

Best Practices for Digital Reading

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Created by the INFOhio Early Literacy Task Force

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Best Practices for Digital Reading

Best Practices for Digital Reading - Early Literacy: An Introduction

Reading is an act of learning, growth, pleasure and for some, frustration. It is one way humans interact and react. Like any act of growth, reading takes practice and patience, and will be easier for some than others, but it is an essential part of learning in our culture.

In the 21st century, there is no longer one way for text to be delivered and read. Today's learners can access both print and digital text. They are expected to comprehend text in all formats, and use that understanding to create and evaluate. Numerous studies show that humans read digital text – words on a television, computer, or handheld device – differently than printed text. The very nature of digital text – pixels, word layout, scrolling – leads readers to skim, lose focus, and grow tired (Konnikova). Skilled readers will work to make the transition, but those who are learning to read and reading to learn, students in elementary, middle, and secondary school, need additional support and instruction to master the comprehension, evaluation, and synthesis of digital text's concepts.

[INFOhio](#), Ohio's PreK-12 digital library, leads in promoting the use of digital text in classrooms. This state-funded collection of resources has a variety of texts and resources that help educators incorporate the skills and strategies needed to develop strong readers of text online. With access to thousands of reliable and authentic texts provided at no cost, all Ohio educators can incorporate digital text from INFOhio into curriculum and instruction. All Ohio school staff, parents, and students have access to INFOhio's resources. When not at school, a username and password is required. Please visit support.infohio.org for more information.

When it comes to developing digital readers, educators must make real efforts to ensure that the necessary skills are being addressed. Teachers must encourage and teach digital reading, along with print reading, to develop literate digital citizens. While the term “digital native” may apply to millennial students, they live here as tech-comfy and not tech-savvy; they play and relax with tech, but they don't necessarily work with it. It is the responsibility of teachers and parents to help students become sophisticated as “info-sumers, critical thinkers, and savvy participants in digital space (Maiers).”

The best practices in this document are based on the findings from numerous studies as well as reflections from classroom teachers and educational leaders. Please use this as a guide to help you lead your students to be strong and close readers of digital text, prepared to engage, connect, and reflect when presented with text from any source. In addition, please follow the [recommendations for use of screen time by children made by the American Association of Pediatrics](#):

- Younger than 18 months - avoid use of screen media
- 18-24 months - choose high-quality media, adult involvement is encouraged
- 2-5 years - limit screen time to one hour a day, adult involvement is encouraged
- 6 and older - consistent limits on time and types of media, avoid using media in place of sleep or physical activity

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Adult/Child/Text Relationship	Best Practices for Reading of Digital Text	Research/Source	Practice in Action
<p><i>Adult Practice:</i> Curriculum/Teaching</p> <p>Teaching Practices: Interaction</p>	<p>Adults should interact with young readers when using digital text</p>	<p>One of the best ways to help young readers learn to read, comprehend and enjoy books, and benefit academically from reading is when an adult shares a book in any format with a child. Reading aloud and talking about the content is a key part of vocabulary development and comprehension. Children who use technology with parent or adult interaction are at an advantage to those students who are not exposed to adults as examples of how to use digital media (Guernsey and Levine 129).</p>	<ul style="list-style-type: none"> ● One-on-one instruction - use one device ● Large or small group instruction - use computer with projector ● Adult models and supports reader ● Use the lesson plans listed below: <p>Preschool - Opposites using Early World of Learning</p> <p>Kindergarten - Friendship using BookFlix</p> <p>First Grade - Physical Fitness using BookFlix</p> <p>Second/Third Grade - Physical Fitness using World Book Kids</p>

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Parent/Caregiver Involvement	Teachers/caregivers and parents should communicate frequently about the use of digital text.	Communication between the adults who monitor student learning is an important part of a successful education. When a teacher opens the discussion about use of technology, a partnership can evolve that helps young readers actively engage with digital text. Sharing quality text from websites or on apps, and encouraging use at home is a great way to help early readers begin to identify digital text as a source for information and entertainment (Cahill and McGill-Franzen).	<ul style="list-style-type: none"> • Send home Early World of Learning information and include Little Books available • Create a newsletter and provide information and activities for online text • Hold a meeting to introduce parents to the Best Practices they can use for reading digital text

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<p>Teaching Practices: Lesson Development</p>	<p>Digital text should be used in lessons and instruction.</p>	<p>Often educators will use technology for centers and individual interventions. However, when digital text is used as part of the teacher's lesson, students have the opportunity to see its use modeled and scaffolded (Guernsey and Levine 94).</p>	<ul style="list-style-type: none"> ● Use digital text displayed through a projector for all subject areas ● Model strategies such as active reading when using digital text in instruction ● Use the lesson plans and parent activities listed below: <p>Preschool - Opposites using Early World of Learning</p> <p>Kindergarten - Friendship using BookFlix</p> <p>First Grade - Physical Fitness using BookFlix</p> <p>Second/Third Grade - Physical Fitness using World Book Kids</p>

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Individualized Learning/Differentiation	<p>The use of digital text and technology must be matched with student need and scaffolded.</p>	<p>Technology should be a support and not a replacement in the education of young children. The use of digital text and other technologies should be carefully applied based on the child's developmental and educational levels. Providing guidance and support is a key role of the teacher or other adult who is interacting with the young learner and digital text (Biancarosa and Griffiths, National Association for Young Children and Fred Rogers Center for Early Learning and Children's Media, Guernsey and Levine 95).</p>	<ul style="list-style-type: none"> ● Use digital text features to help individual learners ● stop and pause button for questions ● turn on/off read aloud functions ● use translation of text when and where available ● replay or reread the text as needed for maximum understanding ● Highlight text as read ● Use the lesson plans linked below: <p>Preschool - Opposites using Early World of Learning</p> <p>Kindergarten - Friendship using BookFlix</p> <p>First Grade - Physical Fitness using BookFlix</p> <p>Second/Third Grade - Physical Fitness using World Book Kids</p>

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<p>Multi-modal Learning</p>	<p>Connect digital text to other forms of media - print, audio, or visual.</p>	<p>Immersing children in multiple forms of media allows them to explore, interact, and engage with not only the media, but the concepts and ideas within. Providing learners with multiple forms of media - pairing an e-book with its print version, or showing a movie that accompanies a print book - helps students connect information sources and seek them out for their own learning and entertainment (Guernsey and Levine 40).</p>	<ul style="list-style-type: none"> • Show resources such as a BookFlix title and the print copy of the book • Use the videos and Little Books available in Early World of Learning • Use the lesson plans linked below: <p>Preschool - Opposites using Early World of Learning</p> <p>Kindergarten - Friendship using BookFlix</p> <p>First Grade - Physical Fitness using BookFlix</p> <p>Second/Third Grade - Physical Fitness using World Book Kids</p>

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<p>Integration of Skills and Knowledge</p>	<p>Teach digital operations for navigation and activation of digital text as part of a reading lesson</p>	<p>Teaching print concepts when using print is second-nature for most, but teaching the same concepts for digital text requires new skills, contexts, and aides. In order to better read and understand digital text, students must be taught how to use the digital platform and the tools that can be found there. Icons, hyperlinks, activation buttons for audio, printing, and note-taking are all part of the navigation needed for digital text. Modeling the use of digital platforms to read and interact will help young learners find their own way through the content of an online resource. (Larson, Guernsey and Levine 23, Javorsky).</p>	<ul style="list-style-type: none"> • Model digital operations to be used as either introductory or review without assumption students have prior knowledge from outside of school • Use Tech Skills for Online Testing to integrate digital operations into lessons • Use the lesson plans linked below: <p>Preschool - Opposites using Early World of Learning</p> <p>Kindergarten - Friendship using BookFlix</p> <p>First Grade - Physical Fitness using BookFlix</p> <p>Second/Third Grade - Physical Fitness using World Book Kids</p>

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Metacognition & Perseverance	Teach metacognition and perseverance strategies for student learning	The need to monitor one’s own learning for understanding is an important part of reading whether using print or digital formats. Having the determination to continue working on a task despite difficulty or fatigue is also critical when guiding students through the labyrinth of digital text, complete with ads, hyperlinks, and interactive features (Tanner, Jabr, Konnikova, US Department of Education, Office of Technology).	<ul style="list-style-type: none"> • Students will pause at the end of each paragraph and summarize what they have learned to check on their own learning • Use graphic organizers to help students identify purpose and desired outcomes • Model reading which addresses the inclusion of ads or links. “I can look at that link after I am done with this paragraph.” • Use the lesson plans linked below: <p>Preschool - Opposites using Early World of Learning</p> <p>Kindergarten - Friendship using BookFlix</p> <p>First Grade - Physical Fitness using BookFlix</p> <p>Second/Third Grade - Physical Fitness using World Book Kids</p>

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<p><i>Child Learning Strategies:</i> Metacognition & Perseverance Active Reading</p>	<p>Students should engage, communicate, connect, create, and reflect when reading digital text.</p>	<p>Today’s level of technology has provided both teachers and learners with opportunities to build upon knowledge acquisition, share it with others, and create new ideas and platforms from the initial learning. Using digital text should lead to a variety of outcomes for students: To engage and interact with text; to share verbally, digitally, and in writing the ways the text has impacted or influenced the reader; to connect in person or virtually with others who feel the same way; to think about how reading the digital text was harder or easier, better or worse, more fun or not and once again, to share this and connect with similar readers to discuss these outcomes. These practices must become part of a young learner’s thinking process when reading digital text. In fact, by connecting with other learners, students will continue to identify and use online research and comprehension skills for reading (Tanner, Jabr, Konnikova, Schwartz, 2016, US Department of Education, Leu, et al).</p>	<ul style="list-style-type: none"> ● Teach active reading strategies ● Collaborative writing such as brochures, critiques, etc ● Book clubs ● “Book Nook” ● Use Twitter to connect with authors ● Use student survey after reading to promote student reflection of learning ● Use the lesson plans linked below: <p>Preschool - Opposites using Early World of Learning</p> <p>Kindergarten - Friendship using BookFlix</p> <p>First Grade - Physical Fitness using BookFlix</p> <p>Second/Third Grade - Physical Fitness using World Book Kids</p>

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<p><u>Metacognition</u>: Skills and Knowledge</p>	<p>Students should recognize and use digital tools while reading digitally to maximize comprehension.</p>	<p>Many online reading platforms and devices come equipped with note-taking tools, highlighting tools, and built-in dictionaries. As part of their digital reading experience, students should use these if provided, and if not, adapt accordingly for maximum comprehension by using graphic organizers, or simply pencil and paper(Tanner, Korbey).</p>	<ul style="list-style-type: none"> ● Model use of text and interface before assigning reading ● Use Tech Skills for Online Testing to help students master the use of digital tools ● Use the lesson plans linked below: <p>Preschool - Opposites using Early World of Learning</p> <p>Kindergarten - Friendship using BookFlix</p> <p>First Grade - Physical Fitness using BookFlix</p> <p>Second/Third Grade - Physical Fitness using World Book Kids</p>

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<p>Metacognition: Planning for Learning</p>	<p>Students should have a plan and prioritize outcomes before reading a digital text.</p>	<p>When presented with digital text that has ads, hyperlinks, or interactive features, asking students to create a simple plan for staying on task will help them complete the reading and comprehend the text. Asking students to first read the text and talk with a partner about the story, and then to go back and click on hyperlinks or interactive features will help them to focus on the text, and not its context (Jabr, Guernsey and Levine 198).</p>	<ul style="list-style-type: none"> ● Develop a simple three-step plan for reading digital text ● Ask students to reflect on their learning using a plan after the lesson ● Use the lesson plans linked below: <p>Preschool - Opposites using Early World of Learning</p> <p>Kindergarten - Friendship using BookFlix</p> <p>First Grade - Physical Fitness using BookFlix</p> <p>Second/Third Grade - Physical Fitness using World Book Kids</p>

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Text: Features and Sources	Digital text should be high-quality (“high-quality writing, images, narration and audio support, as well as extensive navigational controls for interactivity.”) Cahill and McGill-Franzen, 2013.	As when providing print text, it is important to expose students to digital text that is high-quality: well written, timely, with clear and appealing images, and authentic for purpose. Providing readers with a good example of quality digital text will help establish the use of this content throughout the learner’s education (Cahill and McGill-Franzen).	<ul style="list-style-type: none"> ● Use INFOhio’s resources for modeling high-quality text that provides audio support and navigational controls. ● Incorporate multiple points of views on a topic using blogs, digital articles, and databases. ● Provide authentic reading experiences - find an article on Twitter using hashtags to search. ● Use the lesson plans linked below: <p>Preschool - Opposites using Early World of Learning</p> <p>Kindergarten - Friendship using BookFlix</p> <p>First Grade - Physical Fitness using BookFlix</p> <p>Second/Third Grade - Physical Fitness using World Book Kids</p>

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Text: Features and Sources	Choose text that is bimodal; use of audio and highlighting of text.	<p>Highlighted text during read-aloud of digital text can improve focus and help when learning to read. It will also help early readers keep track and remember better (Guernsey and Levine 92).</p>	<ul style="list-style-type: none"> • Use INFOhio's resources to be incorporated audio and highlighting of text. • Use the lesson plans linked below: <p>Preschool - Opposites using Early World of Learning</p> <p>Kindergarten - Friendship using BookFlix</p> <p>First Grade - Physical Fitness using BookFlix</p> <p>Second/Third Grade - Physical Fitness using World Book Kids</p>

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Text: Features and Sources	Use high interest, complex texts (200-300 Lexile points above a student's level) with quality audio such as books on tape or bimodal text and require students to read aloud as well	When accompanying text with audio, readers are being exposed to the prosody or features of speech that affect meaning. Look for digital texts with speech-like audio as it is key in improving comprehension. Exposing students to a slightly more difficult text with the scaffolding of audio exposes them to a higher level of prosody, and can lead to improvements in comprehension (Brown).	<ul style="list-style-type: none"> • Search for articles in INFOhio's Explora. A Lexile limiter is available to differentiate text levels. • Use the narration feature available in Explora's articles. • Use the lesson plans linked below: <p>Preschool - Opposites using Early World of Learning</p> <p>Kindergarten - Friendship using BookFlix</p> <p>First Grade - Physical Fitness using BookFlix</p> <p>Second/Third Grade - Physical Fitness using World Book Kids</p>

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Text: Features and Sources	Prioritize use of texts without ads, hyperlinks, or other interactive features.	<p>The “bells and whistles” found in many digital texts can be distracting and cause students to lose focus and lower comprehension. While using some texts with the distractions is important for media literacy, young readers will benefit from cleaner digital displays where text takes the main role (Guernsey and Levine 85, Jabr).</p>	<ul style="list-style-type: none"> Choose text from INFOhio's databases which is ad-free and hyperlink free. Model for students how to stay on task and complete a text before going on to games or puzzles in BookFlix or Early World of Learning. Develop a simple three-step plan for reading digital text Use the lesson plans linked below: <p>Preschool - Opposites using Early World of Learning</p> <p>Kindergarten - Friendship using BookFlix</p> <p>First Grade - Physical Fitness using BookFlix</p> <p>Second/Third Grade - Physical Fitness using World Book Kids</p>

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Glossary

Activation:

Cause to function or act through participation such as logging in or clicking on start

Audio media:

Communication that is listened to in order to convey information; can be done through radio, tv, audiobooks, etc.

Bimodal text:

Providing two methods for the reader to take in the information, such as highlighting the text as it is read aloud by the electronic device

Complex texts:

Text complexity is looking at the qualitative, quantitative and reader and task such as the writing's reading level, purpose, structures, the type of language, and the amount of reader background knowledge required

Curriculum:

Course of study to fulfill district, state and/or national standards

Differentiation:

Teaching students at different level based on data or formative assessments; introduction, recollection, higher level thinking

Digital media:

Digitized content that can be transmitted over the internet or computer networks

Digital operations:

Actions involved in reading of digital text, such as clicking, scrolling, highlighting, etc.

Digital platform:

An app, a website, an eLearning environment

Digital tools:

Various tools that can be used through a computer or electronic device such as highlighting, audio of text, etc.

Digital text:

Text or writing that is read on an electronic device such as a computer or tablet

High interest:

Text that concerns, involves, draws the attention of, or arouses the curiosity of a person

Individualized learning:

Teaching a student based on individual's needs

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Media:

The means of communication, as radio and television, newspapers, magazines, and the Internet, that reach or influence people widely

Metacognition:

Higher-order thinking that enables understanding, analysis, and control of one's process of knowledge, especially when engaged in learning such as creating a project rather than repeating information

Multimodal:

Learning through a variety of modes

Navigation:

To move from one part to another of a website, document, etc., especially by using the links; can be done through scrolling, clicking and other various means

Perseverance:

To decide to continue in a course of action, a purpose, a state, etc., especially in spite of difficulties, obstacles, or discouragement.

Print media:

Using print sources as a means to communicate information

Scaffolding:

Model or demonstrate how to solve a problem then assist as needed to build understanding at different levels

Visual media:

Using visuals, such as pictures or videos, to communicate information

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