# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>4</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>6</td>
</tr>
<tr>
<td>DEFINITION</td>
<td>7</td>
</tr>
<tr>
<td>COMPONENTS</td>
<td>8</td>
</tr>
<tr>
<td>CONTINUUM</td>
<td>11</td>
</tr>
<tr>
<td>- Digital Citizenship</td>
<td>13</td>
</tr>
<tr>
<td>- Standards-Aligned Content &amp; Tools</td>
<td>21</td>
</tr>
<tr>
<td>- Active Learning &amp; Engagement</td>
<td>28</td>
</tr>
<tr>
<td>- Formative Assessment &amp; Feedback</td>
<td>35</td>
</tr>
<tr>
<td>- Accessibility</td>
<td>41</td>
</tr>
<tr>
<td>GLOSSARY</td>
<td>47</td>
</tr>
<tr>
<td>APPENDIX</td>
<td>51</td>
</tr>
<tr>
<td>- Digital Learning Best Practices Overview</td>
<td>52</td>
</tr>
</tbody>
</table>
ACKNOWLEDGMENTS

The Mississippi Department of Education appreciates the dedication of the following educators who contributed their talent and extensive knowledge to the review of this document:

> Jasmine Bell  |  REGIONAL DIGITAL LEARNING COACH COORDINATOR  |  
Office of Digital Learning  
MISSISSIPPI DEPARTMENT OF EDUCATION

> Anna Bilyeu, Ed.S.  |  ITEACH PROJECT LEAD  |  
> Kristen Klinger, Ed.S.  |  ITEACH PROJECT LEAD  |  
> The team from iTeach  
Bagwell College of Education, School of Instructional Technology and Innovation,  
KENNESAW STATE UNIVERSITY

> Dr. Stacy Baudoin  |  ASSISTANT SUPERINTENDENT OF SECONDARY EDUCATION  |  
PEARL RIVER COUNTY SCHOOL DISTRICT

> Natalie Breithaupt  |  REGIONAL DIGITAL LEARNING COACH COORDINATOR  |  
Office of Digital Learning  
MISSISSIPPI DEPARTMENT OF EDUCATION

> Amy Elizabeth Butler  |  GIFTED TEACHER  |  
West Side Elementary School  
PICAYUNE SCHOOL DISTRICT

> Dr. Hope Durst  |  INSTRUCTOR OF EDUCATION IN RESIDENCE  |  
School of Education  
MISSISSIPPI UNIVERSITY FOR WOMEN

> Martha Hanna  |  PRINCIPAL  |  
Madison Station Elementary School  
MADISON COUNTY SCHOOL DISTRICT

> Eva Harvell  |  DIRECTOR OF TECHNOLOGY  |  
PASCAGOULA-GAUTIER SCHOOL DISTRICT

> Dr. Kristi Livingston  |  EDUCATIONAL CONSULTANT  |  
NORTH MISSISSIPPI EDUCATION CONSORTIUM

> Brett Mayfield  |  REGIONAL DIGITAL LEARNING COACH COORDINATOR  |  
Office of Digital Learning  
MISSISSIPPI DEPARTMENT OF EDUCATION
This project was made possible through funding from the Mississippi Alliance for Nonprofits, with additional support from CDW and Intel.

Special thanks to:
> Cary Cuiccio | IMPACT POINT PARTNERS |
> Jessica Johnson | IMPACT POINT PARTNERS |
> Vanessa Peters, Ph.D. | DIGITAL PROMISE |
INTRODUCTION

The Office of Digital Learning, within the Mississippi Department of Education (MDE), supports educators as they build capacity to deliver high-quality digital learning experiences to students across Mississippi.

The Office of Digital Learning is committed to supporting districts as they implement robust, comprehensive digital instruction aligned with the strategic goals of the State Board of Education: to ensure that all students become proficient and show growth in all assessed areas, that every school has effective educators and leaders, and that every student graduates from high school ready for college and career.

TECHNOLOGY INTEGRATION

The MDE does not officially endorse any specific technology standards or models of teaching with technology. However, the resources provided within this guide are made available to assist educators and administrators with the integration of technology into classrooms, schools, and school districts. Local schools have discretion over which technology partners and products are utilized in their districts. For legal advice regarding technology services, please contact your local school board attorney.

COMPUTER SCIENCE CONNECTIONS

The Digital Learning Instructional Guide is designed to support educators and district and school leaders as they work to effectively integrate technology into classroom instruction. Digital learning should not be confused with the academic area of computer science, which is the study of computers and algorithmic processes, coding, and logical thinking, including computer principles, their hardware and software designs, their implementation, and their impact on society.

Although digital learning and computer science are not synonymous, they do share commonalities. Computer science includes concepts such as the use and operation of devices and applications, internet safety, and social and cultural impacts, which are necessary foundations for educators and students to effectively utilize technology. Connections between digital learning and computer science will be highlighted throughout this guide.

UNDERSTANDING TERMINOLOGY

Throughout the guide, readers will encounter words and phrases that are bold and purple. These words and phrases may be unfamiliar or have context-specific meanings and are defined in the Glossary at the end of this document.
Digital learning is a widely used term used to describe various ways to utilize technology to enrich instruction, from students using devices during face-to-face classroom instruction to students receiving instruction in a fully online setting and any number of configurations in between. However, it is more than devices and classroom settings. Digital learning also encompasses the use of technology to transform how educators teach and students learn. High-quality digital learning relies on many essential strategies, including personalized instructional practices, improved access to content, and enhanced learning experiences.

To provide clarity to educators, students, parents, and other stakeholders as they implement digital learning programs, the MDE has developed the following definition for digital learning:

**DIGITAL LEARNING** delivers rigorous, engaging and personalized instruction through a wide range of technology-based content and communication tools, curricular models, instructional strategies, adaptations, and services to every student in traditional and virtual learning environments.

When effectively utilizing technology, *educators* can personalize instruction by:

- providing students access to multimedia content;
- gathering real-time data to inform student needs;
- engaging students with activities that promote creativity, collaboration, communication, and critical thinking; and
- providing choices for how students demonstrate their learning.

When *students* receive guidance on the selection and utilization of technology, they can begin to take control of their learning by:

- selecting how they interact with and learn content;
- applying timely feedback to further guide their learning;
- completing activities that allow for creativity, collaboration, communication, and critical thinking; and
- showing mastery of content in a variety of ways.

**Personalized instruction** describes a flexible learning environment in which students play an active role in designing learning activities, allowing them to be tailored or personalized to students’ individual learning needs and preferences.

Personalized instruction can be misconstrued as a requirement for teachers to design different learning activities for each student. However, personalized learning focuses on student agency, or the decisions made by the student, and not the adaptations made by the teachers.

The following resources can assist in the development of a shared understanding of personalized learning:

- **A Vision for Personalized Learning in K-12 Schools** (Kennesaw State University)
- **Georgia Personalized Learning Standards**
- **A Conceptual Framework for the Personalized Learning Movement**
- **Personalized Learning** (Academic Development Institute)
COMPONENTS

At its core, digital learning cannot take place without the presence of technological devices and digital tools.

**DIGITAL TOOLS** are any technology-based content, app, software, extension, website, or platform intentionally selected to promote student learning in multiple ways (e.g., accessibility, creativity, critical thinking, communication, collaboration, engagement, assessment, etc.).

Beyond the foundation of digital tools, this guide is organized around five components of digital learning that represent areas of instructional enhancements within the learning environment. Mississippi is committed to building educators’ capacity to utilize digital tools and to support effective implementation of digital learning, allowing educators to:

- **Support responsible DIGITAL CITIZENSHIP**
  - EXAMPLES: Media literacy, internet safety, etiquette, digital wellness, etc.

- **Integrate STANDARDS-ALIGNED CONTENT AND TOOLS** to create enhanced learning experiences
  - EXAMPLES: Grade-appropriate learning activities with real-life connections, virtual field trips, classroom video conferences with experts, etc.

- **Engage students in more ACTIVE FORMS OF LEARNING** and provide options for demonstrating mastery
  - EXAMPLES: Collaborating through group work, project-based learning, or peer review activities, creating a video or audio product, multimedia presentation, or digital portfolio, etc.

- **Provide FORMATIVE ASSESSMENTS AND FEEDBACK** to students
  - EXAMPLES: Use data from an online quiz to find out what students know/don’t know and adjust the instructional approach, give students feedback via text, audio, or video, etc.

- **Ensure learning opportunities are ACCESSIBLE TO ALL STUDENTS**
  - EXAMPLES: Adapt content and design to support all students, including students from marginalized, rural, and low-income populations, English learners, and students with disabilities, provide flexibility and accessibility, access to a device and internet, etc.
To better understand these five components, the following sections describe each in greater detail, including what they are and what they are not. All five components are broken into elements that explore effective teaching practices enhanced by digital tools.
In addition to the components and elements listed above, a roadmap, or *implementation continuum*, has been created for each element to provide guidance for integrating technology within instructional practices.
Implementation of digital learning is a journey that educators and students should explore and enjoy. Implementation continuums will help educators navigate decisions regarding the selection of digital tools, curation of materials, and overall design of learning experiences. Each continuum illustrates a progressive range of teaching practices within each element of the digital learning components. Examples of knowledge and skills educators should see demonstrated by students as a result of their own journeys through the continuum are also provided.

The implementation continuums are not intended to be evaluative or dictate specific activities or tools, but rather help educators identify where they currently fall along their journey. (Remember: The most helpful aspect of the implementation continuums is not checking off items, but the conversations and reflections which result from their use.) Additional resources, quick wins for the classroom, and specific connections to existing MDE supports are provided along the continuum.

HOW TO USE THE IMPLEMENTATION CONTINUUMS
Identify where your district or school falls in the digital learning implementation journey

Recognize strengths and areas of growth for each digital learning component

Provide school leaders and educators with supports aligned to the established digital learning goals

Communicate digital learning expectations with school leaders and educators

Create district or schoolwide digital learning goals and revise digital learning plans to reflect the vision and goals

Support the creation of a district or schoolwide vision for technology integration

EXAMPLE SUPPORTS: Research-based articles, research-based ideas from the “Strategies” section of BrightBytes Technology & Learning, PLCs, professional development, etc.
Digital citizenship includes more than just teaching students how to be safe, kind, and responsible in a digital world. It also includes being comfortable using the internet, applications, and devices; finding a healthy balance in time spent on various digital and non-digital activities; recognizing the impact of media use on emotional well-being; and being capable of critically analyzing news and other media, including determining credible sources and proper use of copyrighted materials. Educators should model these skills daily and incorporate conversations about these skills whenever technology is used in the classroom.

**Digital Citizenship is NOT...**

- only protecting your passwords or preventing cyberbullying.
- a lesson taught once a year.
- a course only taught in a computer lab by the computer instructor.

**Want to learn more about this component?**

Review these Best Practices for Digital Learning Deep Dives:

- [Incorporate digital citizenship](#)
- [Be consistent with technology tools](#)
- [Create structured routines and procedures](#)
**Appropriate relationships, communication, and online behavior** *(e.g., knowledge of cyberbullying, appropriate use of cyberspeech and emojis)*

**PHASE 1**
- Educators provide guidance on recognizing cyberbullying and inappropriate cyberspeech and behaviors
- Educators provide limited opportunities for digital or online communication with classroom peers *(e.g., discussion boards, peer-to-peer feedback)*

**PHASE 2**
- Educators provide guidance on reporting cyberbullying and inappropriate cyberspeech and behaviors
- Educators provide guidance for positive, empathetic, and productive digital or online communication with classroom peers

**PHASE 3**
- Educators model appropriate ways to handle cyberbullying and inappropriate cyberspeech and behaviors, including guidance on where students can seek social-emotional supports
- Educators provide frequent structured practice for positive, empathetic, and productive digital or online communication with classroom peers

**PHASE 4**
- Educators create opportunities to discuss and reflect on appropriate online relationships and behaviors
- Educators foster a classroom culture that promotes positive, empathetic, and productive digital or online communication with classroom peers
- Educators provide opportunities for positive, empathetic, and productive digital or online communication with peers in other classrooms, subject areas, or geographic locations

**EDUCATORS SHOULD SEE...**
- Students monitoring peer-to-peer communications, reporting cyberbullying or inappropriate cyberspeech and behaviors, and seeking social-emotional supports if needed
- Students engaging in appropriate online relationships and behaviors with others
- Students participating in positive, empathetic, and effective digital or online communication with peers located both inside and outside of the classroom
### ELEMENT 2

#### Media balance and well-being

*(e.g., guidelines around social media use, awareness of one's own emotions)*

<table>
<thead>
<tr>
<th>PHASE 1</th>
<th>PHASE 2</th>
<th>PHASE 3</th>
<th>PHASE 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educators occasionally schedule screen-free activities to promote healthy digital <strong>media balance</strong> <em>(e.g., videos, games, websites, music, etc.)</em></td>
<td>Educators regularly schedule screen-free activities to promote healthy digital media balance</td>
<td>Educators provide opportunities to promote and reflect on the importance of healthy digital media balance, including maintaining balance between ways to engage with digital media <em>(e.g., consumption, creation, communication, or collaboration)</em> and the purpose of the digital media <em>(e.g., social, leisure, academic)</em></td>
<td>Educators share data, research, and real-world examples and facilitate discussions about the impact of media <em>(especially social media)</em> and ways to maintain a healthy balance</td>
</tr>
<tr>
<td>Educators rarely discuss <strong>emotional awareness</strong> when consuming <strong>digital media</strong> or using digital communication tools <em>(e.g., social media, text messaging, etc.)</em></td>
<td>Educators regularly discuss emotional awareness when consuming digital media or using digital communication tools</td>
<td>Educators provide guidance on where to find social-emotional supports for the use of digital media or digital communication tools</td>
<td>Educators regularly “check-in” with students to monitor their media balance and well-being and promote social-emotional supports when needed</td>
</tr>
<tr>
<td><strong>PHASE 1</strong></td>
<td><strong>PHASE 2</strong></td>
<td><strong>PHASE 3</strong></td>
<td><strong>PHASE 4</strong></td>
</tr>
<tr>
<td>Educators occasionally schedule screen-free activities to promote healthy digital <strong>media balance</strong> <em>(e.g., videos, games, websites, music, etc.)</em></td>
<td>Educators regularly schedule screen-free activities to promote healthy digital media balance</td>
<td>Educators provide opportunities to promote and reflect on the importance of healthy digital media balance, including maintaining balance between ways to engage with digital media <em>(e.g., consumption, creation, communication, or collaboration)</em> and the purpose of the digital media <em>(e.g., social, leisure, academic)</em></td>
<td>Educators share data, research, and real-world examples and facilitate discussions about the impact of media <em>(especially social media)</em> and ways to maintain a healthy balance</td>
</tr>
<tr>
<td>Educators rarely discuss <strong>emotional awareness</strong> when consuming <strong>digital media</strong> or using digital communication tools <em>(e.g., social media, text messaging, etc.)</em></td>
<td>Educators regularly discuss emotional awareness when consuming digital media or using digital communication tools</td>
<td>Educators provide guidance on where to find social-emotional supports for the use of digital media or digital communication tools</td>
<td>Educators regularly “check-in” with students to monitor their media balance and well-being and promote social-emotional supports when needed</td>
</tr>
</tbody>
</table>

**EDUCATORS SHOULD SEE…**

- Students understanding the adverse effects of extended screen time and working to maintain a healthy digital media balance
- Students recognizing their emotions when using digital media or digital communication tools and seeking appropriate supports when needed
- Students utilizing features of digital tools to share their well-being with educators
## Digital fluency with devices, digital tools, and the internet

### PHASE 1
- Educators provide limited support on the operation of devices, digital tools, and the internet
- Educators infrequently incorporate the use of devices, digital tools, and the internet in their instruction

### PHASE 2
- Educators provide limited opportunities to practice the use of devices, applications, and the internet
- Educators create routines and procedures to support the care of devices
- Educators provide guidance on basic troubleshooting techniques

### PHASE 3
- Educators consistently provide opportunities to practice the use of devices, digital tools, and the internet
- Educators create routines and procedures for all aspects of the use and care of devices, digital tools, and the internet
- Educators model how to find additional information on the operation and troubleshooting of devices and digital tools

### PHASE 4
- Educators create an environment where students can fluently utilize commonly used devices, digital tools, and the internet
- Educators create an environment where students can effectively execute routines and procedures for all aspects of the use and care of devices, digital tools, and the internet
- Educators provide opportunities for students to lead peers in troubleshooting techniques for the operation of devices and digital tools

#### EDUCATORS SHOULD SEE...
- Students demonstrating digital fluency and proper care with a variety of devices, digital tools, and the internet
- Students performing basic troubleshooting techniques with devices and digital tools
- Students researching information on the operation and troubleshooting of devices and digital tools
Understanding news and media literacy, fair use, intellectual property, and copyright laws
(e.g., knowledge of reputable sources, identifying sources of bias, plagiarism, Creative Commons, etc.)

**PHASE 1**

Educators provide a list of approved digital news and media sources students can use to gather information.

Educators provide limited guidance on copyright laws, including fair use, intellectual property, and plagiarism.

Educators provide limited opportunities to practice proper source citations from a variety of sources.

**PHASE 2**

Educators provide limited guidance and support to recognize and analyze reliable digital news and media resources and identify sources of bias.

Educators provide guidance on copyright laws, including fair use, intellectual property, Creative Commons, and plagiarism.

Educators provide opportunities to practice proper source citations from a variety of sources.

**PHASE 3**

Educators provide step-by-step guidance to discern and analyze credible digital news and media sources (e.g., distinguishing news from other types of information, vetting news sources, identifying standards of quality journalism, detecting misinformation, etc.) and any biases the source may contain.

Educators provide opportunities for students to find, select, and analyze credible digital news and media sources and facilitate student reflections to identify biases the source may contain.

Educators model compliance with copyright laws, including fair use, intellectual property, Creative Commons, and plagiarism.

Educators provide opportunities to practice proper source citations from a variety of sources.

**PHASE 4**

Educators provide guidance for using digital tools to generate proper source citations from a variety of sources.

Educators provide regular opportunities to utilize digital tools to generate proper source citations from a variety of sources.

**EDUCATORS SHOULD SEE...**

- Students conducting research online and analyzing digital news and media sources to determine credibility and identify biases
- Students understanding and complying with copyright laws
- Students using digital tools to appropriately cite all sources utilized within learning activities
Monitoring security, privacy, and digital footprint *(e.g., knowledge of phishing and spam, the importance of password protection, etc.)*

<table>
<thead>
<tr>
<th>PHASE 1</th>
<th>PHASE 2</th>
<th>PHASE 3</th>
<th>PHASE 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educators provide limited guidance to recognize phishing and scam attempts</td>
<td>Educators discuss the importance of digital footprints</td>
<td>Educators model how to monitor digital footprints</td>
<td>Educators facilitate student discussions on the importance of digital footprints and anticipating positive and negative effects</td>
</tr>
<tr>
<td>Educators provide limited guidance on the privacy of account information, passwords, and other personal information</td>
<td>Educators provide guidance on how to recognize and report phishing and scam attempts</td>
<td>Educators provide limited opportunities to practice recognizing phishing and scam attempts</td>
<td>Educators provide practice for students to recognize and report phishing and scam attempts using real-world examples</td>
</tr>
<tr>
<td>Educators provide guidance on the privacy of account information, passwords, and other personal information</td>
<td>Educators provide guidance on device security</td>
<td>Educators regularly discuss the importance of the privacy of account information, passwords, and other personal information</td>
<td>Educators provide students the opportunity to take ownership of the security of their devices, accounts, passwords, and personal information</td>
</tr>
<tr>
<td>Educators provide guidance on device security</td>
<td>Educators create effective routines and procedures to promote device security</td>
<td>Educators create effective routines and procedures to promote device security</td>
<td>Educators facilitate student discussions on the importance of digital footprints and anticipating positive and negative effects</td>
</tr>
</tbody>
</table>

**EDUCATORS SHOULD SEE...**

- Students monitoring their digital footprints and anticipating positive and negative effects
- Students recognizing phishing and scam attempts and reporting suspicious activity
- Students taking active responsibility for the security of any devices, accounts, passwords, and personal information
QUICK WINS IN THE CLASSROOM

1. Class contract or agreement for Digital Citizenship.

2. Anchor charts describing clear routines to support students with the use and care of devices, applications, and the internet.

3. Clear troubleshooting tips and strategies, including visuals or video demonstrations, to support student use of devices and digital tools.

4. Class or schoolwide Student Tech Team to lead digital citizenship initiatives.
CONNECTIONS TO MDE RESOURCES

Social-Emotional Learning Standards

MS College- and Career-Readiness Standards for Libraries

MS College- and Career-Readiness Standards for Computer Science:
- **CORE CONCEPT - Computing Systems**: Devices; Hardware and Software; and Troubleshooting
- **CORE CONCEPT - Networks and the Internet**: Cybersecurity
- **CORE CONCEPT - Impacts of Computing**: Culture; Social Interactions; and Safety, Law and Ethics

Professional Growth System:
- **STANDARD 3**: Assists students in taking responsibility for learning and monitors student learning
- **STANDARD 5**: Manages a learning focused classroom community
- **STANDARD 6**: Manages classroom space, time, and resources effectively for student learning
- **STANDARD 7**: Creates and maintains a classroom of respect for all students

ADDITIONAL RESOURCES

- **K-12 Digital Citizenship Curriculum** (Common Sense Education)
- **Be Internet Awesome** (Google)
- **Common Sense Privacy Program** (Common Sense Education)
- **News Literacy Project**
- **Social-Emotional Learning and Digital Citizenship** (CASEL)
- **Digital Citizenship Resource List** (Making Caring Common, Harvard School of Education)
- **Digital Citizenship: Using Technology Appropriately**
- **9 Resources for Teaching Digital Citizenship** (ISTE)
- **Bring Digital Citizenship to the Classroom in Meaningful Ways** (ISTE)
- **ISTE Standards for Educators**: 2.1, 2.2, 2.3, 2.4, & 2.6
Technology integration is the use of devices, digital content and tools, and the internet within classroom learning experiences. Integrating technology should enhance student interaction and understanding of the content included in learning goals. When selecting digital content and tools, educators should be mindful that the use of technology does not change the intent of the standard. As educators plan their lessons, they determine the target skill(s) of instruction and select and/or create content and learning experiences that will help students master the skill(s). At this point, educators choose a digital tool that will transform the lesson by engaging students, enhancing the lesson, or extending the learning.

Standards-Aligned Content & Tools is NOT...

• integrating technology simply to include it in lessons.
• using as many digital tools as possible in your classroom.
• occasionally using a digital tool in your lessons and then expecting students to know exactly how to use the tool.
• transferring traditional classroom content and instructional materials into a digital format without considering how it will affect learning.

Want to learn more about this component?
Review these Best Practices for Digital Learning Deep Dives:
• Ensure that the purpose for using technology is aligned to lesson targets
• Be consistent with technology tools
**ELEMENT 1**

Curate digital content aligned to grade-level standards and lesson targets
(e.g., state/district approved open educational resources, digital textbooks, etc.)

<table>
<thead>
<tr>
<th>PHASE 1</th>
<th>PHASE 2</th>
<th>PHASE 3</th>
<th>PHASE 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educators have limited access to digital <strong>high quality instructional materials</strong> (HQIMs) and use the materials infrequently. Educators select and/or create <strong>digital content</strong> and instructional materials that are not aligned to standards and/or lesson targets.</td>
<td>Educators have access to digital HQIMs and use the materials regularly. Educators select and/or create additional digital content and instructional materials that are partially aligned to standards and/or lesson targets. Educators provide guidance for students on how to locate, select, and use digital HQIMs and other <strong>curated</strong> digital content and instructional materials.</td>
<td>Educators select digital HQIMs and curate additional digital content and instructional materials to create engaging personalized learning experiences that support the standards and/or lesson targets and make meaningful connections to previous and future learning. Educators monitor and observe the effectiveness of digital HQIMs and other curated digital content and instructional materials and seek alternatives as needed.</td>
<td>Educators select digital HQIMs and curate additional digital content and instructional materials to create engaging personalized learning experiences that support the standards and/or lesson targets and make meaningful connections to previous and future learning. Educators select digital HQIMs and curate additional digital content and instructional materials based on collaboration with other content areas to enrich learning. Educators monitor and observe the effectiveness of digital HQIMs and other curated digital content and instructional materials and seek alternatives as needed.</td>
</tr>
</tbody>
</table>

**EDUCATORS SHOULD SEE...**

Students engaging in personalized learning experiences by regularly utilizing digital HQIMs to support the standards and/or lesson targets.
<table>
<thead>
<tr>
<th>PHASE 1</th>
<th>PHASE 2</th>
<th>PHASE 3</th>
<th>PHASE 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educators rarely evaluate digital tools based on technical (including security and privacy), functional, and instructional features</td>
<td>Educators regularly evaluate digital tools based on technical (including security and privacy), functional, and instructional features</td>
<td>Educators model how to evaluate digital tools based on technical (including security and privacy), functional, and instructional features</td>
<td>Educators provide opportunities for students to evaluate and select digital tools based on technical (including security and privacy), functional, and instructional features</td>
</tr>
<tr>
<td>Digital tools do not support the lesson targets</td>
<td>Digital tools are partially aligned to the lesson targets</td>
<td>Educators explain the purpose for using digital tools</td>
<td>Educators facilitate discussion on the purpose for using digital tools</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Digital tools are fully aligned to the lesson targets</td>
<td>Digital tools are fully aligned to the lesson targets and support a coherent and focused sequence of learning</td>
</tr>
</tbody>
</table>

**EDUCATORS SHOULD SEE...**

- Students evaluating and selecting appropriate digital tools to complete learning activities
- Students identifying the purpose for using digital tools
Create enhanced learning experiences with digital content and tools
(e.g., motivate and engage students, provide scaffolded supports, create opportunities to complete authentic, real-world activities, etc.)

<table>
<thead>
<tr>
<th>PHASE 1</th>
<th>PHASE 2</th>
<th>PHASE 3</th>
<th>PHASE 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educators and students use digital tools only as a substitute for traditional paper/pencil methods (i.e., SAMR Model)</td>
<td>Educators and students use digital tools as a substitute for traditional paper/pencil methods with minor improvements</td>
<td>Educators and students use digital tools to provide significant improvements over traditional paper/pencil methods</td>
<td>Educators and students use digital tools to engage, enhance, or extend their learning in ways that would not be possible with traditional paper/pencil methods</td>
</tr>
<tr>
<td>Use of digital tools do not engage, enhance, or extend the learning (i.e., Engage, Enhance, Extend Technology Integration Framework)</td>
<td>Use of digital tools creates limited opportunities to engage, enhance, or extend the learning</td>
<td>Use of digital tools to regularly engage, enhance, or extend the learning</td>
<td>Educators use digital tools to provide opportunities for students to demonstrate connections between what they are learning and how it advances their personal and professional goals/interests</td>
</tr>
</tbody>
</table>

**Educators Should See...**

- Students using digital tools to engage, enhance, or extend their learning in ways that would not be possible with traditional paper/pencil methods
- Students using digital tools to demonstrate connections between what they are learning and how it advances their personal and professional goals/interests
**Consistently integrate digital tools and media into various instructional activities**
(e.g., guided practice, formative assessment, center activities, enrichment, etc.)

<table>
<thead>
<tr>
<th>PHASE 1</th>
<th>PHASE 2</th>
<th>PHASE 3</th>
<th>PHASE 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educators rarely integrate digital tools and media into instructional activities</td>
<td>Educators model the use of a variety of digital tools and media</td>
<td>Educators regularly integrate a consistent set of digital tools and media into a variety of instructional activities</td>
<td>Educators regularly integrate a consistent set of digital tools and media into a variety of instructional activities</td>
</tr>
<tr>
<td>Educators provide limited opportunities for students to practice the use of digital tools and media</td>
<td>Educators provide opportunities for students to practice the use of a variety of digital tools and media within a few instructional activities</td>
<td>Educators create opportunities for students to advocate for their needs related to digital tools and media (e.g., needing more practice with a digital tool, selecting a media format that meets a specific need or preference for content consumption or demonstration of mastery, etc.)</td>
<td>Educators create opportunities for students to advocate for their needs related to digital tools and media (e.g., needing more practice with a digital tool, selecting a media format that meets a specific need or preference for content consumption or demonstration of mastery, etc.)</td>
</tr>
<tr>
<td>Digital tools are not used consistently</td>
<td>Digital tools are used somewhat consistently</td>
<td>Educators provide opportunities for students to practice the use of a variety of digital tools and media</td>
<td>Educators create opportunities for students to advocate for their needs related to digital tools and media (e.g., needing more practice with a digital tool, selecting a media format that meets a specific need or preference for content consumption or demonstration of mastery, etc.)</td>
</tr>
</tbody>
</table>

**EDUCATORS SHOULD SEE...**

- Students proficient in the use of digital tools in the classroom (e.g., using digital tools independently or in creative ways, appropriately using digital tools for a designated purpose, etc.)
- Students advocating their need for additional supports to effectively use a digital tool or media
QUICK WINS IN THE CLASSROOM

1. Complete student reflections on how digital tools supported the lesson targets and their learning needs.

2. Provide standards-aligned learning choice boards or playlists with a variety of digital content and tools.

3. Create opportunities for student agency as students complete the same assignment using the digital tool of their choice.

4. Design authentic learning experiences that connect to the real world and/or outside the classroom walls.
Digital Tool Evaluation

Digital Learning Lesson Plan: Guiding Questions for Teachers

MS College- and Career-Readiness Standards, Alternate Academic Standards, and Scaffolding Documents

MS English Language Proficiency Standards and MS Alternate English Language Proficiency Standards

MS College- and Career-Readiness Standards for Computer Science:
> CORE CONCEPT - Computing Systems: Devices; Hardware and Software; and Troubleshooting

Family Guides for Student Success

Access for All Guide 2.0

Mississippi Instructional Materials Matter

Professional Growth System:
> STANDARD 1: Lessons are aligned to standards and represent a coherent sequence of learning
> STANDARD 2: Lessons have high levels of learning for all students
> STANDARD 3: Assists students in taking responsibility for learning and monitors student learning
> STANDARD 4: Provides multiple ways for students to make meaning of content
> STANDARD 5: Manages a learning focused classroom community
> STANDARD 6: Manages classroom space, time, and resources effectively for student learning
> STANDARD 8: Engages in professional learning

CONNECTIONS TO MDE RESOURCES

 ADDITIONAL RESOURCES

• Common Sense Privacy Program (Common Sense Education)

• Engage, Enhance, Extend Technology Integration Framework

• SAMR Model: A Practical Guide for K-12 Classroom Technology Integration

• Technology Integration Matrix

• There's No App for Good Teaching (TED)

• ISTE Standards for Educators: 2.5 & 2.6
Students who are provided with student agency, defined as opportunities to make choices within the classroom, become actively involved in the learning process and experience higher levels of engagement. With the help of digital tools, educators can design learning experiences which encourage student agency by exploring their individual interests; developing and utilizing creativity, critical thinking, collaboration, and communication skills; and providing flexibility to demonstrate learning in multiple ways. NOTE: It is important to lay the foundation for student agency by explicitly teaching students executive function skills in order to equip them with the skills needed to make the choices that drive their own learning.

**Active Learning & Engagement is NOT...**

- watering down the learning activities and removing accountability for students.
- a free-for-all where students decide everything, and the educator is not needed.
- limited to project or problem-based learning.

Want to learn more about this component?
Review these Best Practices for Digital Learning Deep Dives:

- [Promote Student Engagement](#)
- [Provide Student Voice and Choice](#)
Utilize multiple forms of media to understand content and communicate ideas (e.g., video, audio, text, images, simulations, etc.)

PHASE 1
Educators provide limited opportunities for students to make selections from more than one form of media to obtain knowledge and make connections to content

PHASE 2
Educators provide guidance and strategies for using a variety of media forms to obtain knowledge and make connections to content

PHASE 3
Educators provide opportunities for students to make selections from a variety of media forms to obtain knowledge and make connections to content

PHASE 4
Educators provide opportunities for students to select from a variety of challenging content in a variety of media forms to obtain knowledge and make connections to content

EDUCATORS SHOULD SEE...
- Students choosing from a variety of curated media to obtain knowledge and make connections to content
- Students selecting appropriate forms of media to communicate thoughts and ideas based on content and audience
Incorporate digital tools to support student collaboration
(i.e., students working together in pairs or small groups or connecting with outside experts and community members)

**PHASE 1**
- Educators provide limited guidance and structure for working collaboratively using digital tools
- Educators provide limited opportunities for students to use digital tools to work collaboratively with peers

**PHASE 2**
- Educators provide guidance and structure to support students’ use of digital tools to work collaboratively with peers
- Educators provide regular opportunities for students to use digital tools to work collaboratively with peers
- Educators provide guidance and structure to support students’ use of digital tools to connect and engage with peers, experts, and community members with a variety of backgrounds, skills, and knowledge

**PHASE 3**
- Educators model and facilitate discussions around the appropriate use of digital tools to collaborate effectively with peers to complete a common goal
- Educators provide students with guidance to select appropriate digital tools to contribute resources, ideas, and efforts to a team
- Educators guide students through problem-solving skills needed to overcome challenges when working collaboratively in a digital environment

**PHASE 4**
- Educators lead students in the establishment of norms and expectations for the appropriate use of digital tools to collaborate effectively with peers to complete a common goal
- Educators create opportunities for students to advocate for their needs in a collaborative digital environment
- Educators provide opportunities for students to utilize digital tools to connect and engage with peers, experts, and community members with a variety of backgrounds, skills, languages, and knowledge

**EDUCATORS SHOULD SEE...**
- Students utilizing digital tools to collaborate effectively with peers and educators to achieve a common goal
- Students selecting appropriate digital tools to facilitate real-time collaboration with a team
- Students utilizing digital tools to appropriately connect and engage with peers, experts, and community members with a variety of backgrounds, skills, languages, and knowledge
**Provide opportunities to use digital tools for creativity and self-expression**

(i.e., open-ended activities that create opportunities for student expression, exploration of content, and problem solving)

<table>
<thead>
<tr>
<th>PHASE 1</th>
<th>PHASE 2</th>
<th>PHASE 3</th>
<th>PHASE 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educators provide limited opportunities for students to use digital tools to complete open-ended activities that allow for creativity or expression</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educators demonstrate how to organize and express ideas through a variety of digital tools and provide open-ended activities to practice utilizing the digital tools</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educators provide regular opportunities for students to use digital tools to complete open-ended activities that allow for creativity or expression</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educators provide opportunities for students to showcase examples of open-ended activities that demonstrate student creativity and are created using a variety of digital tools to organize and express ideas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educators require all students to complete the same learning activities and utilize the same digital tools to demonstrate their knowledge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educators offer some variations in learning activities and digital tools to demonstrate knowledge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educators offer flexibility in learning activities and digital tools to demonstrate knowledge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educators support students as they utilize digital tools to explore and share unique talents and interests</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educators offer flexibility in learning activities and digital tools to demonstrate knowledge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educators do not provide opportunities for students to utilize digital tools to explore and share unique talents and interests</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educators provide limited opportunities for students to utilize digital tools to explore and share unique talents and interests</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educators provide students as they utilize digital tools to explore and share unique talents and interests</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educators support students as they utilize digital tools to explore and share unique talents and interests</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educators provide opportunities for students to utilize digital tools to explore and share unique talents and interests</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**EDUCATORS SHOULD SEE...**

- Students completing open-ended activities and selecting appropriate digital tools to organize and express thoughts and ideas
- Students choosing from a variety of learning activities and digital tools to demonstrate their learning
- Students utilizing digital tools to explore and share unique talents and interests
Promote critical thinking skills with the use of digital tools
(e.g., students utilize reasoning and problem-solving skills, students take responsibility for their learning)

<table>
<thead>
<tr>
<th>PHASE 1</th>
<th>PHASE 2</th>
<th>PHASE 3</th>
<th>PHASE 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educators provide limited opportunities to interact with digital instructional materials that present authentic, real-world problems, and rigorous tasks</td>
<td>Educators model the use of digital instructional materials that present authentic, real-world problems and rigorous tasks, and create opportunities for students to select from a variety of digital instructional materials that present authentic, real-world problems and rigorous tasks. Educators provide guidance and practice in the use of digital tools to collect, organize, analyze, and evaluate information.</td>
<td>Educators provide opportunities to interact with digital instructional materials that present authentic, real-world problems and rigorous tasks, and make connections across content areas. Educators provide guidance in the selection of appropriate digital tools to collect, organize, analyze, and evaluate information.</td>
<td>Educators provide opportunities for students to select appropriate digital tools to collect, organize, analyze, and evaluate information. Educators model the use of digital tools to manage, organize, and reflect on the learning process. Educators provide opportunities for students to select from a variety of digital instructional materials that present authentic, real-world problems and rigorous tasks, and make connections across content areas. Educators provide guidance and practice in the use of digital tools to collect, organize, analyze, and evaluate information.</td>
</tr>
</tbody>
</table>
QUICK WINS IN THE CLASSROOM

1. Create, publish, and share digital content to communicate ideas to an authentic audience.

2. Lead students in the creation of classroom rules and expectations for digital collaboration.

3. Use digital portfolios to showcase open-ended student activities and/or explore student interests.

4. Provide one-on-one conferencing in which the teacher offers individual guidance and support as students make choices about their learning.
Universal Design for Learning

Access for All Guide 2.0

MS College- and Career-Readiness Standards for Libraries

MS College- and Career-Readiness Standards for Computer Science:
  > CORE CONCEPT - Computing Systems: Devices; Hardware and Software; and Troubleshooting
  > CORE CONCEPT - Impacts of Computing: Social Interactions

Professional Growth System:
  > STANDARD 1: Lessons are aligned to standards and represent a coherent sequence of learning
  > STANDARD 2: Lessons have high levels of learning for all students
  > STANDARD 3: Assists students in taking responsibility for learning and monitors student learning
  > STANDARD 4: Provides multiple ways for students to make meaning of content
  > STANDARD 5: Manages a learning-focused classroom community
  > STANDARD 8: Engages in professional learning

ADDITIONAL RESOURCES

- Personalized Learning and Student Achievement (Hanover Research)
- Personalized vs. Differentiated vs. Individualized Learning (ISTE)
- Introduction to 21st Century skills: creativity, collaboration, communication, critical thinking (Common Sense Education)
- Executive Function Skills (Harvard Education)
- ISTE Standards for Educators: 2.1, 2.3, 2.5, & 2.6
FORMATIVE ASSESSMENT & FEEDBACK

Formative assessment practices focus on students’ progress toward mastery of a concept or skill. Formative assessments should provide meaningful and timely feedback that guides educators as they select instructional strategies (e.g., reteaching, additional practice, scaffolded supports, etc.) and allow students to monitor and reflect on their learning. Using digital tools creates opportunities for students to receive timely, personalized, and relevant feedback from educators and peers, leading to a deeper understanding of the concept or skill.

Formative Assessment & Feedback is NOT...

• focused solely on a score or level.
• regular daily grades, quizzes, or chapter tests that are not used to inform instructional decisions.
• generic feedback that does not move students toward improvement.

Want to learn more about this component?
Review these Best Practices for Digital Learning Deep Dives:
• Transforming Feedback
• Utilize Digital Assessments
### ELEMENT 1

Increase opportunities for formative assessment and practice using digital tools
(e.g., online quiz, digital poll, discussion board, interactive drag-and-drop, video reflection, etc.)

<table>
<thead>
<tr>
<th>PHASE 1</th>
<th>PHASE 2</th>
<th>PHASE 3</th>
<th>PHASE 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educators occasionally use digital tools to provide opportunities for formative assessments and practice</td>
<td>Educators use digital tools to provide opportunities for formative assessments and practice at certain points in the lesson</td>
<td>Educators regularly use a variety of digital tools to provide opportunities for formative assessments and practice throughout the lesson (e.g., digital quiz for a pretest, interactive digital activities to check for understanding during instruction, video reflection, exit ticket, etc.)</td>
<td>Educators use a variety of digital tools to provide ample opportunities for formative assessments and practice throughout the lesson</td>
</tr>
<tr>
<td>Educators use digital tools to provide opportunities for formative assessments and practice at certain points in the lesson</td>
<td>Educators regularly utilize digital formative assessments to provide a score or level</td>
<td>Educators utilize digital formative assessments focused on monitoring students’ progress toward mastery of a concept/skill</td>
<td>Educators effectively utilize digital formative assessments focused on monitoring students’ progress toward mastery of a concept/skill</td>
</tr>
<tr>
<td>Educators provide limited opportunities for students to use digital tools to self-assess and correct their own errors</td>
<td>Educators provide limited opportunities for students to use digital tools to self-assess and correct their own errors</td>
<td>Educators provide ample and effective opportunities for students to use digital tools to self-assess and correct their own errors</td>
<td>Educators provide ample and effective opportunities for students to use digital tools to self-assess and correct their own errors</td>
</tr>
</tbody>
</table>

**EDUCATORS SHOULD SEE...**
Students using a variety of digital tools to apply new content and practice skills to identify areas of mastery or additional support needed
Feedback provided by digital tools informs student learning
(i.e., clear, specific, actionable, and timely feedback that allows for a deeper understanding of the content)

**PHASE 1**
Educators use digital tools to provide generic feedback (e.g., “great work,” or “8/10 answers correct”) and no opportunities to improve the work

**PHASE 2**
Educators use digital tools to provide limited feedback (e.g., “rework questions 4 and 5”) and limited support to improve the work

**PHASE 3**
Educators regularly use digital tools to provide real-time feedback that is clear, specific, and actionable, and allows for students to improve their work and deepen their understanding of the content (e.g., digital quiz immediately provides a video explaining how to work the math problem the student answered incorrectly and provides an opportunity to rework the problem)

**PHASE 4**
Educators provide ample and effective opportunities to use digital tools to provide real-time feedback that is clear, specific, and actionable, and allows for students to improve their work and deepen their understanding of the content

**EDUCATORS SHOULD SEE...**
- Students applying detailed feedback from digital tools to improve performance and deepen understanding of the content
- Students accessing personalized feedback in multiple digital formats appropriate for each learning activity
- Students engaging in effective peer-to-peer feedback utilizing appropriate digital tools
**Utilize digital tools to collect and analyze data for continuous improvement**
(e.g., real-time feedback, reporting tools, goal setting, professional learning, etc.)

<table>
<thead>
<tr>
<th>PHASE 1</th>
<th>PHASE 2</th>
<th>PHASE 3</th>
<th>PHASE 4</th>
<th>EDUCATORS SHOULD SEE...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educators rarely use digital tools to collect and report real-time data.</td>
<td>Educators use digital tools to collect and report real-time data but do not use the data in a timely manner or occasionally use the data to make instructional decisions. Educators rarely use data collected by digital tools to recognize ineffective practices and seek out and participate in required professional learning opportunities.</td>
<td>Educators regularly use digital tools to collect, report, and analyze real-time data and make instructional decisions to improve student progress and mastery (e.g., reteaching, small groups, enrichment activities, etc.). Educators use data collected by digital tools to recognize ineffective practices and proactively seek out and participate in professional learning opportunities to strengthen teaching practices. Educators model the use of data collected by digital tools to set goals, track progress, and make decisions about learning activities.</td>
<td>Educators effectively use digital tools to collect, report, and analyze real-time data and make instructional decisions to improve student progress and mastery. Educators use data collected by digital tools to recognize ineffective practices and proactively seek out and participate in professional learning opportunities to strengthen teaching practices. Educators support students to use data collected by digital tools to set goals, track progress, and make decisions about their own learning.</td>
<td>• Students seeing the effects of their formative assessments in educators’ instructional practices and learning activities. • Students use data to set goals, track progress, and make decisions about their own learning.</td>
</tr>
</tbody>
</table>
QUICK WINS IN THE CLASSROOM

1. Allot time for students to identify and correct errors on formative assessments.

2. Create a checklist for students to utilize when providing peer feedback.

3. Use digital tools to provide teacher or peer feedback in audio or video format.

4. Assist students with setting goals and monitoring their own progress based on formative assessments and feedback.
**Connections to MDE Resources**

**Access for All Guide 2.0**

**MS College- and Career-Readiness Standards for Computer Science:**
- **Core Concept - Computing Systems:** Devices; Hardware and Software; and Troubleshooting
- **Core Concept - Impacts of Computing:** Social Interactions

**Professional Growth System:**
- **Standard 2:** Lessons have high levels of learning for all students
- **Standard 3:** Assists students in taking responsibility for learning and monitors student learning
- **Standard 8:** Engages in professional learning

**Additional Resources**

- [Top Tech Tools for Formative Assessments](#) (Common Sense)
- [Create Effective Feedback with Educational Technology](#) (ViewSonic)
- [Using Technology Tools for Online Assessment](#)
- [ISTE Standards for Educators: 2.1, 2.4, 2.5, 2.6 & 2.7](#)
Accessibility requires creating a classroom community that fosters success and belonging for ALL students, regardless of their educational or language backgrounds, familiarity with and access to digital learning tools, or learning needs. This includes setting student expectations for learning and using digital tools; selecting digital tools, resources, and content that celebrate student diversity and acknowledge barriers to learning; and providing flexibility, scaffolds, and supports so that all students can succeed.

Accessibility is NOT...

- treating students as though they have the same background, incoming knowledge, and life experiences outside the classroom.
- something addressed one time with no need to revisit.
- providing scaffolds without a plan to gradually remove supports.

Want to learn more about this component? Review these Best Practices for Digital Learning Deep Dives:
- Addressing the needs of all learners
- Provide student voice and choice
<table>
<thead>
<tr>
<th>PHASE 1</th>
<th>PHASE 2</th>
<th>PHASE 3</th>
<th>PHASE 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital instructional content and materials do not represent diverse skills, backgrounds, or abilities</td>
<td>Educators use age-appropriate digital content and materials that are <strong>culturally and socially relevant</strong> to all their students</td>
<td>Educators use a variety of age-appropriate digital content and materials that are culturally and socially relevant to all their students and expose students to other cultures and societies</td>
<td>Educators use a variety of age-appropriate digital content and materials to provide opportunities to interact with other cultures and societies (<strong>e.g., virtual field trips, video conferencing with students from different cultures, etc.</strong>))</td>
</tr>
</tbody>
</table>

**EDUCATORS SHOULD SEE...**

Students engaged in digital content, materials, and activities that showcase other cultures and societies
Use of digital tools and instructional practices that accommodate the learning needs of all students

**PHASE 1**

- Educators do not use digital tools to adapt and differentiate instruction to support students with different ability and linguistic levels
- Educators provide limited digital supports and accessibility tools to make grade-level content accessible to all students
- Educators have limited knowledge about assistive technology tools to support student learning

**PHASE 2**

- Educators occasionally utilize digital tools to adapt instruction, including providing a variety of explanations and multiple representations of content, to support students with different ability and linguistic levels
- Educators provide guidance and opportunities to practice utilizing digital supports and accessibility tools to make grade-level content accessible to all students
- Educators provide guidance and support in the use of assistive technology tools to support student learning
- Educators allow for only one way to demonstrate mastery of skills or content

**PHASE 3**

- Educators utilize digital tools to adapt instruction, including providing a variety of explanations and multiple representations of content, to support students with different ability and linguistic levels
- Educators model the use and selection of appropriate digital supports and accessibility tools to make grade-level content accessible to all students
- Educators model the use of assistive technology tools to support student learning
- Educators utilize digital tools to offer flexibility for how students demonstrate mastery of skills or content

**PHASE 4**

- Educators regularly and effectively use digital tools to adapt instruction, including providing a variety of explanations and multiple representations of content, to support students with different ability and linguistic levels
- Educators promote student selection and use appropriate digital supports and accessibility tools to make grade-level content accessible to all students
- Educators foster student use of assistive technology tools to support learning
- Educators provide regular opportunities for students to select appropriate digital tools to demonstrate their learning in different ways

**EDUCATORS SHOULD SEE...**

- Students utilizing appropriate digital supports, assistive technologies, and accessibility tools to access grade-level content based on their needs
- Students selecting appropriate digital tools to demonstrate their learning in different ways
<table>
<thead>
<tr>
<th>PHASE 1</th>
<th>PHASE 2</th>
<th>PHASE 3</th>
<th>PHASE 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EDUCATORS SHOULD SEE…</strong></td>
<td>Educators are unaware of each student's access to devices, internet connectivity, and resources outside of the classroom</td>
<td>Educators are aware of each student's access to devices, internet connectivity, and resources outside of the classroom but do not adjust learning activities</td>
<td>Educators foster student responsibility to prioritize the completion of learning activities at home and at school based on access to devices, internet connectivity, and resources</td>
</tr>
<tr>
<td></td>
<td>Educators are somewhat mindful of overall screen time required to complete activities and adjust to allow for screen-free activities</td>
<td>Educators are mindful of overall screen time required to complete activities and adjust to allow for screen-free activities</td>
<td>Educators create opportunities for students to advocate for a balance of screen time required to complete activities</td>
</tr>
<tr>
<td></td>
<td><strong>Mindfulness of student access to devices, internet connectivity, and resources outside of school</strong></td>
<td>Educators are aware of each student's access to devices, internet connectivity, and resources outside of the classroom and assign digital learning activities appropriately</td>
<td>Educators are aware of each student's access to devices, internet connectivity, and resources outside of the classroom and assign digital learning activities appropriately</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Educators are somewhat mindful of overall screen time required to complete activities and adjust to allow for screen-free activities</td>
<td>Educators foster student responsibility to prioritize the completion of learning activities at home and at school based on access to devices, internet connectivity, and resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Educators are mindful of overall screen time required to complete activities and adjust to allow for screen-free activities</td>
<td>Educators create opportunities for students to advocate for a balance of screen time required to complete activities</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>EDUCATORS SHOULD SEE…</strong></td>
<td>Educators foster student responsibility to prioritize the completion of learning activities at home and at school based on access to devices, internet connectivity, and resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Educators create opportunities for students to advocate for a balance of screen time required to complete activities</td>
<td>Educators foster student responsibility to prioritize the completion of learning activities at home and at school based on access to devices, internet connectivity, and resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>EDUCATORS SHOULD SEE…</strong></td>
<td>Educators foster student responsibility to prioritize the completion of learning activities at home and at school based on access to devices, internet connectivity, and resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Educators create opportunities for students to advocate for a balance of screen time required to complete activities</td>
<td>Educators foster student responsibility to prioritize the completion of learning activities at home and at school based on access to devices, internet connectivity, and resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>EDUCATORS SHOULD SEE…</strong></td>
<td>Educators foster student responsibility to prioritize the completion of learning activities at home and at school based on access to devices, internet connectivity, and resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Educators create opportunities for students to advocate for a balance of screen time required to complete activities</td>
<td>Educators foster student responsibility to prioritize the completion of learning activities at home and at school based on access to devices, internet connectivity, and resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>EDUCATORS SHOULD SEE…</strong></td>
<td>Educators foster student responsibility to prioritize the completion of learning activities at home and at school based on access to devices, internet connectivity, and resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Educators create opportunities for students to advocate for a balance of screen time required to complete activities</td>
<td>Educators foster student responsibility to prioritize the completion of learning activities at home and at school based on access to devices, internet connectivity, and resources</td>
</tr>
</tbody>
</table>
QUICK WINS IN THE CLASSROOM

1. Use of digital tools that allows students to adjust the way they receive information (e.g., digital books, text-to-speech, texts with adjustable reading levels, changeable color contrast, alterable text size, captions, visual dictionaries, translations, etc.).

2. Ensure students understand what digital supports, assistive technologies, and accessibility tools are appropriate to use before beginning the learning activity.

3. Provide opportunities for students to choose to express learning in a variety of ways (e.g., writing, videos, audio recordings, concept maps, infographics, etc.).

4. Create a survey to understand student’s access to devices, connectivity, and resources outside of the classroom.
CONNECTIONS TO MDE RESOURCES

Access for All Guide 2.0
Universal Design for Learning
Specially Designed Instruction Guidance Document
Equipped Book List
Family Guides for Student Success
English Learner Guidelines
Social-Emotional Learning Standards
MS College- and Career-Readiness Standards for Computer Science:
  > CORE CONCEPT - Computing Systems: Devices; Hardware and Software; and Troubleshooting
  > CORE CONCEPT - Impacts of Computing: Culture; and Social Interactions

Professional Growth System:
  > STANDARD 2: Lessons have high levels of learning for all students
  > STANDARD 4: Provides multiple ways for students to make meaning of content
  > STANDARD 5: Manages a learning focused classroom community
  > STANDARD 7: Creates and maintains a classroom of respect for all students

ADDITIONAL RESOURCES

• Guide for Inclusive Teaching (Columbia University)
• How to make your teaching more inclusive (Chronicle of Higher Education)
• Learner Variability Project (Digital Promise)
• Teaching Inclusively in the Online Classroom (CIRTL Network)
• ISTE Standards for Educators: 2.2, 2.3, 2.5, & 2.7
**GLOSSARY**

**Accessibility tools:** technology designed with the needs of many different users in mind and includes built-in customization features so that the user can individualize their experience to meet their needs.

**Access to content:** reducing basic barriers to understanding content, such as providing a visual dictionary to help students grasp the meaning of words.

**Adaptations:** changes in the way instruction and assessment are carried out to allow a learner equal opportunity to demonstrate mastery of concepts and achieve the desired learning outcomes.

**Assistive technology:** any products, equipment, and systems specifically designed to help a person with a disability to perform a task.

**Bias:** a tendency, inclination, or prejudice toward or against something or someone.

**Collaboration:** utilizing one’s talent, expertise, and knowledge while working together with others to reach a goal (one of the “4Cs,” or 21st century learning skills).

**Communication:** the ability to share information, thoughts, and opinions clearly to others, including the ability to communicate through written, oral, multimedia, and nonverbal methods (one of the “4Cs,” or 21st century learning skills).

**Communication tools:** described as mass, visual and electronic media such as social media, radio, internet, text messaging, or websites, which allow for sharing or exchanging information.

**Copyright laws:** laws that protect original works of authorship including literary, dramatic, musical, and artistic works.

**Creative Commons:** a non-profit organization that provides free licenses for creators to use when making their work available to the public which help the creator to give permission for others to use the work in advance under certain conditions.

**Creativity:** trying new, innovative approaches to get things done (one of the “4Cs,” or 21st century learning skills).

**Critical thinking:** practice of conceptualizing, applying, analyzing, synthesizing, and/or evaluating information in order to better take action and solve problems (one of the “4Cs,” or 21st century learning skills).
Culturally and socially relevant: teaching students to uphold their cultural identities while developing fluency in at least one other culture

Curate: select, create, gather, and organize content and present it in a meaningful way

Curricular models: a conceptual framework and organizational structure for decision making about educational priorities, administrative policies, instructional methods, and evaluation criteria

Cyberspeech: speech on the Internet or in cyberspace

Cyberbullying: includes sending, posting, or sharing negative, harmful, false, or mean content about someone else; it can include sharing personal or private information about someone else causing embarrassment or humiliation

Digital Content (or technology-based content): any content that exists in the form of digital data that can be stored on digital or analog storage and/or downloaded

Digital media: video, audio, text, or other communication content that is created, edited, stored, or accessed in digital form

Digital footprint: a record of your online activity that shows where you've been on the internet and the data you've left behind

Digital fluency: the ability to select and use the appropriate digital tools and technologies to achieve a particular outcome

Digital Learning: the delivery of rigorous, engaging and personalized instruction through a wide range of technology-based content and communication tools, curricular models, instructional strategies, adaptations, and services to every student in traditional and virtual learning environments

Differentiate instruction: a teaching approach that tailors instruction to all students’ learning needs based on students’ interests, preferences, strengths, and struggles

Emotional awareness: knowing when feelings are present in ourselves and others

Enhanced learning experiences: any interaction, course, program, or other experience in which learning takes place that has been improved or increased in quality

Executive function: the mental processes that enable us to plan, focus attention, remember instructions, and juggle multiple tasks successfully
**Fair use:** any copying of copyrighted material done for a limited and “transformative” purpose, such as to comment upon, criticize, or parody a copyrighted work

**HQIMs (high-quality instructional materials):** instructional materials that are content-rich, aligned to K-12 standards, fully accessible, and free from bias; HQIMs support sound pedagogy and balanced assessment to help teachers understand and interpret student performance

**Instructional strategies:** methods that teachers use to deliver course material in ways that keep students engaged and practicing different skill sets

**Intellectual property:** generally characterized as non-physical property that is the product of original thought

**Internet connectivity:** refers to the way people are hooked up to the Internet, and may include dial-up telephone lines, always-on broadband connections, and wireless devices

**Media:** any channel of communication, which can include anything from printed paper to digital data, and encompasses art, news, educational content, and numerous other forms of information

**Media balance:** using media in a way that feels healthy and in balance with other life activities

**Multimedia:** a form of communication that combines different forms of media, such as text, audio, images, animations, or video, into a single interactive presentation

**News and media literacy:** the ability to use critical thinking skills to judge the reliability and credibility of news reports and information sources

**Open educational resources:** materials for teaching or learning that are either in the public domain or have been released under a license that allows them to be freely used, changed, or shared with others

**Phishing:** the attempt to gather personal information from a person in a fraudulent way, normally through emails

**Plagiarism:** the practice of taking someone else’s work or ideas and passing them off as one’s own

**Project-based learning:** a teaching method in which students gain knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge
**Scaffolded supports:** successive levels of temporary supports provided by teachers that help students reach higher levels of comprehension and skill acquisition that they would not be able to achieve without assistance

**Services:** additional help students need to be successful in specific areas, including tutoring, counseling, speech therapy, etc.

**Student agency:** giving students voice and choice in how they learn through activities that are meaningful and relevant to students, driven by their interests, and often self-initiated with appropriate guidance from teachers

**Spam:** email or social media message sent to a large number of addresses and usually containing advertising

**Technological devices:** any computer, cellular phone, smartphone, digital camera, video camera, audio recording device, or other electronic device that can be used for creating, storing, or transmitting information in the form of electronic data

**Technology integration:** the use of technology resources (e.g., computers, mobile devices like smartphones and tablets, digital cameras, social media platforms and networks, software applications, the Internet, etc.) in daily classroom practices, and in the management of a school
BEST PRACTICES
DIGITAL LEARNING

ISTE Standards for Educators 2.2

Address the needs of all learners
• Promote student engagement
• Provide student voice and choice
• Create structured routines and procedures

ISTE Standards for Educators 2.3

Create assessments that encourage students to think critically and allow for multiple ways to demonstrate their learning.
• Utilize technology tools for formative and summative assessments
• Gather data quickly to inform instruction and support student learning
• Create assessments that encourage students to utilize critical thinking, collaboration, communication, and creativity

ISTE Standards for Educators 2.5, 2.6

Technology tools should assist students in focusing their attention on the learning goals and the activity at hand rather than distracting from them.
• Begin technology integration by addressing gaps in lessons where more resources are needed
• Use technology tools to scaffold instruction
• Add technology tools to vetted lessons to enhance student learning

ISTE Standards for Educators 2.5, 2.6

Having clear and defined policies and procedures for classroom technology can help students use class time efficiently.
• Implement predictable procedures and practice them often
• Create a plan for troubleshooting technology issues
• Use visuals to reinforce technology instructions and procedures
• Organize assignments and resources in a consistent location, such as an LMS or classroom website

ISTE Standards for Educators 2.1, 2.2, 2.3, 2.6

Students should select technology tools to assist them in collecting information, analyzing and synthesizing the material, and delivering it professionally.
• Allow students to choose how they will demonstrate their learning
• Use multimodality learning through technology integration
• Encourage student creativity using technology

ISTE Standards for Educators 2.1, 2.3, 2.4, 2.5, 2.6

Technology can help teachers create a learning environment that fosters student choice, curiosity, and collaboration.
• Provide opportunities for interaction and collaboration with peers
• Allow students to review each other’s work and provide feedback
• Encourage critical thinking and creativity by assigning rigorous, enriching, and academically extending activities

ISTE Standards for Educators 2.4, 2.5, 2.6

Utilize technology to help all students access and interact with content, make sense of new ideas and information, and demonstrate their learning.
• Use technology tools as needed to scaffold and support instruction
• Ensure all learning activities allow for differentiation, voice, and choice
• Teach students to utilize assistive technology and accessibility tools when appropriate

ISTE Standards for Educators 2.2, 2.3, 2.5, 2.7

With seamless technology integration, the technology tool becomes an integral and natural part of the learning process and environment.
• Start small by choosing a few technology tools to use often
• Be aware of differences in the user interface between student and teacher accounts
• Practice with students often
• Use district-approved and vetted high-quality digital materials, apps, and websites

ISTE Standards for Educators 2.1, 2.3, 2.4

Be consistent with technology tools

mdek12.org/DLResources