



Moving High-Quality Teaching Online

Using *The Marzano Focused Teacher Evaluation Model*©
to Guide Teachers to Online Best Practices

Bryan Beverly, Ph. D., Nicole Ellefson, and Barbara Elson
Office of K-12 Outreach
College of Education— Michigan State University
August 2020

High-Quality Teaching Online

Using What We Know to Get to Where We Want to Be

The closure of schools in March 2020 took the education community by surprise. Suddenly, for the first time in history, a majority of American students and teachers were thrust into remote teaching and learning. Few were fully prepared for this shift. While schools may reopen as usual in some communities, the risk of further closures is real. Preparing for what comes next is paramount, whether that means a resumption of online instruction or a return to traditional classrooms. The challenges to our education system and to teachers and administrators, personally, are great. We hope, though, that teachers will join us in seizing this opportunity to enhance classroom skills and practice in service to our students. This guide will help teachers and educational leaders prepare to deliver high-quality, online instruction by leveraging digital teaching strategies aligned to the *Marzano Focused Teacher Evaluation Model*.

Frame of Mind

Just as we strive to provide a learning environment for our students that keeps them in the comfort zone, as teachers and administrators we need to do the same for ourselves at this time. We have provided a comprehensive look at how *The Marzano Focused Teacher Evaluation Model* can inform our online instructional practice. Nevertheless, consumers of this information should be mindful that practitioners have varying levels of expertise in using online teaching tools. Given those differences, we suggest that you read this document carefully and decide for yourself where you will begin and when you should add new online practices.

Adopting a growth mindset is the most productive way to approach teaching, be it online or in person. We would never expect our students to provide a polished, final-copy version the first time they submit a writing assignment. As teachers and administrators, we should set similar expectations for ourselves. Give yourself the permission to “simply create” the video or document. It does not have to look like a Ted Talk. Plus, your students want to see you, engaged in what is familiar and expected: facilitating their learning. Your less-than-perfect products and efforts will make your learning process visible to students and may reinforce their willingness to take risks when trying new tools and publication styles. Take a deep breath and dive in.

You Do Not Need to Reinvent the Wheel

At the end of the document we provide selected additional resources for educators and school leaders. Our work as educators over the coming year will require that we practice flexibility, responsiveness, and a commitment to continued learning. With those values planted in our collective consciousness, we encourage teachers and leaders in each district to establish a shared, curated document where helpful resources are compiled and a list of frequently asked questions are addressed. As no one district can expect to fully plumb the depths of resources online, consider making your collections public and inviting other districts in your area to both share

and co-construct tools. Seek out districts and teachers who are already leading the way with digital instruction and use them as inspirations and sources of possible practice.

Consider reframing your Professional Learning Communities (PLCs) for the year to focus on how to implement best practice teaching via digital means. Use PLC time to share and model trying new tools and processes, drawing on the expertise of your colleagues to provide feedback on your lessons. Share promising examples of practice via your district's resources pages. Use these discussions to build the district's FAQ document and resource bases. If we all put forth our best efforts, we will be better able to tackle the task of moving our best practices online.

Remember, we do not need to be that perfect teacher all day every day. We need only to get out there and strive to do our best for our students. Presenting them our real selves, at home or from an empty classroom, giving it our best, is what they want most.

Asynchronous/Synchronous

The terms asynchronous and synchronous are not familiar ones for most teachers. They are important to keep in mind, though, as we contemplate integrating online teaching to our educational processes. Here are the working definitions that we use in this document:

Asynchronous: We use asynchronous to mean teaching and learning activities that can happen at different times for the teacher and student. For example, a homework assignment is asynchronous; you give the material to students to do on their own time at home. Examples of asynchronous learning in the online realm might include videos that students watch as part of an assignment, recordings students do of their work either through audio or video capture.

Synchronous: We use synchronous to mean teaching and learning activities that happen at the same time for teachers and students. For example, teaching in our school classrooms is synchronous; you teach your students in “real time.” Examples of synchronous learning in the digital realm might include holding class meetings via video conferencing or having phone calls with your students.

Digital Learning

Engagement of students in the digital learning environment requires teachers to engage new ways of presenting materials, organizing students, and providing digital learning materials. Just as you would in your “real” classroom, be sure that your online learning plans include a balance of students interacting directly with content, students interacting with other students, and students interacting directly with you. Getting students actively and cognitively engaged in their lessons opens the door to deeper learning. Preparing to work in the digital teaching space can seem overwhelming, but this guide will help you leverage new opportunities for student engagement.

As you create materials for asynchronous learning, be sure to include directions and graphics that will help your students progress through a lesson. When you layout your lessons and your online teaching filing system, be sure to create a consistent framework to how you organize and present your materials online. Doing so will help your students find their way around and through lessons and learning materials.

For live instruction via video, consider adding low-tech ways of assessing engagement as you teach. Ask students to raise their thumbs in front of their cameras to show agreement or understanding. A simple thumbs up, down, or sideways vote can show you when or if you may need to back track or to move on. As with many classroom routines, you will need to teach and reinforce such ways for students to communicate. Reinforcing examples that you see of students showing behavior that indicates profound involvement is a great way to boost student engagement. Schedule small group meetings, with flexible groupings of students, to revisit content with students who struggled initially. As part of your daily calendar, create a list of students who are to check in during such meetings and specify the time and meeting venue for their group's gathering. Remember to communicate your enthusiasm in the video environment.

When you have live-video conferencing time with your students, the discussion will feel much the same as when you are in your “real” classroom. Students will share ideas by asking for recognition using the conventions that you have established. Many video-conferencing platforms allow users to submit ideas and questions through a chat feature. Consider leveraging the chat function during the course of your lesson to gather input from students who may need more processing time, or are hesitant to share in front of their peers.

However, in remote teaching, the idea of classroom discussions can take on new and different forms. You can incorporate discussion threads to lessons that happen asynchronously. Consider inviting students to submit their responses to readings, videos, or slide shows that they watch at their own pace. There are many different applications to support such work, the most basic of which is to create a shared document and give editing privileges to your students. Look at how the nature and process of classroom discourse changes in both a/synchronous instruction.

Getting Started

We know that imagining how to take your teaching practice online can be daunting. Use this guide as a starting point. Give yourself time to play with the new ideas and techniques. Then reach out to your colleagues and share what you have been trying and how it has worked. Learn from them what they have found to be successful.

Alongside your colleagues, set a goal for what you will tackle first. Build those lessons and try test drive them in an online space. Take it step by step and hand in hand.

Setting the Stage: Online Classroom Management

Online learning is just as new to most of our students as it is to teachers. As a result, before we can engage students in using any sort of technology for learning, we must teach students how to use the tool, whether it be the video conferencing platform or a new application. Set aside time to provide students instruction on how to use your video conferencing platform. Give them the chance to explore and experiment with all the affordances/tools that you plan to use during regular instructional time. Do this every time you add a new type of technology. This process will save time as you move into content instruction.

Realize at the outset that most adults are not “tech natives” but our students are. Even if you find it necessary to teach them how to use something, within days, some of your students will have figured out how to use all the bells and whistles. Expect this, and when such a moment comes up, use it as a learning opportunity. Have children teach one another about the new tools. Then, with your students, set expectations about when they should be used and when they should not. For instance, backgrounds in a student’s video can be distracting or on the other hand, stand as an example of self-expression. You and your students must set the guidelines.

At the start of each on-line class session, and at the front end of any asynchronous discussion space, display/restate the expectations and guidelines for your classroom. Continue to reinforce positive behavior. As in the regular classroom, sometimes students will behave in ways that you find non-productive. When these moments arise, you may be forced to use the chat function, your ability to mute a student’s microphone or to turn off a student’s video stream after you’ve engaged first-line tactics such as distracting the distractor (see below). Build in these online classroom management steps as part of the expectations you want to reinforce. As suggested earlier, when necessary, set up one-on-one meetings with students outside of instructional time to discuss your concerns.

We will cover additional ways to create conditions for learning later in this document.

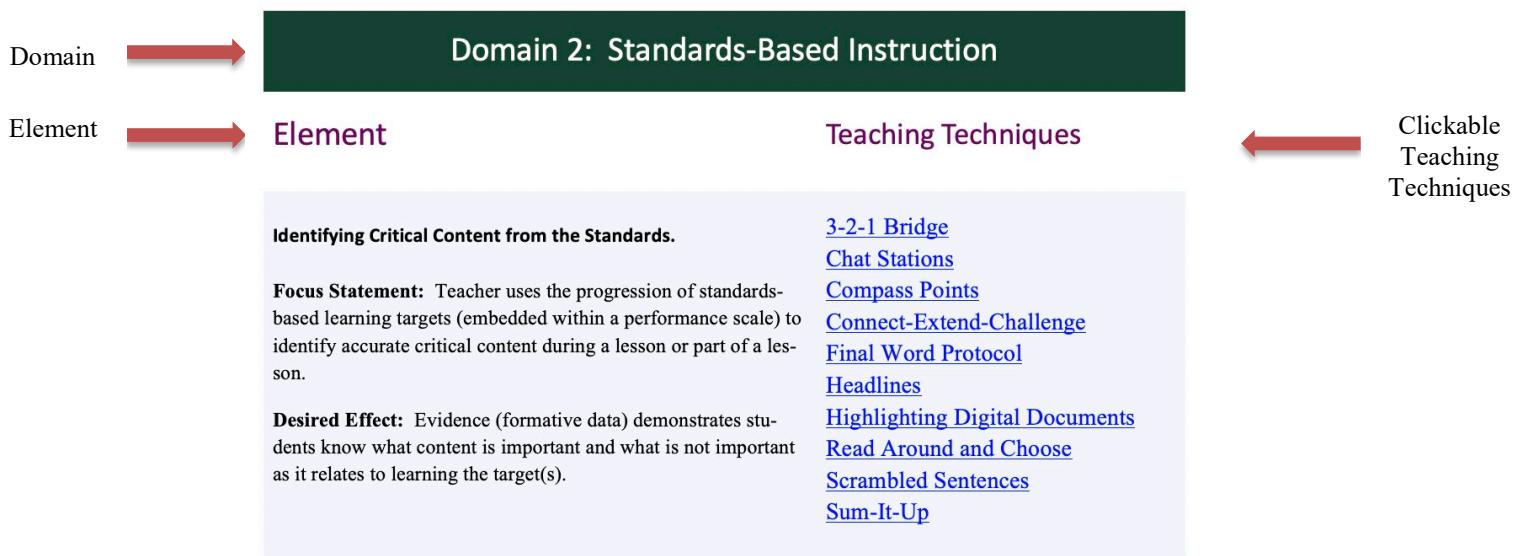
For More on Managing the Online Classroom

- <https://www.edutopia.org/article/extending-classroom-management-online>
- <https://www.cultofpedagogy.com/distract-the-distractor/>

Navigating This Guide

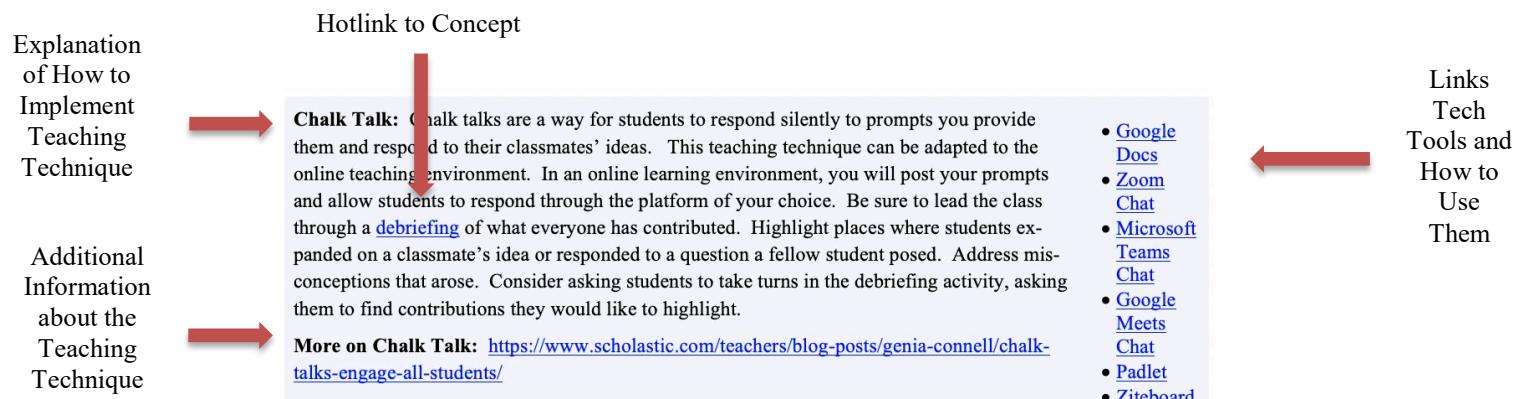
In this guide, we provide online teaching techniques that can be used to address the elements of Domain 2 (Standards-Based Instruction) and Domain 3 (Conditions for Learning) of *The Marzano Focused Teacher Evaluation Model*. We developed this guide with a focus on these two domains as they are the ones most pressing for teachers as they prepare to begin online teaching.

For each of the elements in Domain 2 and Domain 3, we list the *Marzano Focus Statements* and *Desired Effects* along with a set of teaching techniques that you can employ in your online teaching. Click on a particular teaching technique and the link will take you to a description of how you can employ it in your online teaching. We also provide links to technology tools that will help you in carrying out the technique.



In this second section of our guide, you can learn more about how to implement the teaching techniques for each *Marzano Element*. To the right, we list technology tools that you can use to carry out these techniques in your online classroom. We also have made hotlinks in the teaching techniques definitions so that when we refer to another concept in a definition, you can jump right to it.

Please note, some of the teaching techniques do not require any new or special technology tools. You can implement them just by getting started!



At the end of our guide, we have compiled a list of additional resources to support teachers and administrators as you set up your online classrooms for the 2020-21 school year.

Domain 2: Standards-Based Instruction

Element

Teaching Techniques

Identifying Critical Content from the Standards.

Focus Statement: Teacher uses the progression of standards-based learning targets (embedded within a performance scale) to identify accurate critical content during a lesson or part of a lesson.

Desired Effect: Evidence (formative data) demonstrates students know what content is important and what is not important as it relates to learning the target(s).

[3-2-1 Bridge](#)
[Chat Stations](#)
[Compass Points](#)
[Connect-Extend-Challenge](#)
[Final Word Protocol](#)
[Headlines](#)
[Highlighting Digital Documents](#)
[Read Around and Choose](#)
[Scrambled Sentences](#)
[Sum-It-Up](#)

Previewing New Content

Focus Statement: Teacher engages students in previewing activities that require students to access prior knowledge as it relates to the new content.

Desired Effect: Evidence (formative data) demonstrates students make a link from what they know to what is about to be learned.

[Book Walks](#)
[Consensogram](#)
[Highlighting Digital Documents](#)

Helping Students Process New Content

Focus Statement: Teacher systematically engages student groups in processing and generating conclusions about new content.

[Chalk Talk](#)
[Chat Stations](#)
[Connect-Extend-Challenge](#)
[Digital Self-Reflections](#)
[Engage and Connect](#)

Desired Effect: Evidence (formative data) demonstrates students can summarize and generate conclusions about the new content during interactions with other students.

[Expert Groups/Jigsaw Discussion](#)
[Final Word Protocol](#)
[Hands-On Learning](#)
[Highlighting Digital Documents](#)
[Interactive Slides](#)
[Learning Map](#)
[Read Around and Choose](#)
[Scavenger Hunts](#)
[Teach to Learn](#)
[We used to think...Now we think](#)

Using Questions to Help Students Elaborate on Content

Focus Statement: Teacher uses a linear sequence of increasingly complex questions that require students to critically think about the content.

Desired Effect: Evidence (formative data) demonstrates students accurately elaborate on content.

[Chat Stations](#)
[Chalk Talk](#)
[Clarifying Protocol](#)
[Compass Points](#)
[Connect-Extend-Challenge](#)
[Digital Self-Reflections](#)
[Final Word Protocol](#)
[Online Quizzes](#)
[Tuning Protocol](#)

Reviewing Content

Focus Statement: Teacher engages students in brief review of content that highlights the cumulative nature of the content.

Desired Effect: Evidence (formative data) demonstrates students know the previously taught critical content.

[Digital Exit Tickets](#)
[Digital Mini-Lessons](#)
[Digital Self-Reflections](#)
[Dump Your Brain](#)
[Online Quizzes](#)
[Scavenger Hunts](#)

Helping Students Practice Skills, Strategies, and Process

Focus Statement: When the content involves a skill, strategy, or process, the teacher engages students in practice activities that help them develop fluency and alternative ways of executing procedures.

[Digital Breakout Rooms](#)
[Digital Mini-Lessons](#)
[Teach to Learn](#)

Desired Effect: Evidence (formative data) demonstrates students develop automaticity with skills, strategies, or processes.

Helping Students Examine Similarities and Differences

[Connect-Extend-Challenge](#)
[Creating Graphic Representations](#)

Focus Statement: When presenting content, the teacher helps students deepen their knowledge of the critical content by examining similarities and differences.

Desired Effect: Evidence (formative data) demonstrates student knowledge of critical content is deepened by examining similarities and differences.

Helping Students Examine Their Reasoning

[3-2-1 Bridge](#)
[Clarifying Protocol](#)
[Final Word Protocol](#)
[Tuning Protocol](#)

Focus Statement: Teacher helps students produce and defend a claim (assertion of truth or factual statement) by examining their own reasoning or the logic of presented information, processes, and procedures

Desired Effect: Evidence (formative data) demonstrates students identify and articulate errors in logic or reasoning and/or provide clear support for a claim (assertion of truth or factual statement).

Helping Students Revise Knowledge

[We used to think... Now we think.](#)

Focus Statement: Teacher engages students in revision of previous knowledge by correcting errors and misconceptions as well as adding new information.

Desired Effect: Evidence (formative data) demonstrates students make additions, deletions, clarifications, or revisions to previous knowledge that deepen their understanding.

Helping Students Engage in Cognitively Complex Tasks

Focus Statement: Teacher coaches and supports students in complex tasks that require experimenting with the use of their knowledge by generating and testing a proposition, a theory, and/or a hypothesis.

Desired Effect: Evidence (formative data) demonstrates students prove or disprove the proposition, theory, or hypothesis.

[3-2-1 Bridge](#)
[Chat Stations](#)
[Compass Points](#)
[Connect-Extend-Challenge](#)
[Creating Graphic Representations](#)
[Final Word Protocol](#)
[Headlines](#)
[Scrambled Sentences](#)
[Sum-It-Up Protocol](#)
[Teach to Learn](#)

Domain 3: Conditions for Learning

Using Formative Assessments to Track Progress

Focus Statement: Teacher uses formative assessment to facilitate tracking of student progress on one or more learning targets

Desired Effect: Evidence (formative data) demonstrates students identify their current level of performance as it relates to standards-based learning targets embedded in the performance scale.

[Debriefing](#)
[Digital Exit Tickets](#)
[Digital Feedback Methods](#)
[Digital Self-Reflections](#)
[Online Quizzes](#)
[Scavenger Hunts](#)
[Tuning Protocol](#)

Providing Feedback and Celebrating Progress

Focus Statement: Teacher provides feedback to students regarding their formative and summative progress as it relates to learning targets and/or unit goals.

[Chalk Talk](#)
[Chat Stations](#)
[Classroom Roles](#)
[Compass Points](#)
[Creating Graphic Representations](#)
[Dump your Brain](#)
[Expert Groups/Jigsaw Discussion](#)
[Final Word Protocol](#)

Desired Effect: Evidence (formative data) demonstrates students continue learning and making progress towards learning targets as a result of receiving feedback.

[Headlines](#)
[Scrambled Sentences](#)
[Sum It Up Protocol](#)
[Teaching to Learn](#)
[Tuning Protocol](#)

Organizing Students to Interact with Content

[Chalk Talk](#)
[Chat Stations](#)
[Classroom Roles](#)
[Compass Points](#)
[Creating Graphic Representations](#)
[Dump your Brain](#)
[Expert Groups/Jigsaw Discussion](#)
[Final Word Protocol](#)
[Headlines](#)
[Scrambled Sentences](#)
[Sum It Up Protocol](#)
[Teaching to Learn](#)

Establishing and Acknowledging Adherence to Rules and Procedures

[Classroom Roles](#)
[Norms](#)

Focus Statement: Teacher establishes classroom rules and procedures that facilitate students working cooperatively and acknowledge students who adhere to rules and procedures.

Desired Effect: Evidence (formative data) demonstrates students know and follow classroom rules and procedures (to facilitate learning) as a result of teacher acknowledgement.

Using Engagement Strategies

Focus Statement: Teacher uses engagement strategies to engage or re-engage students with the content.

Desired Effect: Evidence (formative data) demonstrates students engage or re-engage as a result of teacher action.

[Chalk Talk](#)
[Chat Stations](#)
[Classroom Roles](#)
[Compass Points](#)
[Creating Graphic Representations](#)
[Dump Your Brain](#)
[Engage and Connect](#)
[Final Word Protocol](#)

[Guided Notes](#)
[Headlines](#)
[Scavenger Hunts](#)
[Scrambled Sentences](#)
[Sum It Up Protocol](#)
[Virtual Classroom Interfaces](#)

Establishing and Maintaining Effective Relationships in a Student-Centered Classroom

Focus Statement: Teacher behaviors foster a sense of classroom community by acknowledgement and respect for the diversity of each student.

Desired Effect: Evidence (student action) shows students feel valued and part of the classroom community.

[Affirmations](#)
[Office Hours](#)
[Social Times](#)

Communicating High Expectations for Each Student to Close the Achievement Gap

Focus Statement: Teacher exhibits behaviors that demonstrate high expectations for each student to achieve academic success.

Desired Effect: Evidence (student surveys, interviews, work) shows the teacher expects each student to perform at their highest level of academic success.

[Exit Tickets](#)
[Leveled Assessments](#)
[Digital Self-Reflection](#)
[Tiered Questioning](#)
[Tiered Task Cards](#)

Teaching Techniques / Technology Tools

This next section provides descriptions of the teaching strategies linked to *Marzano Elements* above. Each description should serve to get you started. We have included links to technology tools that you can use to support each of these teaching techniques. We have organized the techniques alphabetically for easier reference. There is an index at the end of the section.

3-2-1 Bridge: At the left-hand side of a page, ask students to write down three thoughts or ideas, two questions, and one metaphor or simile about the topic. After the lesson, ask students to repeat the process on the right side of their paper, writing down three new thoughts or ideas, two new questions, and one new metaphor or simile. Then, create a “bridge” beneath the two columns by writing a few sentences that connect their new responses to your initial responses.

More on 3-2-1 Bridge: https://pz.harvard.edu/sites/default/files/3-2-1%20Bridge_0.pdf

- [Google Docs](#)
- [Google Drawings](#)
- [Padlet](#)

Affirmations: It is important to create routines to recognize each student’s contributions and humanity in the digital classroom. Create a routine where students offer affirmations to one another at the end of each synchronous class or through a classroom blog. Affirmations can be as simple as, “I enjoyed your story today, Sean.” As students become familiar with the routine, encourage them to look for times when a student exemplifies the norms and roles that are expected in the online classroom. As an instructor, be sure that you offer affirmations to students both publicly during videoconferencing and privately through email or chat functions. These practices help build community even though we must remain physically distant from one another.

More on Affirmations: <https://www.weareteachers.com/micro-affirmations-in-the-classroom/>

- [Google Docs](#)
- [Zoom Chat](#)
- [Microsoft Teams Chat](#)
- [Google Meets Chat](#)
- [Padlet](#)

Book Walks: Introducing content through book or picture walks can be done in the virtual classroom as well. For digital text resources, ask students to scan the material and look for signs of important content, such as text that is bold-faced, underlined, or carries a link to a web document. Visual resources such as pictures and videos can be analyzed to glean ideas about the topic before full viewing.

More on Book Walks: <https://spedellreadingstrategies.weebly.com/bookpicture-walk.html>

Chalk Talk: Chalk talks are a way for students to respond silently to prompts you provide them and respond to their classmates' ideas. This teaching technique can be adapted to the online teaching environment. In an online learning environment, you will post your prompts and allow students to respond through the platform of your choice. Be sure to lead the class through a [debriefing](#) of what everyone has contributed. Highlight places where students expanded on a classmate's idea or responded to a question a fellow student posed. Address misconceptions that arose. Consider asking students to take turns in the debriefing activity, asking them to find contributions they would like to highlight.

More on Chalk Talk: <https://www.scholastic.com/teachers/blog-posts/genia-con nell/chalk-talks-engage-all-students/>

- [Google Docs](#)
- [Zoom Chat](#)
- [Microsoft Teams Chat](#)
- [Google Meets Chat](#)
- [Padlet](#)
- [Ziteboard](#)

Chat Stations: Select several questions that push students thinking about a particular concept you are studying. Share all the questions with the entire group. Let them know that they will be assigned to a group whose task will be to discuss one of the questions and report back to the main group about their discussion. Assign a discussion [Classroom Role](#) to each student in the group and specify the amount of time they will have to discuss their questions. Divide students into small groups and assign them to a [digital breakout room](#). When small groups have finished, ask each group to report out on what they discussed. Allow students from other groups to ask clarifying questions or make their own contributions.

More on Chat Stations: <https://learn.teachingchannel.com/video/conver-stations-strategy>

- [Google Meets Breakout Rooms](#)
- [Zoom Breakout Rooms](#)
- [Microsoft Teams Breakout Rooms](#)

Clarifying Protocol: This protocol helps individual students receive and provide feedback to clarify their ideas. To start, ask students to spend about 10 minutes reflecting on a piece of content. They are to identify the most important aspect of the content (the main idea, the pivotal moment, etc.), provide evidence from the resource to back up their choice, and specify how the portion they identified influences future events.

Once students have completed their individual reflections, assign groups of three students to [digital breakout rooms](#) to engage in discussion. One student starts by presenting their reflections for three minutes. Next, for two minutes, the other two discussion group members are to ask clarifying questions regarding the presentation (<https://global.indiana.edu/documents/global-perspectives/clarifying-and-probing-questions-handout-step-2-define.pdf>).

After clarifying questions have been asked, the group spends three minutes in a discussion guided by the clarifying questions and the content of the presentation.

- [Google Meets Breakout Rooms](#)
- [Zoom Breakout Rooms](#)
- [Microsoft Teams Breakout Rooms](#)

The presenter should engage in the conversation, but also take notes on what others are saying. The goal of the discussion is to help the presenter think more deeply about what they wrote. Finally, the presenter spends one-minute reflecting on what they heard and how that will shape their thinking and writing on the topic. The group should repeat this process until each member has had a turn to be the presenter. After all students have completed their small group discussions, return to a whole group format to [debrief](#) the conversations that occurred in the smaller groups.

Classroom Norms: As you build your online classroom, you will want to clarify roles and expectations for students in each type of learning session. Just as you would in the physical classroom, establish how students are expected to behave and engage as learners in whole group video sessions, as participants in asynchronous discussions, and in small group [digital breakout rooms](#). This process will involve familiar processes where you develop, teach, model and practice what learning behaviors and engagement look like in the digital environment.

More on Classroom Norms: <https://www.cultofpedagogy.com/classroom-management-plan/>.

Classroom Roles: For discussions and collaborative work, you can teach students to take on specific roles. This process is especially useful when you are planning to use [digital breakout rooms](#), because unlike instruction involving small groups in a physical classroom, teachers cannot oversee the work of online groups simultaneously. As with expectations for behavior and engagement, you will want to teach these roles explicitly and give students time to **practice** in a group session where you can support their enactment of the roles. Cooperative group work can be scaffolded by the use of the roles of leader, recorder, time keeper, presenter, and errand monitor (http://www.readwritethink.org/files/resources/lesson_images/lesson277/cooperative.pdf). As students take on the roles, they learn more about how to deepen and guide discussions themselves. In the online teaching environment, the “errand monitor” can research answers to questions that come up during the discussion.

Compass Points: Have students respond to “compass point” prompts for a topic. Students respond by writing about the lesson’s topic in terms of their E- Excitements, W- Worries, N-Needs, and S-Stances, Steps, or Suggestions.

- [Google Forms](#)
- [Padlet](#)
- [Quizizz](#)

More on Compass Points:

<https://www.sadlier.com/school/ela-blog/compass-points-thinking-routine-a-professional-development-series>

Connect-Extend-Challenge: During or after a lesson, ask students to complete a connect-extend-challenge worksheet on a shared document, whiteboard, or Google form. For the first column, ask students to reflect on how the content you presented connects to things they already know. In second column, ask students to consider how new ideas have broadened their thinking and understanding. Finally, in the final column, students outline how the new content poses challenges to their thinking and/or raises questions for them.

- [Google Docs](#)
- [Google Drawings](#)
- [Ziteboard](#)

More on Connect-Extend-Challenge:

<https://thinkingpathwayz.weebly.com/connectextendchallenge.html>

Consensogram: Use a digital whiteboard, or a survey, to create a consensogram to assess assumptions and predictions of students as you introduce new content. You can use consensograms to assess student understanding and give a larger number of students the chance to express their ideas than you can in a discussion. This tool allows you to spot check where students are in processing lesson content so that you can adjust your teaching if necessary. The opportunity for self-expression also helps build rapport as they are able to see that you are interested in their ideas. In addition, the data you gather this way provides the opportunity for students to engage in analysis that can further discussion of your lesson topic.

- [Google Drawings](#)
- [Google Forms](#)
- [PearDeck](#)
- [Ziteboard](#)

More on Consensograms: <https://www.theteachertoolkit.com/index.php/tool/consensogram>

Creating Graphic Representations: Include graphic representations of ideas in your lessons. Expanding your use of graphic representations to include new formats such as graphic organizers for note taking or to demonstrate their understanding of how concepts fit together.

- [Interactive Venn](#)
- [Google Drawings](#)

More on Creating Graphic Representations: <https://www.cultofpedagogy.com/graphic-organizer/>

Debrief: After a teaching session, review the ideas that you have covered as a group. This will allow you to highlight areas where students elaborated on one another's contributions or where there were misconceptions.

Consider having students help with this debrief, by challenging them to find areas to highlight, places where they agreed or disagreed and state why they do, or present an answer to a question a student posed.

- [Google Forms](#)
- [Padlet](#)
- [Quizizz](#)

Digital Breakout Rooms: Video conferencing platforms provide users the chance to meet in smaller “rooms” to engage in group work or discussion in smaller groups. Using such small group meeting spaces will require you to do specific teaching about the norms and roles that you expect in these less-supervised environments. Start as you would with any new skill and invite several students to help you do a role play of how students should behave in digital breakout rooms. Once you are comfortable that students are clear on the norms and roles they are to play, assign them to practice with a simple discussion activity for five minutes. While students are in the breakout rooms, you can “drop in” to each room for a few moments to assess how groups are doing with the norms and roles that they were to follow. Have all students return to the main video meeting and conduct a [debrief](#) to assess how things went.

- [Google Meets Breakout Rooms](#)
- [Zoom Breakout Rooms](#)
- [Microsoft Teams Breakout Rooms](#)

*Note that as of publication, breakout rooms for Google Meets are provided through adding a third party plug-in.

Digital Exit Tickets: The process of using exit tickets to shape student instruction can be adapted to the online space. You can create exit slips to be emailed back to you or posted in the student’s classroom folder. You also can get real time responses through many different apps. Whether you use a Google form or try out one of the apps featured below, digital exit tickets can be used to provide you real-time instructional information about what a student needs next. You can target re-teaching activities or web resources to a particular skill a student has yet to master.

- [Google Forms](#)
- [Socrative](#)
- [Padlet](#)
- [Quizizz](#)

Regardless of whether the exit ticket provides synchronous or asynchronous information to you, the data you gather will allow you to continue to tailor your instruction to your students’ individual needs.

More on Exit Tickets: <https://www.edutopia.org/practice/exit-tickets-checking-understanding>

Digital Feedback Methods: Provide multiple venues for students to share their understandings of the lesson. As in the regular classroom, you can ask students to submit written responses by placing them in their online student folders or via email. In online teaching, there are additional strategies available to you. Consider using tools like the chat and whiteboard functions in your video conferencing software during live instruction. Since we cannot spend six hours a day on video conferencing, students also can submit their work through asynchronous tools, such as email, and by recorded video responses via apps like Flipgrid.

- [Flipgrid](#)
- [Google Forms](#)
- [Socrative](#)
- [Padlet](#)
- [Quizizz](#)

Digital Mini-Lessons: You can create short, simple videos to serve as digital mini-lessons for students who need additional help with a concept. As you record your lesson, remember that you do not have to end up with a fancy Ted Talk presentation. What your students value most is receiving additional help and seeing you provide it.

- [Flipgrid Tools for Making Videos](#)

Students also can create these sorts of videos. If you have a few students who have mastered a concept, challenge them to create a video that explains what they know to students who are still grappling with the content. You can use student created videos to support struggling learners and as a means of assessment for the students who created them.

More on making Digital Mini-Lessons: <https://www.edutopia.org/article/5-step-guide-making-your-own-instructional-videos>

Digital Self-Reflections: Encourage students to create digital self-reflections of what they learned. Allowing students to create short videos or audio recordings where they explain their learning gives students a new way of showing what they know. The process of filming and editing their videos also gets students engaged in the process of metacognition.

- [Flipgrid Tools for Making Videos](#)

More on Digital Self-Reflections: <https://www.hollyclark.org/2020/05/10/reflection-ideas-for-the-classroom/> ;

Dump Your Brain: This technique can be adapted to online teaching. Rather than having students write on chart paper or Post-It notes, you can have students respond using digital tools. You can do this activity before, during, or after you have taught your lesson or unit. To get started, select key content or concepts with which you want students to engage. Using a prompt in a document, on a whiteboard, or through a Google Forms question, have students write down what they know about the concept. When students have completed their contributions, be sure to engage in a group [debrief](#).

- [Google Docs](#)
- [Google Forms](#)
- [Jamboard](#)
- [PearDeck](#)
- [Ziteboard](#)

More on Dump Your Brain: <https://visioninpracticeblog.wordpress.com/2017/10/16/long-term-learning-strategy-brain-dumps/>

Engage and Connect: Prepare content that students can [highlight digital documents](#) (e.g., a Google Document or PDF). Ask students to highlight the document according to the following guidelines. Use green to highlight areas where they agree with the content. Use yellow to highlight where they have a question. Use orange to highlight areas that are new to them or that they had never considered before. After they have completed their highlights, bring students together, in either small groups or as a whole class, to engage in a discussion of areas of agreement, places of questioning, and new content.

- [Google Docs](#)

Expert Groups/Jigsaw Discussion: Create multiple groups of students, being sure to balance learning styles and levels across groups. Ask each group to read about a topic. Let each student know that they will be responsible for reporting to another small group as the expert on this topic, they should be prepared to talk about the key ideas and what they learned about the topic. Assign students to [digital breakout rooms](#). After the groups have had sufficient time for their task, bring everyone back to the main meeting. Create new groupings that contain one “expert” on each topic and task the new groups with sharing out, one at a time, what they have learned in their first round.

- [Google Meets Breakout Rooms](#)
- [Zoom Breakout Rooms](#)
- [Microsoft Teams Breakout Rooms](#)

More on Expert Groups/Jigsaw Discussions:

- <https://teacherthrive.com/2014/07/expert-groups-cooperative-learning.html> ;
<https://www.cultofpedagogy.com/jigsaw-instructions/>
- https://www.youtube.com/watch?time_continue=2&v=euhtXUgBEts&feature=emb_logo

Final Word Protocol: The Final Word Protocol engages students in processing text by identifying the main idea, selecting several sentences from the text that illustrate the main idea. First have students read the text independently and summarize the main idea in two or three sentences of THEIR OWN words. Then ask students to return to the text and highlight two or three quotes that they feel are important to the main idea of the text. Once students have completed these tasks, assign them to small groups for discussion. Students take turns sharing their quotes from the text, one at a time. After each member has shared their quote, the rest of the group members may comment on the quote, but should refrain from general dialog and only respond with a comment on the quote. Then the student who shared the quote tells the group why they chose that quote

- [Google Meets Breakout Rooms](#)
- [Zoom Breakout Rooms](#)
- [Microsoft Teams Breakout Rooms](#)

as important. Repeat this process until all members of the group have shared at least one of the quotes they selected.

More on the Final Word Protocol: <https://www.tolerance.org/classroom-resources/teaching-strategies/community-inquiry/save-the-last-word-for-me-35#:~:text=Save%20the%20Last%20Word%20for%20Me%20is%20a%20comprehension%20strategy,based%20responses%20in%20small%20groups.>

Guided Notes: Guided note taking can be used during live or asynchronous instruction to help support students as they learn new content. Create note sheets that cover the content of the lesson, but leaves blanks in key areas. You can create these note sheets as documents that you drop into each students' folder, or as Google forms where each student responds with the content they feel fits in the blank. Before you start the lesson, review the notes sheet as a group or have students review it on their own. As students go through the lesson, it is their responsibility to be on the lookout for content to complete the areas where there are blanks. At the end of the lesson, you can review students' responses to see which students might need additional support.

More on Guided Notes:

- <https://www.theteachertoolkit.com/index.php/tool/guided-notes#:~:text=Guided%20Notes%20are%20teacher%2Dprepared,%2C%20facts%2C%20definitions%2C%20etc.>

<https://www.interventioncentral.org/academic-interventions/study-organization/guided-notes-increasing-student-engagement-during-lecture->

- [Google Forms](#)

Hands-On Learning: Teachers are accustomed to using hands-on learning materials, such as math manipulatives or science equipment, in their bricks-and-mortar classrooms. Continuing the practice during remote instruction is more challenging. If you are not able to distribute manipulative packages to your students, consider having students gather materials that they have available to them at home. Providing the continued opportunity for students to interact with physical representations of their learning is vital. If that route is not possible, consider using virtual manipulatives to enhance remote teaching.

More on Online Hands-On Learning: <https://msu.edu/~stemproj/simulations.html>

- [Using common household materials as math manipulatives](#)
- [Using virtual manipulatives for teaching math](#)
- [List of On-Line Science, Math, and Social Studies Virtual Simulations and Manipulatives](#)
- [On-Line Science Experiment Simulations](#)

Headlines: Have students review a collection of resources. Once they have finished their review, have them work in teams (in [digital breakout rooms](#)) to create a headline that synthesizes the content. For each headline, they should provide three examples/references to the texts that support their headline. Have students share their headlines with the entire class.

More on Headlines: <https://www.facinghistory.org/resource-library/teaching-strategies/create-headline>

- [Google Docs](#)
- [Google Drawings](#)

Highlighting Digital Documents: Before a lesson, drop a Google doc in each student's folder so they can preview learning goals, key content to be learned, and relevant vocabulary. Have students highlight concepts about which they have questions in yellow and concepts that they already know in green. Have students highlight words in the learning target that are unclear with yellow. At the start of the lesson, ask students to share their words from the learning target that they highlighted yellow. Discuss these words to help students gain understanding of these key words. After the lesson, ask students to revisit their document and check what yellow highlights they can change to green. Review student documents for level of understanding. Similarly, you can use digital highlighting to have students preview the end of chapter/section reflection questions before reading their new content. As they read, have them highlight content that refers back to the questions at the end of the chapter/section.

- [Google Docs](#)
- [Jamboard](#)
- [Zoom whiteboard](#)

Interactive Slides: Many teachers are already accustomed to using slide presentations, like PowerPoint or Google Slides. During online teaching, we can make these sorts of presentations interactive using a variety of add-ons and other applications. The goal with interactive slide presentations is to get students to engage with one another and the content by building in such opportunities into our presentations. You can even use Google Draw to create magnetic poetry activities (<https://www.literacyworldwide.org/blog/literacy-now/2018/10/12/build-your-own-online-magnetic-poetry-kit-with-google-drawing>)

- [PearDeck](#)
- [Asynchronous Interactive Google Slides](#)

Leveled Assessments: During online learning, we want to continue the practice of aligning our classroom assessments with our learning objectives. As in our "regular" classrooms, we want to continue having leveled assessments that allow students to demonstrate what they know at the level at which they are capable of functioning. In an online teaching setting, you can create leveled assessments that students can do synchronously (using apps like Quizizz or Socrative) or asynchronously (using an app such as Google Forms).

- [Google Forms](#)
- [Quizizz](#)
- [Socrative](#)

More on Leveled Assessments: <https://mrsleveledlearning.com/2017/08/leveled-assessments-support-growth-mindset/> or <https://cbdconsulting.com/episode84/>

Office Hours: The task of getting to know our students through online instruction requires setting aside time devoted to that goal. If you have previously held morning meetings or classroom meetings, adapt the process to your online classroom. You can hold video conference meetings for such gatherings. Set aside time for office hours when students can drop in for extra help or just to chat. Track who attends and reach out to connect with those who do not. You can try out holding morning meetings online too! <https://www.weareteachers.com/online-morning-meeting/> or <https://www.edutopia.org/article/bringing-benefits-your-morning-meetings-online>

Online Quizzes: You can utilize quizzes and other sorts of formative assessments in your online teaching. With the help of technology, you can integrate such assessments into your synchronous teaching or have students take the quizzes at times when you are not together in the online video classroom.

- [Google Forms](#)
- [Socrative](#)
- [Quizizz](#)

Processing Guide: You can use a processing guide to support students as they interact with content either synchronously or asynchronously. Create a processing guide for students to use and ask them to complete it as they watch, listen to, or read the content of a lesson. The guide helps structure students' interaction with the content and provides them with footholds to navigate new or complicated content.

- [Google Forms](#)
- [Padlet](#)
- [Processing Guide](#)
- [Quizizz](#)
- [Socrative](#)

Read Around and Choose. For this activity, you will need to divide content to be covered into several small chunks (paragraphs, pages). Assign each student a block to read with the instruction that they are to highlight the content they identify as most important. They should also scan the content just before and after their chunk for places where there are important ideas or connections. Once students have completed their reading, assign students to [digital breakout rooms](#) so that there is one reader of each chunk in the breakout room. Have students take turns sharing their highlighted portions with their small group. Encourage students to make comments that establish connections between the chunk being presented and the chunk that they read.

- [Google Meets Breakout Rooms](#)
- [Zoom Breakout Rooms](#)
- [Microsoft Teams Breakout Rooms](#)

Scavenger Hunt: You can create scavenger hunts using a Google Form or the app GooseChase to layout challenges that ask students to review textbook materials and input key concepts, search for examples of concepts in real life and snap a picture, work collaboratively in small group break out rooms to solve problems.

- [Google Forms](#)
- [GooseChase](#)

More on Scavenger Hunts: <https://www.excitededucator.com/home/online-learning-scavenger-hunt>

Scrambled Sentences: In the chat, each student lists a one-word take-away with what they've learned. Then, create a shared document of all the words. Students then have to use those words to create a sentence using the words. Have children share their sentences verbally and/or in the chat. Even younger students can engage in this strategy!

- [Google Meets Chat](#)
- [Jamboard](#)
- [Microsoft Teams Chat](#)
- [Zoom Chat](#)

Social Times: It is just as important, if not more so, to set aside time for classmates to interact informally during online learning. During the pandemic, children are not able to spend time with their peers at recess, during lunch, or before/after school. To meet these crucial social emotional needs of students, and to help you develop a working relationship with students, set aside time on a regular basis where you and students can interact spontaneously and informally. This can be as simple as allowing students to remain unmuted and to talk with one another and use the chat function for social purposes during the start or ending of a video conferencing meeting. You also build in special meeting times for celebrations of birthdays or other significant milestones for your students. Or just play some fun video-conferencing games (<https://parenting.com/1025105/stephanieosmanski/zoom-games-for-kids/>).

Sum It Up: Divide students into groups. Assign each member of the group specific content to read or review. Give students a set amount of time to read and/or review content with the goal of summarizing their portion in under 20 words. Once each student has created their summary, have students share their summaries with the group. Then challenge each small group to sum up the entirety of the content covered in the small group in 20 words. At the end of the session, ask a representative from each group to share their group summary. You can frame this activity as a game where each individual student/small group has \$2.00 to spend on summarizing their content at the rate of \$.10 per word. See who can do the best job of summarizing for the least amount of money!

- [Google Docs](#)
- [Google Drawings](#)

More on Sum-It-Up: <https://www.readingrockets.org/strategies/summarizing>

Teach to Learn: This strategy can be used in a number of ways—to gain a deeper understanding of what an individual or small group of students knows or to engage students in peer tutoring. When you feel that a student has achieved competence with a topic, ask them to either record a short teaching video on the topic or to teach a short lesson during a small or whole group video conferencing session. If you chose to have students submit videos of their teaching, archive video recordings for use in future teaching.

- [Flipgrid](#)
- [Tools for Making Videos](#)

More on Teach to Learn: <https://wabisabilearning.com/blogs/inquiry/letting-students-teach>

Tiered Task Cards: Differentiated instruction can be conducted during online learning just as you would during “regular” school. Using this type of resource during remote instruction is a great way of building asynchronous educational tasks for your students. Create Google Forms or Slides that have an assortment of tasks keyed to different levels of performance.

- [Google Forms](#)
- [Interactive Slides](#)

More information on Tiered Tasks, see p. 71: http://impactofspecialneeds.weebly.com/uploads/3/4/1/9/3419723/tiering_instruction_in_the_differentiated_classroom.pdf, or: <https://blog.williamferriter.com/2020/05/26/remote-learning-idea-for-primary-teachers/>

Tuning Protocol: This process structures feedback to ensure that all feedback is direct and respectful. The Tuning Protocol can be used for pairs of students or two small groups to provide feedback to one another. Each member of the pair or small group takes turns performing both the presenter and the responder roles. One person or group goes first and shares their presentation for three minutes. Next, the other half of the pair or group provides warm and cool feedback (http://schoolreforminitiative.org/doc/warm_cool_hard.pdf) for a total of three minutes. Then the presenter is given one minute to react to what they heard, during this time the other half of the group is not allowed to speak. This process is then repeated with the presenters shifting to responders and vice-versa. After each group, engage the entire class in a [debriefing](#). This process can be done as a whole group but is better suited for smaller groups in [digital breakout rooms](#).

- [Google Meets Breakout Rooms](#)
- [Zoom Breakout Rooms](#)
- [Microsoft Teams Breakout Rooms](#)

Virtual Classroom Interfaces: For many of us, the time right before our students return to the classroom is an exciting time where we decide how to display information in our rooms and what decorating we will do. Just because teaching is remote, does not mean we have to forgo creating warm and welcoming “classrooms!” Using applications such as Bitmoji classroom, you can create a digital classroom where your digital avatar welcomes students and displays information. The warmth of this type of digital environment can serve as an anchor to your virtual interactions with students.

- [Bitmoji Classroom](#)

We Used to Think, Now We Think: You can engage students in this protocol using shared documents, surveys, or Google forms. At the end of a teaching cycle, ask students to evaluate what they used to think about a specific topic and what they now think about the topic. Prompt students to think about trends, key points, and how what they learned changed their thinking. Once all students have submitted their responses, engage in a group [debrief](#).

- [Google Docs](#)
- [Google Drawings](#)
- [Google Forms](#)
- [Padlet](#)
- [Ziteboard](#)

Index

[3-2-1 Bridge](#)
[Affirmation](#)
[Book Walks](#)
[Chalk Talk](#)
[Chat Stations](#)
[Clarifying Protocol](#)
[Classroom Norms](#)
[Classroom Roles](#)
[Compass Points](#)
[Connect-Extend-Challenge](#)
[Consensogram](#)
[Creating Graphic Representations](#)
[Debrief](#)
[Digital Breakout Rooms](#)
[Digital Exit Tickets](#)
[Digital Feedback Methods](#)
[Digital Mini-Lessons](#)
[Digital Self-Reflections](#)
[Dump Your Brain](#)
[Engage and Connect](#)
[Expert Groups/Jigsaw Discussion](#)

[Final Word Protocol](#)
[Guided Notes](#)
[Hands-On Learning](#)
[Headlines](#)
[Highlighting Digital Documents](#)
[Interactive Slides](#)
[Leveled Assessments](#)
[Office Hours](#)
[Online Quizzes](#)
[Processing Guide](#)
[Read Around and Choose](#)
[Scavenger Hunt](#)
[Scrambled Sentences](#)
[Social Times](#)
[Sum It Up](#)
[Teach to Learn](#)
[Tiered Task Cards](#)
[Tuning Protocol](#)
[Virtual Classroom Interfaces](#)
[We Used to Think, Now We Think](#)

Additional Resources

Getting Up to Speed for Online Teaching

- Classter's Tools and Tips for Creating a Virtual Classroom: <https://www.classter.com/2020/03/30/tools-tips-for-virtual-classroom/>
- Engaging Learners in Online Learning through Universal Design for Learning Principles: <https://elearnmag.acm.org/featured.cfm?aid=3310383>
- Global Online Academy's COVID-19 Resources: <https://globalonlineacademy.org/covid-19>
- K-12 Online Interaction Chapter from K-12 Blended Teaching: A Guide to Personalized Learning and Online Integration: https://edtech-books.org/k12blended/online_interaction
- National Institute for Excellence in Teaching-- Taking Great Teaching Online: <https://www.niet.org/newsroom/show/blog/taking-great-teaching-online-candice-mcqueen>
- National Institute for Excellence in Teaching- Instructional Strategies for Virtual Learning: <https://www.niet.org/assets/Resources/f42de7f8fb/niet-rubric-companion-for-virtual-instruction.pdf>
- National Institute for Excellence in Teaching- Collection of Articles about Online Teaching: https://www.niet.org/newsroom?type=BlogNewsItem&search=online&action_handleNewsroomFilters=Submit
- The Teacher's Guide to Tech, by Jennifer Gonzales from Cult of Pedagogy an Online Course (\$25 on Teachers Pay Teachers): <https://teachersguide-totech.com/guide/>

Effectively Using Video Conferencing with Students

- Caitlin Tucker's 3 Ways to Use Video Conferencing with Students: <https://catlintucker.com/2020/03/3-ways-to-use-video-conferencing/>
- User Generated Education- Increasing Student Participation During Zoom Meetings: <https://usergeneratededucation.wordpress.com/2020/03/20/increasing-student-participation-during-zoom-synchronous-teaching-meetings/>

Additional Tech Resources for Online Teaching

- Cult of Pedagogy's Distance Learning Resources List: <https://www.cultofpedagogy.com/distance-learning/>
- Free Tech 4 Teachers: <https://www.freetech4teachers.com/>
- Tech Against Coronavirus' List of Tech Resources <https://techagainstcoronavirus.com/>
- Using Google Classroom to Organize Files: <https://www.youtube.com/watch?v=qOUEP29MX58>

Resources for Administrators

- Global Online Academy
 - 10 Strategies for Leading Online When School Is Closed: <https://globalonlineacademy.org/insights/articles/10-strategies-for-leading-online-when-school-is-closed>
 - If I Knew Then... A School Leader Reflects: <https://globalonlineacademy.org/insights/articles/if-i-knew-then-a-school-leader-reflects-on-ten-weeks-of-learning-online>
 - The New Normal: Five Insights: <https://globalonlineacademy.org/insights/articles/the-new-normal-five-insights-from-goals-covid-19-leadership-roundtable>

- Why Online Collaboration and Connection Matter More Than Ever: <https://globalonlineacademy.org/insights/articles/why-online-collaboration-and-connection-matters-more-than-ever>

Support for Major Video Conferencing Platforms

Google Meets

- Google's Education Blog: <https://blog.google/outreach-initiatives/education/>
- Google Meet Help: <https://support.google.com/meet/?hl=en#topic=7306097>

Microsoft Teams

- Microsoft Teams Education Blog: <https://educationblog.microsoft.com/en-us/category/education/>
- Best Practices for School Leaders using Microsoft Teams: <https://support.microsoft.com/en-us/office/best-practices-for-school-leaders-creating-teams-and-channels-in-microsoft-teams-for-education-f3663ad9-a835-4971-9acb-6725a543c003?ui=en-us&rs=en-us&ad=us>
- General Microsoft Teams Support: <https://support.microsoft.com/en-us/teams>

Zoom

- Tips and Tricks: Teachers Educating on Zoom: <https://zoom.us/docs/doc/Tips%20and%20Tricks%20for%20Teachers%20Educating%20on%20Zoom.pdf>
- General Zoom Support: <https://zoom.us/docs/en-us/covid19.html>
- Breakout Rooms: <https://www.youtube.com/watch?v=jbPpdyn16sY>

Other Apps to Support Online Teaching

Bitmoji Classroom:

- Teacher Tutorial: <https://www.helloteacherlady.com/blog/2020/4/how-to-create-a-virtual-bitmoji-scene-in-google-slides-or-powerpoint>
- Ideas: <https://glittermeetsglue.com/virtual-bitmoji-classroom/>

Google Forms:

- Teacher Tutorials:
 - https://docs.google.com/presentation/d/121UK-FUXW26bC0_jl2pMUAsCW_fwnKf8C595Cx1zL2k/htmlpresent
 - <https://support.google.com/edu/classroom/answer/9095575?hl=en>

Google Slides:

- Teacher Tutorials:
 - https://edu.google.com/teacher-center/products/slides/?modal_active=none
 - <https://www.brightcarbon.com/blog/how-to-make-an-interactive-presentation-in-google-slides/>
- Ideas for using Google Slides in Teaching:
<https://sites.google.com/view/linksforteachingbymark/g-suite/slides>

Jamboard:

- <https://nerdschalk.com/how-to-use-google-jamboard-with-google-meet/>

Kahoot:

- <https://nerdschalk.com/how-to-play-kahoot-on-zoom-and-google-meet/>

Padlet

- Teacher tutorials:
 - <https://padlet.com/anissa1/iPadWorkshop2015>
 - <https://www.youtube.com/watch?v=4F60kOS5HYw>
 - <https://www.bookWidgets.com/blog/2017/08/30-creative-ways-to-use-padlet-for-teachers-and-students>
- Student tutorial: https://www.youtube.com/watch?v=deIW1Jtq_w

Challenges for Administrators

Just as teachers will confront unforeseen challenges, educational leaders, school principals, and central office staff are certain to face unanticipated challenges as well. Preparation for the 2020-21 school year will require additional planning that will stretch your capacities. We encourage leaders to take it one step at time and give themselves the same grace we allow our students. Get started, look for mistakes, own where you need to grow, and make a plan to do so.

Digital infrastructure and architecture are key areas where leadership will be immediately needed.

- We urge districts to research and select one, and if needed two at the most, learning management platforms. Consistency is needed so that your tech teams can provide needed support. Families need uniformity as many will have learners at multiple grade levels.
- We encourage districts to establish templates for how classroom shared drives are set up across grade levels. Consistency in such formatting will allow students and families to better access the multiple folders they will use during remote learning.
- We appeal to districts to help staff come to consensus about how to create classroom calendars and naming conventions for digital files and to provide templates for calendars and unit/lesson plans for teachers to share with students and families. Standardizing the process for accessing learning tools will allow students and families to more easily access the multiple folders they will use during remote learning.

Establishing an environment where teachers and students can take risks, try new things, and sometimes fail will be crucial.

- We recommend that all district leaders, from principals to superintendents, participate in professional learning alongside their staffs.
- We encourage district leaders to publicly engage in the process of trying new technologies, making mistakes, owning the missteps, and planning to resolve them.
- We believe that district leaders must take the lead in advocating for additional training, materials, technology, and professional learning time for their staff. The latter is crucial, as online teaching is a new territory for almost all teachers. Professional development sessions need to be matched with additional planning time for teachers to experiment with new techniques and build them into their lessons.