.M., Capotosto, L., & Kingston, H.C. (2016). Delayed effects of a low-cost and large-scale summer reading intervention on elementary school children's reading comprehension. *Journal of Research on Educational Effectiveness, 9*(sup1), 1–22.

Kim, J.S., & White, T.G. (2008). Scaffolding voluntary summer reading for children in grades 3 to 5: An experimental study. *Scientific Studies of Reading, 12*(1), 1–23.

Laho, N.S. (2019). Enhancing school-home communication through learning management system adoption: Parent and teacher perceptions and practices. *School Community Journal, 29*(1), 117–142.

Learning Heroes. (2020, May). *Parents 2020: COVID-19 closures a redefining moment for students, parents, & schools*. Retrieved from https://r50gh2ss1ic2mww8s3uvjq1-wpengine.netdna-ssl.com/wp-content/uploads/2020/05/LH_2020-Parent-Survey-Partner.pdf

Leu, D., Forzani, E., Rhoads, C., Maykel, C., Kennedy, C., & Timbrell, N. (2015). New literacies of online research and comprehension: Rethinking the reading achievement gap. *Reading Research Quarterly, 50*(1), 37–59.



Leu, D., Kili, C., & Forzani, E. (2016). *Individual differences in the new literacies of online research and comprehension*. P. Afflerbach (Ed.). New York: Routledge.

Mayer, S.E., Kalil, A., Oreopoulos, P., & Gallegos, S. (2015). *Using behavioral insights to increase parental engagement: The Parents and Children Together (PACT) intervention*. Working Paper No. 21602. National Bureau of Economic Research, Inc. Retrieved from <https://www.nber.org/papers/w21602.pdf>

Office of Special Education Programs (OSEP). (2020a, April). *Evidence-based and promising practices to support continuity of learning for students with disabilities: Practices and resources to support teachers*. Topical Issue Brief. Retrieved from https://osepideasthatwork.org/sites/default/files/SWDLearning-Teachers%20Brief_April%202020.pdf

Office of Special Education Programs (OSEP). (2020b, April). *Evidence-based and promising practices to support continuity of learning for students with disabilities: Practices and resources to support parents and families*. Topical Issue Brief. Retrieved from https://osepideasthatwork.org/sites/default/files/SWDLearning-Families%20Brief_April%202020.pdf

Ohio Department of Education (ODE). (2020a, January). *Ohio's plan to raise literacy achievement*. Retrieved from <https://education.ohio.gov/getattachment/Topics/Learning-in-Ohio/Literacy/Ohios-Plan-to-Raise-Literacy-Achievement.pdf.aspx?lang=en-US>

Ohio Department of Education (ODE). (2020b, April). *Remote learning resource guide during the coronavirus pandemic ordered school-building closure*. Retrieved from <http://education.ohio.gov/getattachment/Topics/Student-Supports/Coronavirus/Remote-Learning-Resource-Guide.pdf.aspx?lang=en-US>

Ohio Department of Education (ODE). (2019). *Each child our future: Ohio strategic plan for education: 2019–2024*. Retrieved from <http://education.ohio.gov/getattachment/About/EachChildOurFuture/Final-Strategic-Plan-Board-Approved.pdf.aspx?lang=en-US>

Pytash, K.E., & O'Byrne, W.I. (2014). Research on literacy instruction and learning in virtual, blended, and hybrid environments. In R.E. Ferdig & K. Kennedy (Eds.), *Handbook on Research on K–12 Online and Blended Learning* (pp. 179–200). Carnegie Mellon University. Pittsburgh, PA: ETC Press.



- Regional Educational Laboratory (REL) Mid-Atlantic. (2020, April). Learning remotely in the age of COVID-19: Lessons from evidence and concerns for equity. Webinar. Retrieved from <https://ies.ed.gov/ncee/edlabs/regions/midatlantic/app/Events#EventId:2259,EventType:archived,Page:1>
- Reich, J., et al. (2020) *Remote learning guidance from state education agencies during the COVID-19 pandemic: A first look*. MIT Teaching Systems Lab, Massachusetts Institute of Technology. Retrieved from <https://tsl.mit.edu/covid19/>
- Rice, M.F. (2017). Analyzing text cohesion in online learning environments: Implications for students with reading difficulties. Special Issue. *ICT and Inclusive Education*, 69(3), 107–123.
- Rice, M.F. (2018). Supporting literacy with accessibility: Virtual school course designers' planning for students with disabilities. *Online Learning Journal*, 22(4), 161–179.
- Rideout, V., & Katz, V.S. (2016). *Opportunity for all? Technology and learning in lower-income families*. A Report of the Families and Media Project. New York: The Joan Ganz Cooney Center at Sesame Workshop. Retrieved from https://www.joanganzcooneycenter.org/wp-content/uploads/2016/01/jgcc_opportunityforall.pdf
- Samudra, P.G., Wong, K.M., & Neuman, S.B. (2019). Promoting low-income preschoolers' vocabulary learning from educational media: Does repetition support memory for learned word knowledge? *Journal of Cognitive Education and Psychology*, 18(2), 32–44.
- Senechal, M., & Young, L. (2008). *The effect of family literacy interventions on children's acquisition of reading from kindergarten to grade 3: A meta-analytic review*. Retrieved from https://lincs.ed.gov/publications/pdf/lit_interventions.pdf
- Vaala, S., & Takeuchi, L. (2012, Summer). *Parent co-reading survey*. A Cooney Center QuickReport. The Joan Ganz Cooney Center at Sesame Workshop. Retrieved from http://www.joanganzcooneycenter.org/wp-content/uploads/2012/11/jgcc_ereader_parentsurvey_quickreport.pdf
- White, T.G., & Kim, J.S. (2008). Teacher and parent scaffolding of voluntary summer reading. *The Reading Teacher*, 62(2), 116–125.

Willingham, D.T. (2017). *The reading mind: A cognitive approach to understanding how the mind reads*. San Francisco, CA: Jossey-Bass.

Wolf, M. (2018). *Reader, come home: The reading brain in a digital world*. New York: HarperCollins.

York, B.N., Loeb, S., & Doss, C. (2019). One step at a time: The effects of an early literacy text-messaging program for parents of preschoolers. *Journal of Human Resources, 54*(3), 537–566.

Zawilinski, L., Forzani, E., Timbrell, N., & Leu, D.J. (2019). *Best practices in teaching the new literacies of online research and comprehension*. (L.M. Morrow & L.B. Gambrell, Eds.). New York: Guilford Publications.





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