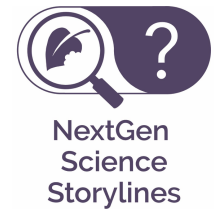


Remote Learning Resource

Setting Norms



Rich science learning happens in classrooms where students are positioned as knowledge constructors and sense-makers and where teachers leverage students' experiences and ideas as the class works together to develop explanations for phenomena. Establishing and maintaining norms is an essential step in developing an equitable learning community grounded by trusting and caring relationships, a shared understanding and appreciation for diversity, and students' sense of belonging in the science classroom.

In this document, we offer suggestions for developing and maintaining norms that promote safe student-driven learning experiences in remote learning environments. Remote learning environments might be synchronous experiences enhanced by technology that allows educators and learners to see and talk with each other, asynchronous communications that may or may not be aided by technology, or somewhere in between. When technology is used in remote learning, there will be variation in the skill and comfort level among teachers and students. Whatever approach you use for digital technology, be aware of your district and school policies in selecting tools to use. Ultimately, the nature of the teachers and learners and the circumstances in which those human beings find themselves must guide the development of norms for learning. The suggestions offered here center on pedagogical practices that support community, belonging, and human feelings. For more information, read [Humanizing online learning](http://works.bepress.com/mary-candace-raygoza/28/). (Raygoza, M., León, R., & Norris, A. (2020). *Humanizing online teaching*. <http://works.bepress.com/mary-candace-raygoza/28/>)

How do we build and support norms in classrooms?

The OpenSciEd [instructional model](#), the inquiryHub [instructional model](#), and the NextGenStorylines [instructional model](#) all support the early co-construction of and frequent revisiting of classroom [norms](#) that allow students to see themselves as knowers and doers of science. Teachers and students work together to generate a vision of an equitable classroom by agreeing to actions that

- are **respectful** and make classrooms safe places for sharing;
- are **equitable** so that everyone's ideas and participation are valued;
- support **commitment to community** and learning together; and
- **move science thinking** forward as students work to figure things out.

How can a community care for one another when they can't meet in person?

Creating norms in a face-to-face classroom setting often begins with asking the students to describe and agree on actions that reflect the ideals described above. This practice can be useful in a remote environment but must also attend to the features and constraints of the technology used (or not used). When remote learning is new or necessitated by circumstance, contextualizing familiar norms may help students and teachers feel more at ease. In your efforts to establish norms for remote learning, remember that learning can be messy under the best circumstances. Be flexible and remember that perfection is not the goal.

Although all people need to express and receive care from one another, acts of care take different forms. Care can involve giving help to a student who needs it. An educator can show care by taking everyone's ideas seriously. It is evident when students feel they are treated fairly, and when they are trusted. When working at a physical distance from students, consider different ways to reach out--by phone, text, letter, email, or over video-conference - to express care.

What norms represent best practices for teachers and students in remote learning environments?

				Learning Environment		
				Synchronous virtual learning	Asynchronous learning aided by technology	Asynchronous learning without technology
Respectful				<ul style="list-style-type: none"> Use digital talk moves to provide positive feedback. Use established signals/digital responses to facilitate taking turns to avoid simultaneous talking (e.g., raising hands, thumbs up, muting when others are speaking). Adhere to agreements about when to use cameras and when to mute/unmute audio. 	<ul style="list-style-type: none"> Agree that digital platforms (e.g., Pinup, Padlet, GoogleDocs) are safe places for questions and discussions. Address the inherent anonymity of using digital tools and define respectful interactions. Know that others will read and respond to your comments. Develop respectful comment/feedback starters (e.g., How about...). Recognize that thought partners might be working on a different timeline and be patient when waiting for responses. 	<ul style="list-style-type: none"> Provide examples of written responses, questions, and claims, and encourage students to agree, disagree, ask questions, or make their claims in writing. Remove set due dates to accommodate the demands of family life. Check-in regularly by text or phone.

	Synchronous virtual learning	Asynchronous learning aided by technology	Asynchronous learning without technology
Equitable	<ul style="list-style-type: none"> • Take time to learn and practice using the digital platform and post tutorial videos for reference. • Recognize that students may access digital platforms with different devices that may have differing capabilities. • Use and rotate breakout groups to increase participation and sharing of ideas. • Use strategies to manage speaking such as each person nominating another to speak, until all have spoken • We check in on folks who aren't here. • Provide recordings of lessons for students who miss synchronous interactions. 	<ul style="list-style-type: none"> • Provide opportunities for students to share in different ways, such as videos or written responses or images. • Accept responses that reflect varied student resources such as registers of language. • Monitor contributions and participation. Reach out via phone or text to address gaps. 	<ul style="list-style-type: none"> • Distribute learning materials to students who have limited technology access. • Translate materials into home language. • Distribute meals to students in need. • Provide learning materials in various ways, such as through bus routes, posted in common locations like laundromats or grocery stores. • Collaborate with local television stations to present materials.
Committed to Community	<ul style="list-style-type: none"> • Maintain a format for recording and tracking progress on student questions. • Encourage patience, support, and kindness among the group, paying particular attention to those who might be new to technology or selected platforms. 	<ul style="list-style-type: none"> • Find a way to honor all contributions. • Provide support for parents (e.g., tutorials, online meetings, overviews of assignments, links to helpful websites, etc.). 	<ul style="list-style-type: none"> • Share ideas in a weekly printed newsletter. • Utilize learning/choice boards, citizen science, and local media to encourage individual learning. • Recognize the community includes families and caregivers.

	Synchronous virtual learning	Asynchronous learning aided by technology	Asynchronous learning without technology
Moving Science Thinking Forward	<ul style="list-style-type: none"> Establish structures for quick teacher-student and peer-peer feedback. Utilize breakout groups for small group discussions and processing before whole group sharing. 	<ul style="list-style-type: none"> Engage in asynchronous discussion boards. Set expectations for contributing and responding to asynchronous discussions. Establish a buddy system and encourage students to agree on times to meet online to collaborate on activities. 	<ul style="list-style-type: none"> Send feedback in writing. Find a way to share learning with the extended community. Utilize available resources such as newspapers, magazines, and television.

What strategies support co-construction of norms in varied remote environments?

Remote Learning Norms Development		
Synchronous virtual learning	Asynchronous learning aided by technology	Asynchronous learning without technology
<ul style="list-style-type: none"> • Use a virtual whiteboard with stickies (Pinup, Padlet, Flipgrid) and get consensus on some shared norms that way, grouping ideas together. • Re-establish or adjust classroom norms for a virtual setting. • Revisit norms often and draw attention to a specific norm for the learning session. • Take time to check-in and connect with students. • Allow students to express a “digital identity” using a background or profile picture. 	<ul style="list-style-type: none"> • Use a digital board to collect ideas, allowing all students to return at a later time to analyze and add comments. • Post ideas and suggestions for norms (perhaps by category) for the teacher to compile. • Allow students to react to, vote for, and add ideas to a suggested list of norms. This could also include describing what a particular norm could look like in a remote learning setting. • Utilize online journals that students can share and “talk to” each other about. 	<ul style="list-style-type: none"> • Ask students to develop norms with family members as students will have different norms in their homes. • Use group text threads with groups of students. • Send texts to parents to make sure they know you’re available.

What considerations do we need to make to attend to different populations of students when providing remote learning?

Student Population	Considerations
Underrepresented students	<ul style="list-style-type: none"> • Provide ideas for adaptations of materials to the students' home culture and interests. • Opening up science instruction so that it no longer involves a school building can be freeing for students who aren't connected to school. • Foster thinking about how this "new normal" can benefit students who were marginalized by school. • Provide opportunities for students to practice skills and ideas that matter to them.
Emergent bi- and multilingual students	<ul style="list-style-type: none"> • Engage support staff and community members in creating translations of materials. • Support student-student discourse using technology if possible. • Allow students to dictate or video record responses for activities. • Use a platform like YouTube that has captioning options.
Special education students	<ul style="list-style-type: none"> • Allow for and provide multiple modes of expression to students for sharing ideas, listening/reading/communicating. • Involve the parent/caregiver as much as possible. • Provide scaffolding such as frameworks or sentence starters. • Give them a virtual partner to share Ideas and models with • Record lessons and let them view as many times as needed.
Homeless students	<ul style="list-style-type: none"> • Work with area shelters and food banks to coordinate learning resource and meal pickup and drop-off. • Engage other staff in supporting students.

How can we foster norms for learning that complement students' family norms and current circumstances?

- Ask students to share what their family's routines are right now, and how those routines support everyone doing what they need to do, support everyone staying healthy
- Ask students to identify times when they may need to prioritize home activities over school work, from their own perspective and that of their parents
- Ask students how their parents can help/engage
- Norms will need to be flexible based on each student's individual circumstance. Stressing that we all learn and support each other.
- When developing online norms, ask students whether or not each norm will work for them in their current learning environment.

Some additional advice on norms and pedagogy in online platforms, including reaching a range of students with differing learning abilities can be found [here](https://teachremotely.harvard.edu/best-practices). (*Best Practices: Online Pedagogy*, Harvard University, <https://teachremotely.harvard.edu/best-practices>)

How can we acknowledge the realities of remote working and learning?

Working and learning remotely often means sharing space with others, competing for limited technological resources, and dividing attention between learning activities or materials and the goings-on of the out-of-classroom environment. Even under the best of circumstances, distractions and unexpected interruptions are inevitable. Teachers and learners in remote settings should operate from the standpoint of compassion and assume the best intentions of each other. As educators, we have varying demands at home and therefore need to find a level of remote engagement with our students that is sustainable for our own self-care and family care.

Some tips include

- Accept that each individual will be managing different circumstances in their remote environment.
- Assume technological glitches will happen.
- Be flexible and patient.
- Check-in frequently with learning community members and ask how they are managing.
- Set small goals for yourself and for learners.
- Invite and offer gratitude.

This document was developed collaboratively among a group of [OpenSciEd](#), [iHub](#), and [NextGenStorylines](#) developers. Special thanks to the [OpenSciEd state](#) leads and the [OpenSciEd](#) and [iHub](#) facilitators for their participation and valuable contributions.