

Lessons from the COVID-19 pandemic: Evidence-based resources for professional development facilitators

Harnessing remote learning tools for in-person instruction, grades 6–12

Facilitator guide

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Introduction

As in-person instruction resumes following the COVID-19 pandemic, teachers should consider how to repurpose the remote learning tools and resources to supplement traditional classroom instruction and remediate skill gaps that may have widened among students during the period of online learning. This professional development module and easy-to-use activities will help professional development facilitators apply evidence-based lessons of virtual learning to inform and strengthen middle and high school teacher practices. Specifically, the module focuses on two components of remote learning: fostering teacher-to-learner and learner-to-learner connections.

Research suggests that strong teacher-to-learner connections help students become more resilient, improve academic achievement, and support positive peer relationships (REL Southwest, 2020; REL Midwest, 2020a, REL Appalachia, 2020a). Research on learner-to-learner connections identifies the ways positive peer interactions support students in learning and developing critical thinking skills (Brindley, Walti, & Balschke, 2009). This module identifies evidence-based practices and engages participants in activities to explore the practices in greater depth.

In response to the COVID-19 pandemic, educational researchers from the nation's 10 Regional Educational Laboratories (RELs), which conduct applied research and training to promote an evidence-based education system, collaborated to compile resources and guidance to support educators in moving to virtual instruction. This work examined cross-cutting issues affecting grades K–12. This module repurposes these evidence-based tools, which are posted on the REL COVID-19 web page (<https://ies.ed.gov/ncee/edlabs/projects/covid-19/>), to support middle grade and high school teachers in adding virtual instruction to their repertoires. Researchers emphasized content with specific applicability to grades 6–12. The examples provided are geared towards these grade levels.

The REL COVID-19 web page contains a wealth of information on remote learning, with 44 evidence-based resources posted, including blogs, FAQs, an infographic, videos, and webinars. Researchers from REL Northwest synthesized website content to distill key findings and recommendations. This professional development module is intended to support district facilitators in delivering information to an audience of middle grade and high school educators as a 90-minute professional development experience. For flexibility, the module may be broken into sections and/or may be extended into a longer session(s). The module's content is summarized below:

- ***Module background and context.*** This section orients participants to the module with definitions and background information about remote learning and research. The timing of this portion of the module is designed for participants, such as colleagues, who know

one another. If the facilitator is working with a group of people unfamiliar with one another, they may want to extend this time and add activities to help participants get to know each other and the background each brings to the conversation.

- ***Fostering teacher-to-learner connections.*** This section helps participants understand the importance of building trusting relationships and breaking down barriers to communication among teachers and students. It features evidence-based practices to foster connections between teachers and learners in remote, hybrid, and face-to-face contexts.
- ***Fostering learner-to-learner connections.*** This section introduces participants to the benefits of connecting students with one another to foster learning. It highlights evidence-based practices that can be used to promote positive, interactive conversations among students to reinforce instruction in remote, hybrid, and face-to-face settings.

The module showcases eight evidence-based practices educators may adopt to take advantage of the benefits of remote learning. Self-guided activities are offered to help participants explore each of the eight practices. In the 90-minute timeframe, each participant will have time to directly engage in two activities: one for teacher-to-learner engagement and one for learner-to-learner engagement. Facilitators may seek to have all participants complete the same activity or group them based on their interest in a particular practice. If facilitators prefer, they can extend the session to allow participants to go deeper into a single activity or to work through more than two of the activities.

Learning outcomes

The presentation and activities included in this module will enable middle school and high school educators to identify, describe, and practice key evidence-based strategies to foster teacher-to-learner and learner-to-learner connections in remote, hybrid, and face-to-face instructional settings.

Process for identifying resources and activities

Information for this module was drawn from a review of 44 research studies, webinars, infographics, and blogs developed by REL researchers and posted on the REL COVID-19 web page (<https://ies.ed.gov/ncee/edlabs/projects/covid-19/>). REL Northwest reviewed the resources developed by other RELs to distill content and activities that middle grade and high school teachers might adopt to strengthen their use of remote learning. In doing so, we prioritized research about youth, populations in the United States, and practices that are easy to implement. Because the module's purpose is to support teachers in integrating remote learning opportunities into everyday instruction, rather than in response to unexpected school closures, we excluded strategies and practices narrowly aimed at helping students maximize

learning in remote settings during COVID-19 or natural disasters. Consideration also was given when designing module format and components to time limitations of the professional development experience and the need for discrete activities for teachers.

Module-at-a-glance

The following section offers a structure for delivering a 90-minute professional development experience. It includes suggested times for each segment, a topical description, and summary of the key activities to be addressed. Key concepts are color-coded by focus in case facilitators wish to break the module into shorter sessions to conform to available time.

<i>Timing</i>	<i>Segment</i>	<i>Key activities</i>
10 minutes	Welcome and module background	<p>Invitation as participants arrive: <i>Share one practice you experienced or used during remote learning that you want to take with you into the classroom.</i></p> <p>Introduce the module Module purposes and overview</p>
10 minutes	Definitions and context	<p>Define terms Poll: <i>What are the challenges you faced in using remote learning tools?</i></p>
10 minutes	Fostering teacher-to-learner connections Rationale and evidence-based practices	Why teacher-to-learner connections are important and promising ways to improve academic achievement by using remote learning to build connections with students
17 minutes	Small groups use an evidence-based practice	Small groups engage with one of two evidence-based practices
5 minutes	Reflection and feedback	Participants reflect on the small-group activity and provide feedback
10 minutes	Fostering learner-to-learner connections Rationale and evidence-based practices	Why learner-to-learner connections are important and ways to improve academic achievement by using remote learning to build connections among students
17 minutes	Small groups use an evidence-based practice	Small groups engage with one of two evidence-based practices
5 minutes	Wrap-up	Reflect and give feedback
5 minutes	Thank you and feedback	Evaluation

When using the slide deck, keep in mind that the notes included on the facilitator slides are both directional and scripted. Feel free to use the script in whatever way works best for you, as long as you are true to the research described in the Facilitator Guide. *Directions for facilitators are included in the slides in italics; suggested scripts to read are in “quotation marks.”*

Step-by-step facilitation guide: Preparation

The following section lists steps that facilitators should take to prepare to offer a professional development experience. Addressing these prior to the session will help to ensure that it proceeds smoothly and will lessen disruptions. Allow at least two hours of preparation to customize the materials and activities.

Tasks to complete prior to the session

The facilitator should plan to complete the following tasks to prepare for the session.

- Create the two polls in the module, plus any you wish to use during introductions or at other times.
- Create any feedback survey you wish to conduct at the end of the session (optional).
- Customize the slide deck, which may be accessed on the REL Northwest website [LINK TO BE INSERTED]
 - Insert the names and titles of presenters on slide 3. Note that while presenters names will be added to the deck, the facilitator should be clarify during opening remarks that these individuals are not affiliated with the REL program or IES.
 - Insert links to polls and surveys as needed.
 - Add slides to customize introductions and icebreakers, breaks, or other directions as needed.
 - Create a PDF version of the slides with no slide notes as a handout for participants by selecting “File --> Export --> Create PDF/XPS Document” in PowerPoint (optional).
- Ensure the customized slide deck is saved and accessible on the computer you will use for projection or sharing.
- Make physical and/or digital copies of the agenda and activity handouts included in the appendices and posted on the REL Northwest website.

Communications with participants

The facilitator should reach out to participants prior to the session to advise them of what they will need to bring to the event, using the instructions in the face-to-face or virtual columns, depending upon how the professional development will be delivered.

<i>Face-to-face delivery</i>	<i>Virtual delivery</i>
<ul style="list-style-type: none"> • A device, such as a laptop or a mobile phone • Logistical directions for the event, including locations and start and end times • Links to all needed files and web pages • Download application from Screencast-o-matic.com to their laptop or mobile phone prior to event and test use • Create a free account (good for one month) at Peergrade.com and confirm 	<ul style="list-style-type: none"> • Updated platform connection to make the breakout room options as smooth as possible • Logistical directions for the event, including connection information and start and end times • Links to all needed files and web pages • Download application from Screencast-o-matic.com to their laptop or mobile phone prior to event and test use • Create a free account (good for one month) at Peergrade.com and confirm

Materials

The facilitator should plan to bring the following materials to the event, using the instructions included for the face-to-face or virtual columns depending upon how the professional development will be delivered. In the event of an online delivery, see the instructions on how to set up an online poll in Appendix B.

<i>Face-to-face delivery</i>	<i>Virtual delivery</i>
<ul style="list-style-type: none"> • Laptop • Projection screen • Physical or digital copies of handout packets 	<ul style="list-style-type: none"> • Zip file of professional development handouts (PDFs) • Link to polls or files

Session setup

The facilitator should take the following steps the day of the event to ensure they are prepared for participants to arrive, using the instructions included for the face-to-face or virtual columns, depending upon how the professional development will be delivered.

<i>Face-to-face delivery</i>	<i>Virtual delivery</i>
<ul style="list-style-type: none"> ● Connect slides to the projector ● Open webpages you may want to show ● Log into polling function ● Distribute handout packets or have them readily available 	<ul style="list-style-type: none"> ● Log into polling function in your virtual meeting platform. ● Prepare participant email list and send zip file containing handouts the morning of the training ● Create a slide to explain how to use features of your webinar platform, including the chat or Q&A box, breakout rooms, polling, and whiteboards

Appendix A: Participant agenda

This agenda is available for you to customize, copy, and paste into any email messages or handouts you may want to provide.

- 10 min Welcome and introductions
Participants will introduce themselves and review the content for the session.
- 10 min Definitions and context
Review of key definitions and how they are used.
- 32 min Fostering teacher-to-learner connections
Overview of why teacher-to-learner connections are important and ways to improve academic achievement by using remote learning strategies to build connections between teachers and students. Includes descriptions of evidence-based practices and a small-group activity.
- 32 min Fostering learner-to-learner connections
Description of why learner-to-learner connections are important and ways to improve academic achievement by using remote learning strategies to build connections among students. Includes descriptions of evidence-based practices and a small-group activity to practice skills.
- 6 min Closing
Discussion of next steps to apply learnings.

Appendix B: Welcome and module background handouts

Opening reflection and poll on barriers and challenges

The purposes of the following two activities are to get participants warmed up and to give them an opportunity to share any experiences or feelings that might get in the way of their full participation in this module. The key is to give participants the opportunity to be heard and to share difficulties they experienced when teaching remotely.

A poll provides an easy way for a facilitator and participants to identify common themes among responses to a prompt. We recommend adopting a polling platform of your choice (such as Poll Everywhere or Mentimeter) to create a poll and display results as they are coming in.

The first poll is designed to give participants a way into the session. The intention is for them to reflect on things they have tried or heard about that they might want to use. Show slide 1 as they enter the room and periodically let them know they can reply by going to your URL.

After several replies come in, you can switch the projection screen to show the responses as they are being submitted. This gives participants something to think about as they wait for the session to start and encourages them to respond.

The second poll is designed to give participants an outlet to express any concerns or frustrations they may have about remote learning. This is offered because it is important that teachers feel heard—if they do, they will be more likely to set aside their frustrations and engage in the activities. You can add specific directions for taking the poll to the slide deck. Again, after several replies come in, you may want to switch the projection screen to show the responses as they are being submitted.

Appendix C: Teacher-to-learner connections handouts

This appendix includes handouts for small-group sessions on teacher-to-learner connections. Each of the activities featured below relates to a specific practice that participants may wish to explore in greater depth. Facilitators may choose to have all participants engage in one of the four practices or group them based on their interest. Participants should be reminded that they may explore each of the practices following the professional development experience to expand their understanding and skills related to remote learning. Although participants will only take part in one activity per session, you may want to distribute all the handouts so they can try other activities on their own. This will also help them follow along during the report-out that follows the small-group sessions.

Activity handouts:

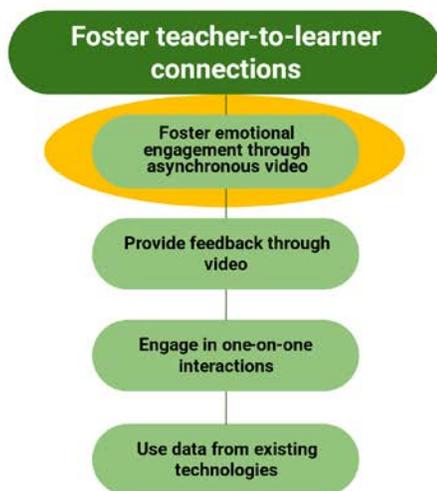
- **Foster emotional engagement through asynchronous video.**
This activity walks participants through why video can foster emotional engagement and how to create a quick introductory video to build teacher-to-learner connections.
- **Provide feedback through video.**
This activity walks participants through how to foster teacher-to-learner connections by using asynchronous video to provide feedback to students.
- **Engage in one-on-one interactions.**
This activity helps participants to understand the practice of one-on-one interactions occurring remotely, which is one way to develop emotional connections. Specifically, the small group will explore the practice of micro-conferences and how to use them effectively to save time and foster teacher-to-learner connections.
- **Use data from existing technologies.**
This activity helps participants understand how existing technologies may contain data they are not currently accessing. This data may be helpful in monitoring and providing feedback in ways that foster teacher-to-learner connections. Participants will be asked to access their own online tools or systems or to look over the shoulder of a colleague who already uses such tools or systems.

Activity: Foster emotional engagement through asynchronous video

Time: 20 minutes

Purpose: This activity walks participants through why video can foster emotional engagement and how to create a quick introductory video to build teacher-to-learner connections.

Evidence-based practices



Strategies for using video to foster emotional engagement can include:

- Recording introductory messages in which teachers share information about themselves.
- Incorporating activities to engage students in navigating video platforms.
- Creating daily videos to jump -start students' day and instill excitement.

Instructions: Getting started

Choose a timekeeper to keep track of the time to ensure that your group completes the activity.

Read the following section, up to the “activity instructions” in the gold bar below. This should take about one minute.

Activity: Introductory video

Research shared by REL Appalachia shows that students who are more emotionally engaged see more value in their online learning activities and have an enhanced sense of belonging to their learning community, which ultimately supports greater academic achievement. Emotional engagement refers to the “emotional energy associated with feelings about the classwork. For example: boredom versus enjoyment or interest, anxiety/frustration versus confidence, sadness versus happiness.”¹

In this activity, you will practice creating an introductory video that students can view remotely, either before the school year or semester starts, individually or in small groups in class while the teacher is working with other small groups, or as homework. As an introductory video, you would want to do this activity either before you meet students for the first time or very early in the class, as you and your students are still getting to know each other. Given the value of practicing this skill, you will be asked to practice recording a video and not simply role-play one.

Creating an introductory video does not need to take a long time; **videos do not need to be carefully produced or edited to be effective**. What does help to establish emotional connections with students through video is including a show of personal feelings, humor, or self-disclosure. Self-disclosure involves students or instructors sharing details of their personal lives outside of school. For example, in a video or audio file, high school teachers could share a story from their own high school experience or personal or professional updates.

While much of this activity requires independent work, you may choose to work in pairs or ask your colleagues for help as you are working through the steps.

Activity instructions

1. Timekeeper asks the group to take three minutes to think independently about (and discuss with a partner, if you wish) what you might say in a video where you introduce yourself to your students. How might you use the following to foster emotional engagement?
 - a. Emotion.
 - b. Humor.

¹ Source: REL Appalachia. (2020a). Research-based strategies for effective remote learning: Student engagement; Facilitator’s Handbook. https://ies.ed.gov/ncee/edlabs/regions/appalachia/events/materials/12-08-20_Workshop-1_student-engage_handbook_acc.pdf

- c. Self-disclosure.
 - i. What concerns do you have about self-disclosure (i.e., sharing information about your own personal life)? What might assuage these concerns?
 - ii. What might you share about yourself—personally and professionally? For example, what might you share about yourself when you were your students’ age to foster connections with them? How might that be connected to content?
2. Timekeeper lets the group know when three minutes have passed and notes the next part of the activity is for individuals to each spend 10 minutes creating an introductory video of themselves. Feel free to find a semi-private spot in the room to work, but remember, this does not have to be perfect!

You may record a video on your cell phone, computer, or one of many online programs. Most online video applications offer the added benefit of making your video easy to distribute to students. Examples include:

- Screencastify. <https://www.screencastify.com/>
- Hippo Video. <https://www.hippovideo.io/>
- Tinytake. <https://tinytake.com/>
- ScreenRec. <https://screenrec.com/>
- Screencast-O-Matic. <https://screencast-o-matic.com/>

If you do not already use a video program, create a short introductory video by clicking on [Screencast-O-Matic](https://screencast-o-matic.com/) (<https://screencast-o-matic.com/>). The device you use must have a camera attached.

- i. When the program loads, click “Launch Free Recorder” and allow the recorder to download.
 - ii. Record a one-minute video welcoming a student to your class and disclosing something about yourself. Remember that the purpose of this video is to help you make emotional connections with your students. Your video does not need to be carefully produced or edited to be effective!
 - iii. Watch the video and think about whether you would be comfortable sharing this (or something like this) with your students.
3. Timekeeper invites participants to spend one minute thinking about how they would follow up with students after they watch the video. What feedback might you ask your students to provide to learn more about them? How might the feedback you solicit help

you think about making connections to the content in your classroom? How will you collect their feedback (e.g., survey, video platform, audio program, etc.)?

4. Timekeeper invites participants to spend one minute planning how they might make their introductory video available to students (e.g., email, Google Drive, course webpage, etc.).

Reflection

Next, consider as a group how you might use this activity in your classroom. The timekeeper asks the group to consider the following questions and to discuss their thoughts for the last two minutes:

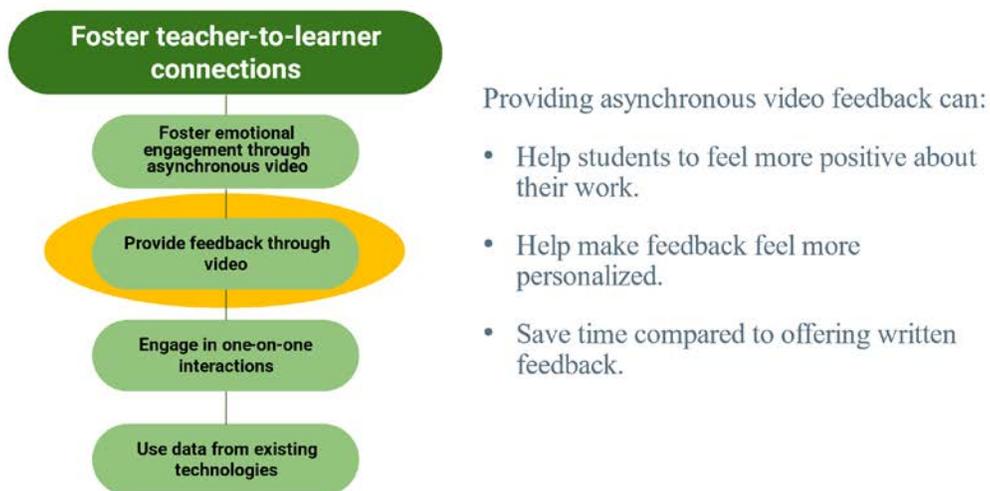
1. What seems promising about creating an introductory video? Where did you hit a snag?
2. How and when might you use this activity with your students?

Activity: Provide feedback through video

Time: 20 minutes

Purpose: This activity walks you through how to foster teacher-to-learner connections by providing feedback to students via asynchronous video.

Evidence-based practices



Instructions: Getting started

1. Choose a timekeeper to keep track of the time to ensure that your group completes the activity.
2. Read the following section, up to the “activity instructions” in the gold bar below. This should take about one minute.

Activity: Video feedback

Research shared by REL Appalachia shows that students have positive perceptions of video feedback and are motivated by it. Students perceive audio and video feedback to be more personal than written feedback and audio feedback may be just as effective as written feedback.² Accordingly, employing audio or a combination of audio and video feedback may help to strengthen students' learning experience whether instruction occurs in a virtual or in-person setting.

Creating a feedback video does not need to take a long time. Teacher-produced videos do not need to be carefully produced or edited to be effective and can be quite short. To practice, this activity invites you to create a short video to provide feedback to a fictitious student. Given the value of practicing this skill, you will be asked to actually record a video and not simply role-play making one.

While much of this activity requires independent work, you may choose to work in pairs or ask your colleagues for help as you are working through the steps.

Activity instructions

1. Take two minutes to reflect on this scenario:

"One of your students appears to be struggling to turn in their homework assignments on time. What feedback might you give to the student to show that you are concerned and want them to succeed?"

2. Spend eight minutes practicing creating a feedback video, either alone or in pairs. You may record a video on your cell phone, computer, or one of many online programs.

Examples include:

- Screencastify. <https://www.screencastify.com/>
- Hippo Video. <https://www.hippovideo.io/>
- Tinytake. <https://tinytake.com/>
- ScreenRec. <https://screenrec.com/>
- Screencast-O-Matic. <https://screencast-o-matic.com/>

² Anson, I. G. (2015). Assessment feedback using screen capture technology in political science. *Journal of Political Science Education*, 11(4) 375–390. <https://eric.ed.gov/?id=EJ1081729> as cited in REL Appalachia. (2021). *Research-based strategies for effective remote learning: Monitoring student progress*. https://ies.ed.gov/ncee/edlabs/regions/appalachia/events/event_series_research-based-strategies-for-effective-remote-learning.asp.

If you do not already use a video program, create a short feedback video by clicking on [Screencast-O-Matic](#).

- a. When the program loads, click “Launch Free Recorder” and allow the recorder to download.
 - b. Record a two-minute feedback video. Remember that your video does not need to be carefully produced or edited.
 - c. Watch the video and think about whether you would be comfortable sharing this (or something like this) with your students.
3. Spend one minute planning how you might make feedback videos securely available to students (e.g., email, Google Drive, course webpage, etc.).

Reflection

Next, consider as a group how you might use this activity in your classroom. The timekeeper asks the group to consider the following questions and to discuss their thoughts for the last two minutes.

1. What seems promising about providing feedback via video? Where did you hit a snag?
2. How and when might you use this activity with your students?

Activity: Engage in one-on-one interactions

Time: 20 minutes

Purpose: This activity helps participants to understand the practice of one-on-one interactions, which is one way to develop emotional connections. Specifically, the small group will explore the practice of micro-conferences and how to use them effectively to save time and foster teacher-to-learner connections.

Evidence-based practices



Instructions: Getting started

1. Choose a timekeeper to keep track of the time to ensure that your group completes the activity.
2. Read the following section, up to the “activity instructions” in the gold bar below. This should take about one minute.

Activity: Micro-conference

Conferring one-on-one with middle-grade or high school students was noted by researchers in REL Appalachia as a valuable strategy for structuring remote learning for the following reasons:³

- a. Provides opportunity for individualized instruction and feedback.
- b. Misconceptions can be cleared up.
- c. Relationships are built.
- d. Students feel heard by a caring adult.

Conducting micro-conferences with a student to discuss their work or behavior is an example of a promising one-on-one interaction practice. While the idea of providing one-on-one feedback to students may seem daunting, you can structure a conference that takes no more than one or two minutes if you prepare a focused, structured conversation.

This activity is designed to let you practice a one- to two-minute micro-conference. If this seems promising to you, you can either call students over during class or speak with one student at a time while the whole class is logged in during a remote class. If you want a private conversation with each student in a virtual learning environment, you could use your platform's breakout room function.

Activity instructions

1. Divide into groups of two. Take eight minutes to reflect on this scenario and to have each person in the group draft an outline to address it:

“One of your students appears to be struggling to turn in their homework assignments on time. You want to hold a micro-conference to show that you are concerned and want them to succeed. Create an outline to detail what you might share during your interaction.”

Remember, a micro-conference should be focused and carefully structured to accomplish one or all of the following outcomes:

- a. Provide individualized instruction and feedback.
- b. Clear up misconceptions.

³ Johnson, M. (2020, May 10). *Flash feedback: How to provide more meaningful feedback in less time*. Cult of Pedagogy. <https://www.cultofpedagogy.com/flash-feedback/> as cited in REL Appalachia. (2021). *Research-based strategies for effective remote learning: Monitoring student progress*. https://ies.ed.gov/ncee/edlabs/regions/appalachia/events/event_series_research-based-strategies-for-effective-remote-learning.asp.

- c. Build relationships.
 - d. Allow the student to feel heard by a caring adult.
2. Practice micro-conferencing for eight minutes total.
- a. One participant begins by using their outline to facilitate a micro-conference with the other participant, who role-plays as a student. Time yourself, allowing for one or two minutes.
 - b. After the micro-conference, debrief for two minutes. From each person's perspective, how did the micro-conference go? Was one to two minutes enough time for the micro-conference? Too much?
 - c. Switch roles and repeat the process, with the other participant using their outline to facilitate a micro-conference and then debrief.

Reflection

After doing the activity in pairs, consider with the broader group how you might use this activity in your classroom. The timekeeper asks the group to consider the following questions and to discuss their thoughts for the last two minutes:

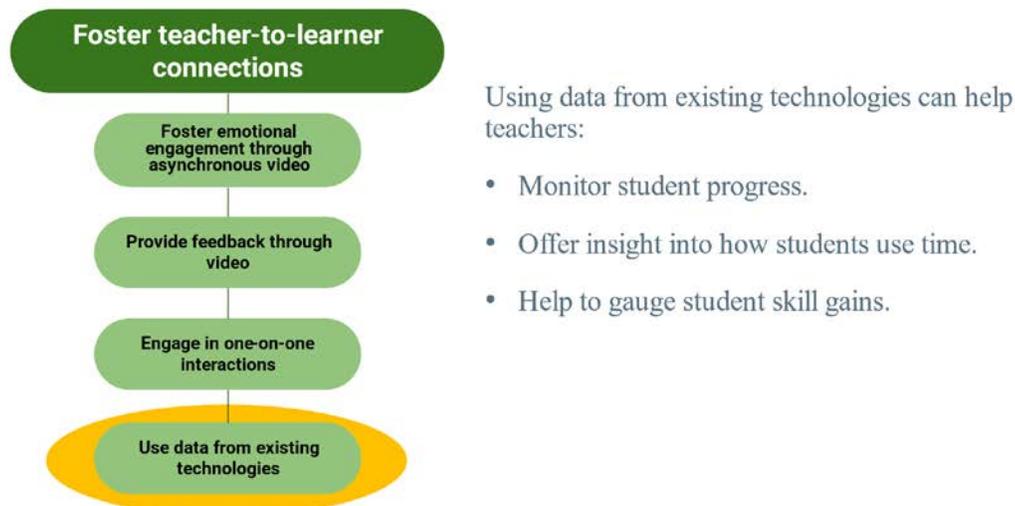
1. What worked well in your practice micro-conferences?
2. How and when might you use micro-conferences with your students?

Activity: Use data from existing technologies

Time: 20 minutes

Purpose: This activity helps participants understand how existing technologies may have data they are not currently accessing, but can use to monitor and provide feedback in ways that foster teacher-to-learner connections. Participants will be asked to access their own online tools or systems or to look over the shoulder of a colleague who already uses such tools or systems.

Evidence-based practices



Instructions: Getting started

1. Choose a timekeeper to keep track of the time to ensure that your group completes the activity.
2. Read the following section, up to the “activity instructions” in the gold bar below. This should take about one minute.

Activity: Using data from your learning management system

Researchers from REL Appalachia found that while most educators use data from instructional technologies (e.g., DreamBox Learning or Achieve 3000) and learning management systems (e.g., Canvas)⁴ related to student performance, such as which questions students answered correctly or incorrectly on an online quiz, these technological platforms often provide additional data that can be used to support learning. However, please note that available data varies depending on the technology being used.⁵

Examples of these additional information pieces include:

- a. The amount of time students spent on activities.
- b. Whether students got an item right on the first try or took multiple attempts.
- c. Which incorrect answers students gave most frequently.
- d. Frequency with which students accessed course content.

In this activity, we provide an example of how you can find data in a learning management system that is part of your remote learning delivery platform, then invite you to go to your own system to see what kind of additional data you can find.

Activity instructions

1. Individually or in subgroups, [click on this link](#) and watch the video on Actively Learn, a digital curriculum platform that features a host of digital information tools, from 51:55–54:39.
2. After watching the video, the timekeeper asks if anyone is using data from their learning management system or instructional technology program (such as Dreambox Learning, Lexia, Achieve 3000, Canvas, Moodle, etc.) that they would be willing to describe. If participants are interested in exploring those programs, the entire small group can look over the shoulders of the volunteers or the group can break into subgroups. If not, have the group brainstorm the types of questions they would want to answer to improve their remote learning practice. Spend 12 minutes learning about all the data available in the tools and how to access it or use the time to brainstorm ideas.

⁴ All resources in this module are provided as examples, not recommendations.

⁵ Molenaar & Knoop van-Campen, 2018; Schifter et al., 2014; Xhakaj et al. 2017; as used in Research-Based Strategies for Effective Remote Learning: Monitoring Academic Progress and Providing Feedback to Students, https://ies.ed.gov/ncee/edlabs/regions/appalachia/events/materials/01-28-21_Workshop2_FacilitatorHandbook_Acc.pdf

If someone would like to explore a tool to try to find additional data, they can use the 12 minutes to practice. They may self-organize into subgroups to help each other explore available data in the tools they use, or others.

When three minutes remain in this 12-minute activity, the timekeeper should give the group a time check and invite people who have not yet logged into their own system to find data to do so.

Reflection

After the activity, consider as a small group how you might use this activity in your classroom. The timekeeper asks the group to consider the following questions and to discuss their thoughts for the last two minutes:

1. Who had luck locating additional data?
2. What might the data or information that you found tell you about your students' learning and/or engagement? What questions do you have about the data you found?

Appendix D: Learner-to-learner connections handouts

This appendix includes handouts for breakout sessions on learner-to-learner connections. Each of the activities featured below relates to a specific practice that participants may wish to explore in greater depth. Facilitators may choose to have all participants engage in one of the four practices or group them based on their interest. Participants should be reminded that they may explore each of the practices following the professional development experience to expand their understanding and skills related to remote learning. Even though participants will only take part in one activity per session, you may want to provide them with all the handouts in case they want to try other activities on their own. This will also help them to follow along during the report-out that follows the small-group sessions.

Activity handouts:

- **Organize small-group collaborations.**

This activity helps participants to understand the practice of organizing small-group collaborations, which is one way to promote learner-to-learner connections. In this activity, you will break into pairs or triads to read an excerpt from the article, *Creating Effective Collaborative Learning Groups in an Online Environment*, and discuss the strategies it describes for small-group collaborations.

- **Model how students should engage and respond.**

This activity invites participants to engage in a crowdsourcing process to develop their understanding of how to model engaging in discussions and respond to others for students, and how this promotes learner-to-learner connections.

- **Engage prior knowledge and experience.**

This activity provides a specific protocol to have students share their prior knowledge and experience. Participants will be invited to share their own prior experiences with fostering learner-to-learner connections to determine if the protocol might work in their classrooms.

- **Engage peer feedback.**

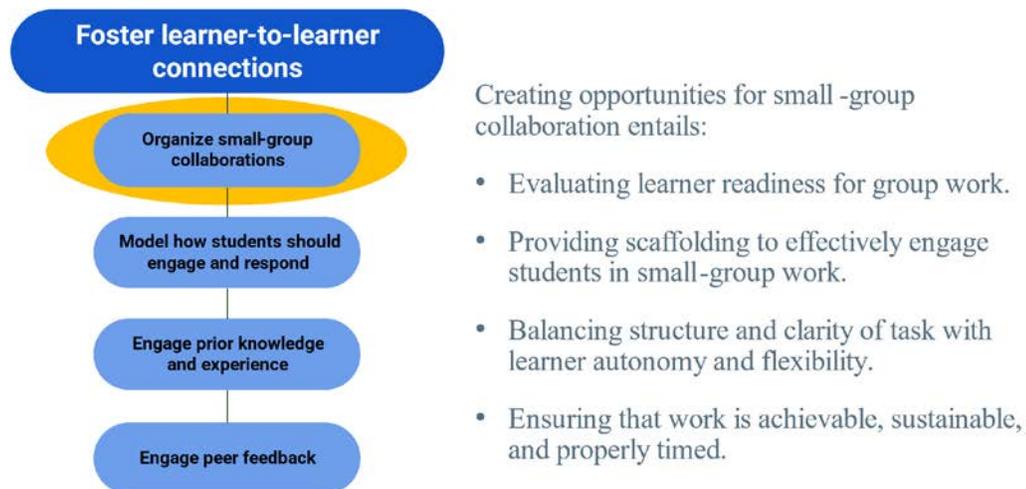
This activity invites participants to practice using an online tool (Peergrade) to collect feedback, which is one way to promote learner-to-learner connections. Note that if participants already have a preferred peer feedback platform that is not Peergrade, they should not participate in this activity.

Activity: Organize small-group collaborations

Time: 20 minutes

Purpose: This activity helps participants to understand the practice of organizing small-group collaborations among students, which is one way to promote learner-to-learner connections. In this activity, you will break into pairs or triads to read an excerpt from the article, *Creating Effective Collaborative Learning Groups in an Online Environment*, and discuss the small-group collaboration strategies it describes.

Evidence-based practices



Instructions: Getting started

1. Choose a timekeeper to keep track of the time to ensure that your group completes the activity.
2. Read the following section, up to the “activity instructions” in the gold bar below and to scan the rest of the instructions. This should take about one minute.

Activity: Organize small-group collaborations

Research reported by REL West shows that educators play a vital role in effective small group collaborations conducted online. Teachers need to provide scaffolding to help students develop the skills for effective small group collaborations. Teachers should provide a balance between structure and flexibility in assigning group work and be thoughtful in considering what work they assign to groups. Is it work best done through collaboration?

In addition to possessing the skills to effectively collaborate with other learners, students need to feel a sense of community and connection as they enter their small group work. Meaningful collaboration should deepen those bonds of community and connection. To foster connection among students working in small groups, teachers can:

- Use ice breakers.
- Offer ideas to start the conversation.
- Offer statements about expectations regarding participation, etiquette, and guidelines for behavior.
- Help students learn how to retrieve, evaluate, apply, and source information and use technology effectively.

Throughout small group collaborations, it is important for teachers to maintain a supportive presence in the small group. This might involve answering questions, modeling acceptable behavior, and providing enough time for students to fulfill the collaborative learning assignment expectations.⁶

Activity instructions

1. Participants in the small group should break into subgroups of two or three people.

Each subgroup should click the link to the article *Creating effective collaborative learning groups in an online environment* by Brindley, Walti, and Blaschke (2009) and read pages 12–13. Select one of the seven principles they describe and take up to five minutes to discuss the corresponding questions listed below. If there is time left over, subgroups can read a second strategy.

2. After five minutes, the timekeeper pulls the subgroups back together.

⁶ Brindley, J. E., Walti, C., & Blaschke, L. M. (2009). Creating effective collaborative learning groups in an online environment. *International Review of Research in Open and Distance Learning*, 10(3), 1–18; in the IES-COVID Resource: REL West. (2020). Ask-a-REL: *Research-based online learning practices*. <https://ies.ed.gov/ncee/edlabs/regions/west/Ask/Details/100>.

3. The timekeeper asks which strategy each group discussed to find out how many total report-outs to expect. For the next seven minutes, ask subgroups to share what they talked about.

Reflection

After doing the activity in pairs or triads, consider as a full small group how you might use this activity in your classroom. The timekeeper asks the group to consider the following question and to discuss their thoughts for the last two minutes:

1. What might you need to do to ensure this kind of small-group collaboration helps foster learner-to-learner connections?

Small-group reading: Creating effective learning groups

Brindley, Walti, and Blaschke (2009) found that, “rather than focus on the grading of collaborative group projects, instructors should incorporate a variety of instructional strategies to improve the quality of group collaboration and to increase the likelihood of student participation.”⁷ Each box below contains one of the principles they identified. Discuss the questions in the cell to the right of the principle you have selected.

Excerpt from <i>Creating effective collaborative learning groups in an online environment</i> (pages 12–13)	Mini-group discussion questions
<p>1. <i>Facilitate learner readiness for group work and provide scaffolding to build skills.</i></p>	<ol style="list-style-type: none"> 1. What kinds of activities have you used in the past to help get students ready to use remote tools for collaboration? How did you teach them the skills they needed? What might you do differently in the future? 2. What expectations have you set in the past for participation and behavior? How well did those work? What might you change in the future?
<p>2. <i>Establish a healthy balance between structure (clarity of task) and learner autonomy (flexibility of task).</i></p>	<ol style="list-style-type: none"> 1. What remote learning tools could you use to facilitate small-group collaborations? How would students form their own groups? <ol style="list-style-type: none"> a. How would they technically get into groups on your remote platform? b. What prompts would you give them to form the groups? 2. How would you determine ahead of time whether the tasks you outline for small-group collaborations will be achievable, sustainable, and properly timed?

⁷ Excerpted from Brindley, Walti & Blaschke. (2009). *Creating effective collaborative learning groups in an online environment. International Review of Research in Open and Distance Learning, 10*(3), 1–18; in the IES-COVID Resource: REL West. (2020). *Ask-a-REL: Research-based online learning practices.* <https://ies.ed.gov/ncee/edlabs/regions/west/Ask/Details/100>, p. 12.

<p><i>3. Nurture the establishment of learner relationships and sense of community.</i></p>	<ol style="list-style-type: none"> 1. What instructional practices do you already use to establish a sense of community among students? 2. How do you already model informality, familiarity, honesty, openness, heart, passion, dialogue, rapport, empathy, trust, authenticity, disclosure, humor, or diverse opinions? 3. What else might you do to build a sense of community among students?
<p><i>4. Monitor group activities actively and closely.</i></p>	<ol style="list-style-type: none"> 1. What technologies can you use to monitor small-group collaborations in remote learning environments? 2. How can you create a culture of monitoring and feedback so that an instructor performing these functions does not derail student small-group work?
<p><i>5. Make the group task relevant for the learner.</i></p>	<ol style="list-style-type: none"> 1. How can you interest students in choosing topics for group work and projects? 2. What tools can you use to learn more about student interests and the knowledge and skills learners may bring to a project? 3. How can you design collaborative work that rewards students for sharing their knowledge? <ol style="list-style-type: none"> a. What check-ins can you build into collaborative work to ensure students are co-creating project work and/or learning assignments?
<p><i>6. Choose tasks that are best performed by a group</i></p>	<ol style="list-style-type: none"> 1. What kinds of tasks are best performed by a group? 2. How can you help students understand how they benefit from small-group work? 3. How can you help students who are resistant to small-group work understand how their learning around this particular task will benefit from teamwork?

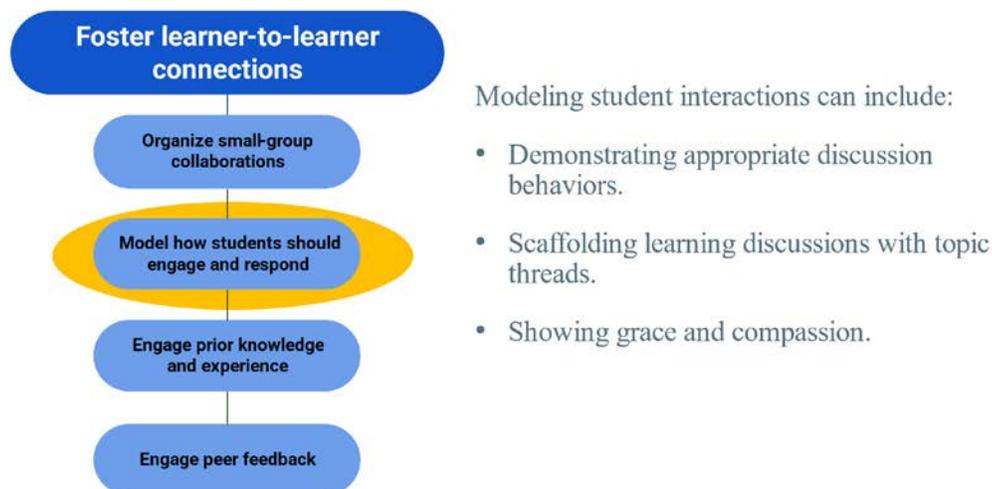
<p><i>7. Provide sufficient time</i></p>	<ol style="list-style-type: none">1. How can you scaffold collaborative learning activities that ask students to engage in group scheduling, planning, and organizing?2. How can you build in check-ins to ensure that students have sufficient time to schedule, plan, and organize their learning in collaborative activities?
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Activity: Model how students should engage and respond

Time: 20 minutes

Purpose: This activity invites participants to engage in a crowdsourcing process. The intent is to develop understanding of the practice of modeling how students should engage in discussions and respond to each other to promote learner-to-learner connections.

Evidence-based practices



Instructions: Getting started

1. Choose a timekeeper to keep track of the time to ensure that your group completes the activity.
2. Read the following section, up to the “activity instructions” in the gold bar below and to scan the rest of the instructions. This should take about one minute.

Activity: Brainstorm how to model student responses

By modeling expectations for student engagement, teachers can help to frame appropriate behaviors for students to adopt. In this activity, developed based on findings from REL Southeast, you will discuss what modeling a discussion might look like for your students and work in small groups to discuss your expectations and goals for student participation. You will have time to plan specifically how to model student engagement.

The key to this activity is to consider how strategies to increase learner-to-learner connections through modeling can be adapted to work for your students in your context. A second goal is for you to think about the structured activity we are modeling and whether it would work well with your students.

Research tells us that teachers can model appropriate discussion behaviors, including encouraging participation, showing compassion, and helping students to understand that they have responsibilities for interacting with each other.⁸

Activity instructions

1. Spend 15 minutes talking about what this practice means to you and how you might model it for your students (e.g., what words or phrases might you use? During what kinds of activities might you engage in these practices?). Ask a participant to take notes in the template below. Offer as many ideas for how to model this practice as you can.

Practice	How would you model this practice? (e.g., key phrases)
Encourage participation	
Show compassion	
Help students understand that they have responsibilities for interacting with and helping each other	

⁸ REL Southeast. (2020). *When teachers and students are separated: Strategies from research on social presence for teaching at a distance*. https://ies.ed.gov/ncee/edlabs/infographics/pdf/REL_SE_When_Teachers_and_Students_are_Separated.pdf.

Reflection

After the small groups have shared, the timekeeper asks the group to consider the following questions and ask questions of each other for the final two minutes.

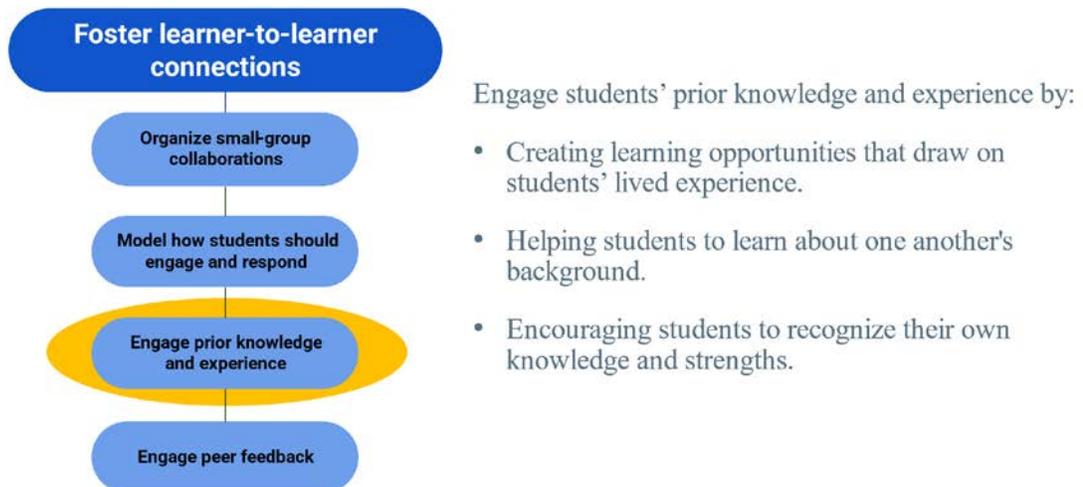
1. What looks promising to you? What will you try?
2. What questions do you have about how to engage in this practice?

Activity: Engage prior knowledge and experience that students bring to the course

Time: 20 minutes

Purpose: This activity⁹ provides participants a specific protocol to have students share their prior knowledge and experience. Participants will be invited to use the protocol to share their own prior experiences with fostering learner-to-learner connections to determine if it might work in their own classrooms.

Evidence-based practices



Instructions: Getting started

1. Choose a timekeeper to keep track of the time to ensure that your group completes the activity.
2. The small group should break down into even smaller subgroups of 3–6 people for this activity.

⁹ Adapted from original resource: https://ies.ed.gov/ncee/edlabs/regions/appalachia/events/materials/01-28-21_Workshop2_FacilitatorHandbook_Acc.pdf

3. Read the following section, up to the “activity instructions” in the gold bar below and to scan the rest of the instructions. This should take about one minute.

Activity: “Fortunately, unfortunately”

As reported by REL West, by engaging students in a process of sharing the prior knowledge and experience they bring to the class, you help them to establish collaborative communities of practice with their peers.¹⁰ This practice gives students opportunities to learn more about each other, as well as to recognize their own knowledge and see it as an accomplishment they can build on. As a learning process, this can help students abandon fixed mindsets and adopt a growth mindset by learning from the knowledge and experiences of others.

One way to support students in building collaborative peer communities is to put students into small groups and give each a turn to share their responses to the following questions:

- **Fortunately:** What is something that is going well in your efforts to ___?
- **Unfortunately:** What is something that is not going well in your efforts to ___?

Activity instructions

1. In your full small group, the timekeeper asks everyone to take three minutes to independently come up with their own responses to the following questions:
 - a. **Fortunately:** What is going well in your efforts to transition students back into in-person learning?
 - b. **Unfortunately:** What is not going well in your efforts to transition students back into in-person learning?
2. The timekeeper calls time after three minutes of silent thinking. They then ask each participant to take one minute to share their responses to the questions in their subgroup of 3–6 people. The timekeeper can call out “time to switch” to the entire small group at the end of each one-minute increment, until everyone in the subgroups has had a chance to speak. This part of the activity should take no more than six minutes.

¹⁰ Dailey-Hebert, A. (2018). Maximizing interactivity in online learning: Moving beyond discussion boards. *Journal of Educators Online*, 15 (3); in the IES-COVID Resource: REL West. (2020). Ask-a-REL: *Research-based online learning practices*. <https://ies.ed.gov/ncee/edlabs/regions/west/Ask/Details/100>.

3. After every participant has responded, the timekeeper invites participants to ask questions of each other in the subgroups. This part of the activity should take five minutes.

Reflection

After sharing experiences and talking as a group, consider how you might use this “Fortunately, unfortunately” activity in your classroom. The timekeeper asks the group to consider the following questions and to discuss their thoughts for the final two minutes:

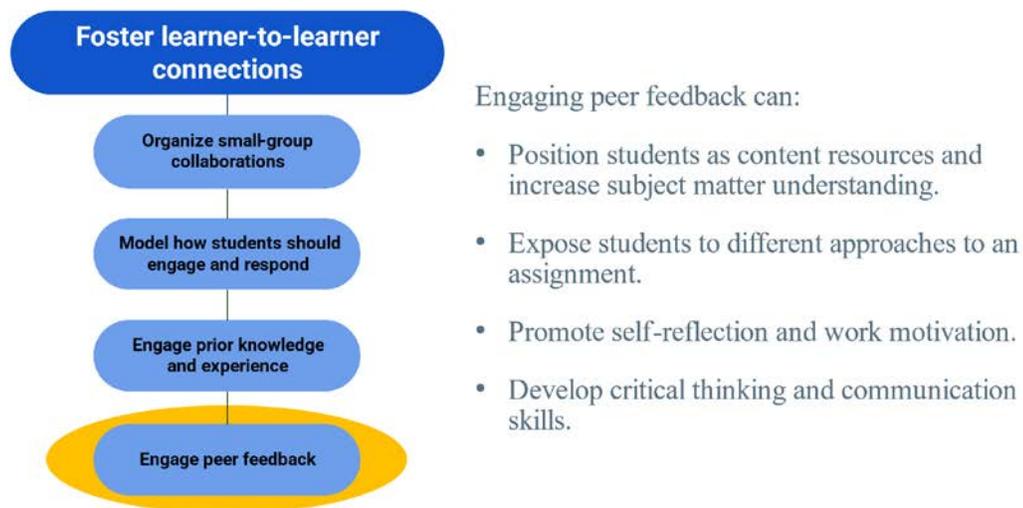
1. Might this activity work for your students?
2. What adaptations might you want to make to this activity?

Activity: Engage peer feedback

Time: 20 minutes

Purpose: This activity invites participants to practice setting up a peer feedback assignment and asking students to use an online tool to provide feedback to one another, which is one way to promote learner-to-learner connections.

Evidence-based practices



Instructions: Getting started

1. Choose a timekeeper to keep track of the time to ensure that your group completes the activity.
2. Read the following section, up to the “activity instructions” in the gold bar below and to scan the rest of the instructions. This should take about one minute.

Activity: Use an online tool to support quality peer feedback

Peer feedback can provide an opportunity to empower students to be resources for each other. As noted by researchers from REL Appalachia, quality peer feedback can enrich the learning experience because it:¹¹

1. Empowers students to serve as resources for each other.
2. Increases students' understanding of subject matter.
3. Exposes students to different approaches to an assignment.
4. Supports students to engage in self-reflection.
5. Improves students' motivation to improve their own work.
6. Supports students to develop critical thinking skills.
7. Supports students to improve their communication skills.

Teachers can support students to deepen their own understanding of the material by providing rubrics or structured processes to help them deliver detailed feedback to each other as part of a virtual learning experience. Digital tools can be a useful mechanism by which students can deliver their feedback to each other. While we are not recommending any particular tool, some examples include:

- **Learning management systems:** Canvas, Google Classroom
- **White boards:** Google Jamboard, Miro
- **Peer feedback forms:** Peergrade, PeerStudio, Google Forms

Activity instructions

In triads (groups of three), you will work on an assignment that one of you typically gives to students and that requires you to give them feedback. You will use an online tool to shift that assignment so that students are giving feedback to one another. *The key to this exercise is to test out a remote learning tool for the process of eliciting peer feedback, so do not get too caught up in creating a perfect assignment, rubric, or submission. Rather, try to advance swiftly through the steps in order to see how the online tool works and to consider how it might help during instruction.*

¹¹ All research is cited in the IES-COVID Resource REL Appalachia (2020-2021). *Research-based strategies for effective remote learning.*
https://ies.ed.gov/ncee/edlabs/regions/appalachia/events/event_series_research-based-strategies-for-effective-remote-learning.asp.

1. The timekeeper tells the entire small group they are to take three minutes to think in triads of a simple assignment that one of you gives to students and that involves giving students feedback on their work. Agree on one assignment to work on together.
2. After three minutes, the timekeeper lets everyone know it is time to move on and take 14 minutes to think about structured processes you could provide for students to deliver their feedback to each other. (The timekeeper should give everyone a time check after twelve minutes.) How might an online tool you used during remote teaching be helpful for this purpose? If you have used an online tool that might be useful for this task, have one person login into that tool and work as a group to create a structured process for the sample assignment. This should include at least one criterion that would be in a scoring rubric and a place for students to deliver their review feedback. Invite the rest of the triad to submit an assignment and then to provide feedback to the other participant.

This exercise uses Peergrade as an example.

- a. Ask participants to log into <https://www.peergrade.io/>. Participants may need to create an account to access Peergrade. (In the upper righthand corner, click “Get Started,” then select your role as “Teacher.” Sign up by providing your name, email address, and institution name. Confirm your account by following the directions in the email message you will receive from Peergrade.)
- b. Once participants are logged in, one person should click on “Create a Class” while the others observe and support the process.
 - i. Select “Create a new class.”
 - ii. Give this class a title, such as “PD Test Case.” (You can change this title later or delete this class.)
 - iii. Once in the Class, click on “Create assignment.”
 - iv. Give a simple title and then select “Next.” (For purposes of this exercise, you can move quickly through creating a title and description, as the rubric is the exercise to get to.)
 - v. Now you are on the Rubric page. You can use or adjust the rubric that is provided or you can click on the “Rubric Library” to search through sample rubrics that are provided. Try to come up with at least one criterion that students would use as they evaluate their peers’ work.

- vi. Select “Next.” At this stage, you can either set up the feedback process as a “Live Session” or as “Homework.” For now, select “Live Session” so you can see how it works.
 - vii. After selecting “Live Session,” click on the “Create Assignment” button at the bottom. This will complete the assignment set up and take you to the tracking page. Here, you can see who has submitted their assignment and been moved into a “reviewer” role, who has completed their review, and who has reacted to the review of their own work.
- c. The “teacher” of this Peergrade class should invite the rest of the triad to complete this assignment by clicking the button to go back to “Class.” In the middle of the screen, you will see a row with icons and the words, “Assignment,” “Participants,” “Class Settings,” and “Summary.” Click on “Participants” and then the “Invite participants” button. Invite your colleagues as Students for this exercise. Enter their names and email addresses and they will get an invitation to the class once you click on “Add students.”
 - d. Your triad colleagues, who should already have logged into Peergrade, can either refresh their screen to see the class or click on the link in the Peergrade email they receive. Walk together on their devices through the steps to submit the assignment. Notice that once the assignment is submitted, a student is taken to the screen where they will review a peer’s assignment. Quickly review a submission and submit.
 - e. Now you can look at the Peergrade Teacher’s dashboard to see what it looks like when students submit both assignments and reviews.

Reflection

After doing the activity, the breakout timekeeper should ask the small group to consider the following question and to provide quick responses in two minutes:

1. Do you think you might use the technology you experimented with to support learner-to-learner feedback in your learning environment?

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