TRY IT OUT
COMPANION GUIDE

TECHNOLOGY INTEGRATION

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

STANDARDS-ALIGNED CONTENT & TOOLS

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

2 Provide standards-aligned learning choice boards with a variety of digital content and tools for students to complete independently or in small groups.

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 (e.g., virtual field trips, video overviews, simulations, etc.).

TRY IT OUT

1 Complete student reflections on how digital tools supported the lesson targets and their learning needs.
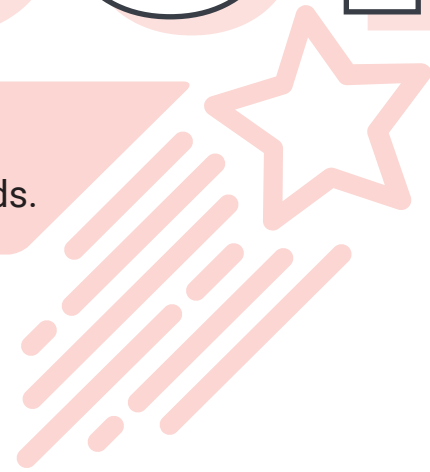
Reflection is a powerful tool for helping students see their progress in, the significance of, and solutions to learning. In addition to developing critical thinking skills reflection helps students analyze why concepts are important to the learning process. When using digital tools, it is important to teach students how they can use reflection to evaluate how effectively a tool supports the lesson targets and their learning needs.

WHAT
WILL BE ASKED?

When engaging in reflection, first identify what will be asked to support student analysis of digital tools. Create questions that help students evaluate the effectiveness of the tool in connection with the learning targets and personal learning needs. Consider this list of potential questions to support reflection:

- What successes did you experience while using this tool?
- What challenges did you face while using this tool?
- What made you choose this tool?
- Did the tool work easily on the device you used?
- How did you access the tool?
- How did you share your work when using this tool?
- What features of the tool were important or helpful to you?
- Did this tool help you learn? How so?
- Would another tool have better supported your learning needs?
- Would you recommend this tool to others? Why or why not?

WHEN
WILL STUDENTS REFLECT?

It is important to use reflections in a timely manner in order for students to appropriately share and apply their thoughts while making decisions to support their learning. Consider these different options for reflection:

Before learning: When engaging in reflection of technology tools, provide time for students to reflect before using technology by identifying what is needed to accomplish the task or assignment. From those reflections, students can make appropriate choices about the type of technology they will use.

During learning: As students are using technology they have selected, provide time throughout the learning process for them to consider how they are using the tool in connection with the tasks. Students should reflect on how the technology tool is supporting both the requirement of the lesson assignment and their learning goals.

After learning: Once students have completed the task, assignment, or unit with their selected technology, provide them with the opportunity to reflect on their work. Students should reflect on how they used the technology tool during their learning, determining if it was the appropriate tool to select, or if another would have suited their needs better. Encourage older students to maintain a portfolio of their reflections, using these to guide their selections in the future.

HOW
WILL STUDENTS REFLECT?

Reflection can occur in a variety of ways and should support the readiness of your students. Consider these options for your learners:

1. **Class Discussions and Modeling:** Consider reflecting through modeling and collaborative class discussions, demonstrating how students may reflect on the use of technology tools in connection with the learning tasks. This is an excellent support for younger students as they are learning how to reflect.

2. **Guided Reflections:** Based on the readiness of your students, consider providing guided reflections that help students evaluate their thoughts. For example, a smiley face or the color green may represent a positive experience with a technology tool, while a frowning face or the color red may indicate a negative experience with the tool. Paper-based reflections may be created using **Canva**, or you may create a technology version using **Microsoft** or **Google** Forms.

3 **Open-Ended Reflections:** Consider developing more open-ended questions for reflection based on the readiness of your students. Teachers may pose a reflective question encouraging students to analyze the use of technology in support of the learning task and their personal needs in a video format using **Flip.**

4 **Reflective Portfolio:** Older students may be equipped to collect their reflections over time to evaluate progress and identify trends. Provide students with a space to collect their reflections as they analyze the use and application of various technology tools. Give students the autonomy to select how they want to reflect, including their method of reflection and the questions they may use to guide reflective responses. Students can use digital tools such as **Wakelet** or **Book Creator** to build their reflective portfolios.

HOW
WILL STUDENTS APPLY THEIR REFLECTION?

Reflective practices should be used to support student learning and growth as they evaluate how successful they were in the learning process. This should be done frequently and in a variety of ways to support students in their application of reflective practices to support their decision-making and autonomy when using technology tools. Students will thrive when they use their reflections to support agency as learners. They will be prepared to select technology tools to support their learning and guiding future decisions with the use of technology.

RESOURCES

- **Choosing Technology Tools Activity** (Digital Promise)
- **50 Learning Questions for Students**
- **Top Ten Considerations When Selecting Technology Tools**
- **Canva Reflection Templates**
- **Microsoft** or **Google** Forms
- **Flip**
- **Wakelet**
- **Book Creator**

TRY IT OUT

2

Provide standards-aligned learning choice boards with a variety of digital content and tools for students to complete independently or in small groups.

Both choice boards and playlists provide students with a selection of resources and activities to support their learning. Choice boards typically allow students to make some decisions about which activities they complete, while playlists are structured sequentially to aid in the acquisition of content over time. Choice boards and playlists offer several benefits to teachers and students:

- Provide students with flexible learning opportunities as they access and utilize a variety of digital content at their own pace.

- Increase student agency by allowing students to make choices about the when and how of their own learning.

- Are largely student-directed tasks, which frees up the teacher's time to target individual and small group needs in the classroom.

IDENTIFY
THE WHY

Prior to creating the choice board or playlist, it is essential to first identify your end goals for this learning task:

Learning outcomes: What standards are being addressed? What do students need to know and understand once they have completed this task?

Purpose: How will students use this choice board or playlist? For example, will it be used to activate prior knowledge, build background understanding, explore new concepts, as formative assessment during a unit, or as summative assessment at the end of the unit?

Time: How long will students have to complete this work?

SELECT
RESOURCES AND ACTIVITIES

Select available activities and resources to include in the choice board or playlist:

- Brainstorm activities and resources that align with the intended learning outcomes, purpose, and available time.

- Begin with digital resources that are readily available within your school or district. Using tools that students are familiar with supports learning during independent tasks.

- Consider including a variety of activity-types. Possible activity-types include hands-on or paper-based activities, collaborative tasks, independent work, consumption of digital content to build understanding, or creation-based tasks using digital tools to demonstrate learning.

- Think about how you might differentiate the available resources and activities to meet a variety of student needs. For example, you can utilize adaptive digital content, include content in multiple types of media, and/or provide resources available at different Lexile levels.

- Older students and students who are more experienced with using choice boards and playlists may be prepared to propose their own resources and activities related to learning outcomes. Consider including a "free choice" space into your choice board or playlist to increase opportunities for student agency.

- For choice boards or playlists that will be used during several lessons or throughout a unit, you might opt to integrate checkpoints. These checkpoints are brief formative assessments or check-ins with the teacher so students can demonstrate mastery before they move on to their next task.

CONSIDER
PROGRESSION

Consider how students will progress through the choice board/playlist:

1. **Decide how many activities students will complete.** Younger learners may require fewer options to minimize feeling overwhelmed. You may also consider using a progressive choice board, adding options throughout the year as students learn how to use more digital tools and resources.

2. **Identify any "must do" activities.** These tasks are non-negotiable activities that all students will complete and are usually selected to ensure everyone has obtained important foundational understandings for the lesson or unit.

3. **Identify any "may do" activities.** These options offer opportunities to differentiate, extend, or remediate learning.

4 Identify supports and scaffolds that you might put into place within the choice board or playlist. For example, you might use a data point from a pre-assessment or formative assessment task to help students identify a recommended starting point on the choice board or playlist. Or, you might include guiding questions to help students identify which choices are best aligned to their needs and interests as learners.

SELECT
A DESIGN

Based on how students will progress through the choice board or playlist, determine how the activities and resources will be packaged to best support student learning. Many templates are available online to save time during the design process. (See resources and examples below for sample templates.) Some options include:

TIC-TAC-TOE	PICK 2 / 3 / 4	LEARNING MENU
Create a 3X3 choice board with activities in each space. Students must pick three in a row to complete. The size of the choice board may be changed based on age and readiness of students.	Share a list of options and ask students to complete a designated number of tasks from the list.	Similar to a menu at a restaurant, this style provides various activity types listed in different sections, with students selecting one or more activities from each section.
POINTS BASED	**BINGO BOARD**	**SEQUENTIAL**
Each resource or activity on the choice board or playlist is assigned a point value based on the rigor of the task. Students are challenged to accumulate a minimum number of points, but are able to determine their own path to achieving this point value.	A large selection of choices are offered in a grid format and students are asked to complete 5 in a row. Because so many options are available, this format is best for older students who are more experienced with choice boards, and it typically includes shorter activities.	This format represents the playlist model, requiring the students to work through a variety of activities in a specified order to build on skills. Completed independently, students control the pace at which they work while teachers may provide individual support within this model.

RESOURCES

Choice Boards:

- **How to Create Engaging Choice Boards** (Teq)
  - ▶ **Menu Choice Board Template**
  - ▶ **Tic-Tac-Toe Choice Board Template**
- **Templates and Ideas for Making Differentiated Choice Boards** (TechNotes)
- **6 Steps to Creating Custom Choice Boards** (Kasey Bell)
- **Progressive Choice Boards: Provide Choice without Overwhelming** (Matt Miller)

Playlists:

- **Playlist Building 101** (Education Elements)
- **Using Playlists to Differentiate Instruction** (Cult of Pedagogy)
- **Playlists: A Path to Personalizing Learning** (Dr. Catlin Tucker)
  - ▶ **Playlist Template**

TRY IT OUT

3

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

GET
READY
DEFINING THE PRACTICE

Student agency provides students with the opportunity to make purposeful and informed decisions in the classroom as they are given choices to direct their learning paths. Driven by student interest and learning needs, the teacher provides a variety of options to support the acquisition of the content. In the digital classroom, the teacher may provide a single assignment with a variety of technology-based options for completing that assignment.

GET
SET
UNDERSTANDING THE WHY

Student agency is a beneficial strategy that allows learners to become responsible for their unique learning paths as they make selections in how they complete assignments. Students take on the role of agents of their learning, while teachers become facilitators, moving into a more student-centered classroom. The voice and choice offered by providing options for students results in the use of critical thinking and problem solving skills as learners consider what works best for their needs or interests in the learning environment. This also leads to more active engagement in the learning on behalf of the student as they come to know what they are learning, how they are learning, assessing whether they are learning, and what to do with what they have learned. In the digital space, students become critical thinkers as they determine which tools will best support their learning.

GO

IMPLEMENTING IN THE CLASSROOM

Consider the following strategies to successfully implement student agency with the use of technology tools:

1 DEVELOP A RUBRIC TO ANALYZE TECHNOLOGY TOOLS

It is important to provide students with a way to think critically about the purpose of the digital tools at their disposal. Co-create a rubric or checklist that supports student analysis of tools to use for the completion of an assignment so they may determine the best option for them. Check out this **digital evaluation rubric** created by the Mississippi Department of Education to consider elements you might include in your class rubric. As a class, you may also consider:

- ► The purpose of the tool.
- ► How to access the tool.
- ► Collaboration and sharing abilities with the tool.
- ► The way this tool supports the learning.
- ► Self-assessed comfort level using the tool.

2 DEVELOP A TECHNOLOGY TOOLBOX

There are an abundance of technology tools and options available to students. In an effort to prevent overwhelming students, consider sharing a core list of common tools that have already been vetted and approved by your district to support student learning. As a class, develop a list of primary tools to be considered first when completing assignments. Within the list, consider which tools allow for the creation of a variety of digital media such as presentations, blogs, websites, video, audio, graphic design, etc.

3 PRACTICE THE POWER OF YES

Student agency will look different for each student, depending on their determination of what is needed for them to be successful on an assignment or task. Consider practicing the power of "yes" in your classroom when appropriate. Students may ask to represent learning in a different way, work in a different location, or work with a new digital tool. Encourage student agency by saying "yes"!

4

EMBED THE USE OF TECHNOLOGY THROUGHOUT THE YEAR

Modeling is a wonderful strategy to support student agency. Throughout the year, consider embedding the core tools into lesson delivery to provide students with the opportunity to practice using the tool as a class. Exposure to the tool will provide students with more comfort in the use of the tool as it applies to the learning environment.

5

DESIGN OPEN-ENDED TASKS

Create opportunities for students to demonstrate their learning in a variety of ways. Develop assignments that have open-ended prompts, inviting students to achieve the learning outcome in a method of their choice through various media options. Students would utilize rubrics such as **mastery rubrics** or **single point rubrics** to ensure they have addressed key information connecting to the learning target. It will be up to the student to determine which technology tools to use to communicate that understanding and mastery of skills. folder, or binder.

GRADE BAND
CONSIDERATIONS

PreK - 2nd Grade

In PreK-2nd grade classrooms, it is beneficial to provide one tool that has the potential to offer options to support student agency. Tools such as **Seesaw** provide students with opportunities to choose from different ways to post content through the use of video, voice recording, drawing, text, or image sharing. Using tools such as this provides young learners with access to one, familiar space while still implementing the capability for students to make choices in their learning.

3rd - 5th Grade

Choice boards are a great strategy to support student agency in 3rd-5th grade classrooms. Once a learning outcome has been identified, the teacher may create a choice board with 3-4 different options for completion. These options may offer variety in digital tools or in the implementation of the same tool for students to choose from. Consider using one of these **choice board templates** to guide development.

Middle School

Middle school students should be given the opportunity to utilize self-selected tools they feel best meets their needs as learners when accomplishing a task. Rather than providing students with a list of potential tools, instead provide students with a variety of media options that could be created to complete the assignment. From the list of media options, students can self-select tools to create the digital media of their choice.

High School

High school students are largely capable of leading decision making when determining technology tools to complete assignments. Explain the task and goal, then allow students to take over. At the close of the assignment, ask students to complete an assessment of the technology tool, adding student reviews, suggestions, and feedback to a compiled class list of tools that could be used to support learning.

RESOURCES

- **The Promise, Power, and Practice of Student Agency** (ASCD)

- **Student Agency: Promoting Student Engagement**

- **Tools and Strategies for Developing Learner Agency** (ISTE)

- **Digital Learning Resources** (MDE)

- **Modern Classrooms Project: Example Mastery Check Rubrics**

- **Meet the Single Point Rubric** (Cult of Pedagogy)

- **Choosing Technology Tools** (Digital Promise)

TRY IT OUT

4 Design authentic learning experiences that connect to the real world and/or outside the classroom walls (e.g., virtual field trips, video overviews, simulations, etc.).

GET READY
DEFINING THE PRACTICE

Authentic learning experiences are those that connect classroom content to real-world issues and applications of knowledge. Authentic learning can most-often be described by one or more of the following characteristics:

- Students assume a role that is similar to those faced by adults or professionals in the world outside of school

- Students produce a positive effect, change or impact on others

- Students create products that will be used or experienced by others. This authentic audience cares about the results.

- Learning connects to students' interests, identities, and/or issues that are relevant to them.

- Students use authentic processes, tasks, and tools as they participate in real-life or simulated scenarios.

- Questions or problems that students address are open-ended and have multiple possible solutions.

GET SET
UNDERSTANDING THE WHY

Authentic learning experiences promote engagement as students become more interested and motivated in learning when it connects to real-life. When students learn foundational skills, knowledge, and understandings by doing or creating, they become active participants in their learning. Furthermore, authentic learning promotes critical thinking because students move beyond memorization of facts to apply, analyze, evaluate, and create and

they accomplish complex, open-ended tasks. By facilitating authentic learning experiences in the classroom, we also equip students for lifelong success when we give students opportunities to build knowledge and develop practical skills that will be needed in future college and career contexts. Authentic learning often requires students to connect with peers, experts, and audiences outside the classroom walls. In doing so, students develop important communication skills, build empathy for others, and learn to value diverse perspectives.

GO

IMPLEMENTING IN THE CLASSROOM

Try these strategies as you begin planning authentic learning experiences that connect outside the classroom:

1

IDENTIFY REAL WORLD CONNECTIONS

Once you have identified which curriculum standards will be addressed during this learning experience, brainstorm connections to concepts from the real world. Ask yourself the following questions and create a list of all the possibilities:

- ► Who in real life uses these standards?
- ► How do these adults or professionals use this information, knowledge, and/or skills?
- ► How might students engage in similar tasks?
- ► Self-assessed comfort level using the tool.

2

GENERATE A DRIVING TASK

Authentic learning is often centered on a driving task that poses a compelling challenge to students. Successfully accomplishing the driving task requires students to learn and utilize related content standards. Authentic driving tasks often ask students to:

- ► Educate others
- ► Solve a problem to a real-world predicament
- ► Call people to action by convincing them to do something
- ► Change the opinions of an audience
- ► Build or create something useful
- ► Plan an event
- ► Raise money or awareness for a purpose
- ► Recognize or inspire others
- ► Design a better way to do something

3 CREATE AN AUDIENCE

We can increase authenticity by giving students an audience beyond just their teacher. Consider who students might connect with to share and discuss their work. Some possibilities include students from other classrooms within or outside of the school, members of the community, individuals from a professional group, or people working at a relevant nonprofit organization. As you plan, be sure to integrate opportunities for two-way interaction so students recognize that their work is important to your selected audience.

4 CONNECT WITH EXPERTS

Enhance learning by using digital tools to connect with outside experts. This connection can be synchronous, such as through a live video call, or asynchronous, through Twitter, email, online chat, or even comments on a blog! Experts might be invited to share their knowledge as you open a new lesson or unit, answer student questions about a topic, provide students with meaningful feedback, or serve as an audience for student work.

5 PUBLISH WORK ONLINE

The use of digital tools to create products offers great flexibility in how those products are shared with audiences around the world! After students produce podcasts, blogs, graphics, videos, and more, use online platforms such as blogs, websites, or even Twitter to share with authentic audiences. Note that whenever you share student work publicly, you must always remain compliant with FERPA requirements and follow best practices to protect student privacy.

6 TAP INTO AN EXISTING PROJECT

If you're short on time, take advantage of projects that have already been established. There are a variety of websites designed to make it easy for classrooms to connect with each other for authentic learning experiences. They have already done the planning. All you have to do is join! Check the resource list below for some suggestions.

GRADE BAND
CONSIDERATIONS
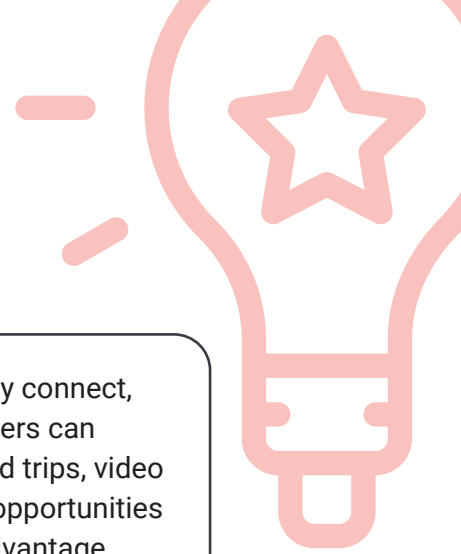
PreK - 2nd Grade

PreK-2nd grade students will require support as they learn to effectively connect, collaborate, and share with people outside the classroom walls. Teachers can design whole-group authentic learning experiences, such as virtual field trips, video calls with experts, or managing a class blog or website. Use these as opportunities to model effective communication and collaboration skills and take advantage of teachable moments to address important digital citizenship skills. Pair these learning experiences with mini-lessons to support students as they work toward independence in their online interactions.

3rd - 5th Grade

In 3rd through 5th grade, students may be ready for more independence as they connect with individuals outside of the classroom. When choosing digital tools to facilitate these connections, look for tools that permit the teacher to review, approve, and/or delete student work as needed. For example, **Flip #Gridpals** is one excellent option. Through Gridpals, students can connect with students around the world within the Flip platform, recording audio or video responses to a specific prompt or task. The teacher has the ability to monitor all posts and interactions, making this a safe space for students as they learn to share and interact in virtual spaces.

Middle School

Thanks to popular social media platforms, students are often already well-versed in using digital tools to connect with others once they hit the middle grades. For a variety of reasons, we may not want learners posting to these platforms during class. However, we can still tap into students' interests by designing learning tasks that mirror this type of content creation. Get creative with Matt Miller's collection of **Social Media Templates**. Students can utilize these templates in connection with standards, then publish their completed work to a class website or blog to seek comments and feedback from a wider audience.

High School

As they look ahead to their college and career, high school students benefit greatly from opportunities to network and connect with professionals outside of the school building. Use digital tools to help students build **social capital** that can impact their future success. Establish mentoring relationships with professionals who work in fields of student interest. You might also support and guide students as they pursue their own connections with authentic audiences and experts.

RESOURCES

- **Authenticity: How to Move Projects from Engaging to Empowering,** including an **Authenticity Guide from** (PBL Works)

- **Crafting Questions that Drive Projects** (Tony Vincent)

- **One-hour interactive training course on protecting student privacy** (Common Sense Media)

- **FERPA 101 video** (U.S. Department of Education)

- Projects that offer students and educators opportunities to authentically connect and collaborate:

  ► Using **Go Pangea**, learners explore real-world topics by sharing their perspectives with other students around the world.

  ► **TakingITGlobal for Educators** offers a free online platform for classrooms to complete collaborative projects focused on shaping a more inclusive, peaceful, and sustainable world.

  ► **iEARN** features over 150 collaborative projects designed to connect classrooms around the world.

  ► Edublog's **Student Blogging Challenge** occurs twice each year. Participating classes complete eight weekly tasks in order to improve blogging and commenting skills while connecting with a global audience.

  ► **ePals** connects K-12 classrooms in more than 99 countries to share ideas and collaborate on projects, including pen pal exchanges.

  ► **Empatico** features a platform that connects classrooms around the world to complete standards- and research-based activities that fit easily into existing curriculum.

  ► **Exploring by the Seat of Your Pants** hosts more than 25 Google Hangout events each month, allowing classrooms to connect with leading scientists and explorers across the globe.

  ► During the **Awesome Squiggles** global art challenge, students create original art based on four squiggly lines and then share their artwork around the world.

  ► Each year, students around the world connect to exchange **Virtual Valentines** while building geographical awareness and cultural understanding.