

VIRTUAL LEARNING EXPECTATIONS AND PARTICIPATION

Introduction

As schools teach virtually due to the COVID-19 pandemic, teachers across the country struggle with engaging students in virtual learning environments.¹ School leaders and teachers across the United States are looking for strategies to monitor student engagement in virtual learning environments, particularly when students are not required to have their cameras on during class. Thus, to support Hanover Research's member districts in engaging students during virtual learning, the following research brief examines strategies for setting expectations, encouraging, and measuring student engagement and participation in a virtual learning environment.

Key Findings



Teachers should develop and communicate expectations for student participation and other behaviors during remote learning. When setting participation expectations, teachers should adapt expectations from traditional learning environments prior to school closures, use language and content that reflect and align with broader school or team expectations, and promote buy-in by involving secondary students as active participants in the development process.



Teachers can encourage student engagement and participation through strategies that promote student motivation and focus on autonomy, competence, relatedness, and relevance. Autonomy requires enabling students to choose how they demonstrate content or skill mastery and fostering a sense of responsibility for their learning. Competency involves assigning activities and tasks that challenge students while remaining achievable. Relatedness and relevance help students feel connected to their teachers, peers, and class content.



When engaging adolescents, teachers should leverage students' relationships with their teachers, parents, and peers. According to the Adolescent Community of Engagement framework, student engagement increases in tandem with teacher, parent, and peer engagement. Thus, these stakeholders contribute to, and share responsibility for, students' behavioral, affective, and cognitive engagement.²



Strategies for engaging students whose cameras are off during class include providing students with **autonomy and choice** about when to turn on their cameras, brainstorming opportunities for when camera use could benefit the class, and **communicating these benefits** to students. Additional students should have opportunities to engaging in **fun and relationship-building activities** (e.g., learning games) that encourage camera-use and incorporate a social-emotional learning perspective, therefore **promoting alternative participation methods** through digital features such as chat boxes, online polls, and interactive whiteboards.



Teachers can use multiple measures to monitor student engagement in virtual learning, such as the average hours spent on a virtual platform, the number of videos viewed per week, how often students participated during a virtual class session, or the number of times a student contributed to an online discussion forum. A virtual student participation rubric can help teachers both communicate participation expectations and monitor student participation.


Setting Expectations for Student Participation in Virtual Learning Environments

Remote teaching and learning due to the Covid-19 pandemic represents a significant shift for most students and educators. As such, setting expectations for student behavior, including participation, becomes critical to successful virtual student success.³ Teachers have a responsibility to set expectations, as "students need clear structures and expectations as they find their footing in the online model."⁴ Teachers set expectations for student behaviors in traditional classrooms, and setting expectations becomes even more important during remote learning due to the change and lack of structure or existing norms. Indeed, an Education Week Research Center survey of educators teaching virtually due to the COVID-19 pandemic found that "expectations for student behavior in online classes range widely from strict adherence to physical classroom rules to much more laissez-faire approaches during the school building shutdowns."⁵

Additionally, setting expectations benefits students and the overall teaching and learning experience by creating structure and norms for students during a time of uncertainty, establishing routines, increasing expected behaviors and decreasing disruptive and inappropriate behaviors, and improving efficiency and time spent learning.⁶ Research also supports the importance of teacher expectations and indicates that high expectations can positively impact student achievement in comparison to lower expectations.⁷

When setting expectations for online learning, teachers should focus on expectations for student participation as well as student interactions, camera and microphone use, respectful behavior with minimal distractions, how to submit work or ask a question, and how to contact their teacher.⁹ For example, teachers can create a policy for how students ensure their teacher knows that they are present and engaged, such as specific sign-in methods or having students note their presence or respond to a prompt in the chat box when they enter the virtual classroom.¹⁰

Furthermore, many expectations that involve student behavior inherently relate to how and when students participate in their learning with their teacher and peers. For example,

 White Settlement Independent School District in Texas publishes the expectation that students "Participate in virtual learning activities by responding to questions, asking questions, providing input and working with groups," in addition to other student behavioral expectations for virtual learning.⁸

expectations for technology use, such as the microphone, camera, and chat features will impact how students participate in class using digital tools. Similarly, discussions of communicating and connecting respectfully also highlight general expectations that students will participate.

Teachers should purposefully develop expectations for student participation and other behaviors during remote learning. When relevant, educators should adapt expectations from traditional instruction prior to school closures, as students may already be familiar with these expectations. For instance, many educators held expectations for student participation and appropriate behavior prior to the transition to virtual learning, which they can use as a starting point to develop participation expectations for synchronous or asynchronous instruction.¹¹ When developing new expectations, educators should aim for language and expectations that reflect and align with broader school or team expectations.¹² For secondary students in particular, educators can involve students as active participants in the process of developing expectations, as students are more likely to engage with and follow expectations they help create.¹³ Figure 1 below offers sample consideration questions which teachers can consider when developing student participation expectations.¹⁴

Figure 1: Considerations for Developing Student Expectation Expectations

- Will you ask students to minimize disruptions on their end?
- Will you ask students to avoid side-conversations with other classmates (or people in their homes)?
- What is the expectation around being muted/unmuted during class (is it different during discussions or group work)?
- What will your response be if students are breaking these norms and/or interfering with the class? Will you interrupt the students, send a private message, mute them, or wait patiently until you have everyone's attention?
- How will students indicate they have a question or comment? Will they only use voice or a chat feature?

Source: VHS Learning¹⁵

Students may not be aware of the expectations for virtual learning and it may take time and practice to internalize new expectations. Therefore, teachers should clearly and repeatedly communicate their expectations to students, both verbally and in written format.¹⁶ Teachers can use a participation rubric to share expectations for how they expect students to participate and engage.¹⁷ Sample criteria for a participation rubric, with adaptations for virtual learning, include:¹⁸

Click the icons below to access two sample virtual participation rubrics.



- How often did the student participate during class?
- Were contributions relevant to the topic under discussion?
- Did the student appear to be adequately prepared? Did contributions reflect or apply to the content of course readings?
- Did the student contribute new ideas?
- What was the quality of evidence of critical thinking in the student's contributions?

- How well did the student listen to the contributions of others?





When communicating expectations, teachers may also wish to share potential consequences for not meeting these expectations.¹⁹ Indeed, a misalignment between teacher expectations and student behavior or awareness of expectations can lead to frustration and negatively impact learning.²⁰ Teachers may also wish to share with students what students can expect from them.²¹

*"Frequent dialogue is an important element in setting expectations. This approach can help students avoid frustration and persist in their distance learning classes."*²²

Encouraging Student Participation in Virtual Learning Environments

Efforts to engage students should build from four main elements: **autonomy, competence, relatedness, and relevance** (defined in the Figure 2).²³ Notably, each element also links to the impact of student motivation on engagement and participation.

Figure 2: Four Elements of Student Engagement

ELEMENT	DEFINITION
 Autonomy	Students have a degree of control over what needs to happen and how it can be done.
 Competence	Students feel they have the ability to be successful.
 Relatedness	Class activities help students feel more connected to others and cared about by people whom they respect by doing the activity.
 Relevance	Students see schoolwork as interesting, valuable, and useful to their present lives and hopes for the future.

Source: Education Week²⁴



When engaging reluctant learners, regardless of ability or subgroup, teachers must help them develop **autonomy over their education.**

According to the American Psychological Association:

*"When students understand their role as agent (the one in charge) over their own feeling, thinking and learning behaviors, they are more likely to take responsibility for their learning."*²⁵



Autonomy requires teachers to provide students with choices while ensuring they understand how those choices

relate to learning goals and standards.²⁶ The American Psychological Association (APA) recommends that teachers provide students with an age-appropriate degree of choice in learning activities to support motivation and develop self-regulation skills. Research finds that choice in learning activities develops intrinsic motivation and self-efficacy in students across grade levels.²⁷

For example, choice boards contain a list or matrix of online or offline activities that can be used to practice certain skills and concepts.²⁸ By including activities that vary in difficulty, choice boards also allow for differentiated instruction and student autonomy.²⁹ These tools offer flexibility because the structure of the choice board remains the same while the following characteristics change:³⁰

Activities	Target grade level	Setting (e.g., individual, whole class)	Length of time
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Advancement Courses, a virtual professional development provider, notes that teachers can create choice boards using a tic-tac-toe structure and the steps in Figure 3, below.³¹

Figure 3: How to Create a Choice Board

STEP 1

- Identify the instructional focus and learning outcomes of a unit of study. What do you want students to know and be able to do by the end of the unit?

STEP 2

- Determine student readiness, interests, learning styles, and needs using assessment data, student surveys, and learner profiles.

STEP 3

- Design nine different tasks that meet your students' various interests, needs, and learning styles determined in Step 2. Arrange each task so it has its own grid on the Tic-Tac-Toe board.

STEP 4

- Select one required task for all students. This task should be placed at the center of the board.

STEP 5

- Ask your students to complete three tasks, one of which must be the one in the middle. Students should complete their tasks in a vertical, horizontal, or diagonal Tic-Tac-Toe row.

Source: Advancement Courses³²

Students must also feel **competent and connected to their coursework and peers to remain engaged in virtual settings.**

Teachers can support feelings of competency by providing clear instructions for assignments. For example, teachers can simplify directions "to



increase the likelihood that [their] students will be able to be successful completing the task."³³

Teachers should facilitate positive relationships and peer interactions between students to foster **relatedness** and thus promote student engagement in online learning.³⁴ Strong communication, structures, and routines can also sustain peer relationships by providing regular and meaningful opportunities to engage. Once these foundations are set, teachers can design online learning activities that require students to interact and collaborate with each other, which has been shown to promote student engagement.³⁵ According to the TIES Center, which stands for increasing time, instructional effectiveness, engagement, and state and district support for inclusive practices:

"It is important to remember that engagement begins with supporting a sense of community for all students, regardless of the location for teaching and learning."³⁶

Virtual learning provides several opportunities for peer interaction. For example, teachers can promote collaboration by setting up online discussion boards where students reflect on their learning and receive feedback from peers and teachers.³⁷ Participating in discussion boards ensures that students actively engage with course content rather than passively observing instruction.³⁸ Providing explicit instruction on the social skills required for collaboration and expectations for specific collaborative activities at the outset of the learning experiences can enable effective collaboration and help avoid frustration caused by ineffective collaboration.³⁹

Peer review strategies, in which students review and provide feedback on one another's work, also help ensure that students engage constructively with online learning assignments. Teachers should provide incentives, such as online tokens or points, to encourage students to provide peer feedback.⁴⁰ Figure 4 presents additional virtual learning strategies for building and maintaining connections.

Figure 4: Strategies to Support Student Relatedness

STUDENT-TEACHER CONNECTIONS	PEER CONNECTIONS
<ul style="list-style-type: none">Post regular announcementsReply early and oftenVary communication toolsUse feedback to build relationshipsMake physical connections under social distancing (e.g., teacher parades, chalk messages)	<ul style="list-style-type: none">Use prompts to spark discussionFacilitate student talk during synchronous learningDesign group assignmentsPromote student-led tech supportCarve out time to share

Source: EdSurge⁴¹



Student participation requires that students feel motivated to engage and persist in online learning, as research shows that motivation leads to student engagement and participation.⁴² Student choice and **relevancy** are intrinsically related to student motivation, and thus increasing relevancy and student choice can motivate students to participate.⁴³ Teachers can increase motivation and support relevance by asking students about their interests, considering how these topics fit into the curriculum, and connecting instruction to students' interests.⁴⁴ For example, teachers of English language learners can incorporate those students' interests into vocabulary lessons, reading passages, and conversations.⁴⁵

Addressing Students Who "Game the System"

Within virtual settings, students may "game the system," or avoid learning by using virtual help or feedback mechanisms to sidestep thinking about course material.⁴⁶ Gaming the system, which can impact short- and long-term learning and college attendance, can occur because students:⁴⁷

- Dislike the software's subject matter;
- Lack self-drive;
- Feel frustrated;
- Dislike computers;
- Believe that ability is innate; or
- Believe that the tutor is not helpful for learning.

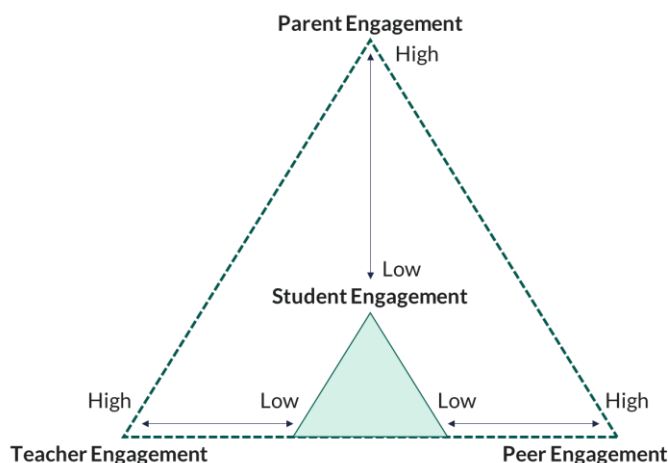
According to a 2014 review of four studies on gaming the system, the following strategies may reduce this tendency and increase learning:⁴⁸

- Adding supplementary exercises to force students to slow down and solve problems in different ways; and
- Combining meta-cognitive feedback messages that suggest slowing down or reading more carefully and visualizations to show how much the student tries to game the system.

Engaging Adolescents

To support adolescent student engagement in virtual learning, teachers should consider the **Adolescent Community of Engagement (ACE) framework**. This framework, reproduced below, connects four types of engagement: student, teacher, parent, and peer.⁴⁹

Figure 5: Adolescent Community of Engagement Framework



Source: *Journal of Technology and Teacher Education*⁵⁰

The ACE framework stems from the hypothesis that student engagement increases as teacher, parent, and peer engagement increase. As illustrated in the preceding figure, student engagement increases from the area of the shaded triangle to the area within the dotted line. This engagement includes behavioral, affective, and cognitive engagement.⁵¹ Figure 6, below, outlines how teachers, parents, and peers help increase student engagement to fill the outer triangle.

Figure 6: Adolescent Community of Engagement Elements

STAKEHOLDER	PRACTICES
Teachers	<ul style="list-style-type: none"> Facilitate interaction (i.e., nurturing student relationships and safe environments, monitoring and motivating student engagement, facilitating discourse) Organize and design course materials and timelines Instruct students
Parents	<ul style="list-style-type: none"> Facilitate interaction (i.e., nurturing, monitoring and motivating, volunteering) Organizing students' environments Instructing students
Peers	<ul style="list-style-type: none"> Instruct and collaborate (i.e., by sharing content knowledge and strategies with other students) Motivate through peer interaction

Source: *Journal of Technology and Teacher Education*⁵²

Engaging Students Whose Cameras Are Off

Engaging students who do not have their camera turned on during synchronous learning poses a significant challenge for educators.⁵³ However, many districts do not require students to turn their webcams on, and requiring camera use can raise privacy concerns.⁵⁴ Rather than asking students to have their cameras on at all times, teachers and students can brainstorm and discuss scenarios and opportunities where it could benefit the class to turn cameras on. Autonomy and structure may encourage students to share their live video, especially when they know it will be beneficial in specific scenarios.⁵⁵

Teachers can also encourage students to turn on their cameras and participate through a social-emotional learning approach that recognizes the importance of communication and community.⁵⁶ An Edutopia article on strategies for encouraging student camera use recommends the following sample SEL-focused strategies and resources.

Figure 7: SEL-Focused Strategies for Increasing Student Participation and Encouraging Video Use

- **Build relationships.** Focus on trust, both teacher to student and student to student. Students who know they are safe and cared for by their community will be more comfortable having their cameras on.
- **Survey students.** Ask students individually or in a Google form what deters them from using a camera and what would make them comfortable. Once you identify the barriers to camera use, you can collaborate with students to reduce or remove those barriers.
- **Use icebreakers.** Try community-building activities that encourage camera use. For example, prompt students to "find the largest yellow thing in your house that you can safely bring back to the camera." As a variation, try the icebreakers [Within Reach](#) or [Pass the Pen](#) as engaging approaches to building community remotely.
- **Play games.** "Rock, paper, scissors" works well in a remote classroom setting, as do Pictionary and charades. Explore [25 games to play on Zoom](#), which includes options that work for different ages.
- **Visually vote or share understanding.** Have students vote with their thumbs up or down on a topic, or poll the class with a [Fist-to-Five](#), a simple signaling system that can engage reluctant students and build consensus within a group.
- **Encourage students who have social capital to use their cameras.** The best role models are likely in your classroom already. Consider using a Google form to ask students to name three classmates with whom they would most like to be in a breakout room or with whom they would most like to work on a group project. The students with the most requests are likely the students with the most social capital and can be positive role models for camera-on activities. You can also consider using a [sociogram](#) to identify the best role models when it comes to camera use.

- **Be empathetic.** Share with your students times when you haven't felt like being on camera in a meeting. Talk about how you prepare yourself to turn on the camera, even when you're not in the mood. If you're self-conscious about looking prepared or about multitasking while on camera, talk about it. Sharing will bring out your humanness.

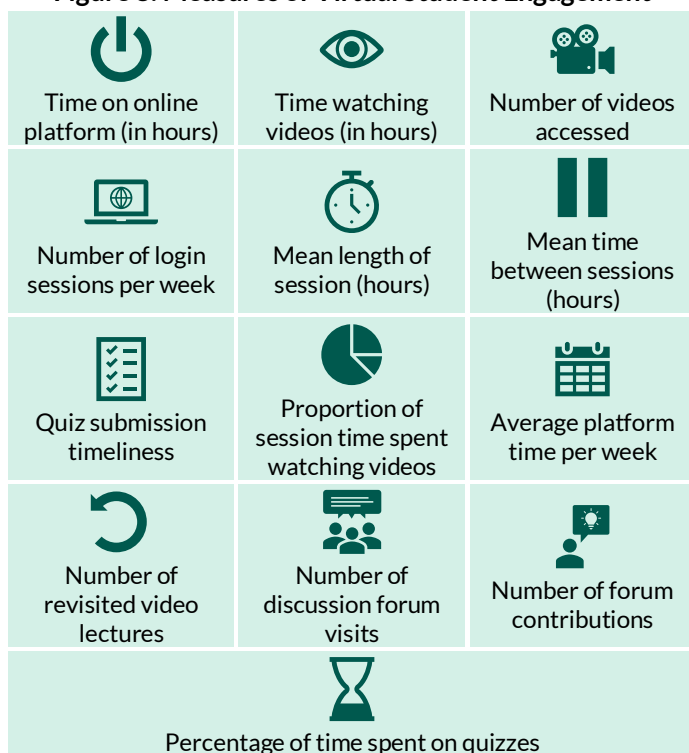
Source: Edutopia⁵⁷

Additionally, when students choose to keep their cameras off, digital features such as chat boxes, online polls, reaction buttons, and interactive whiteboards can offer alternative methods for engaging student participation.⁵⁸

Monitoring and Measuring Student Participation in Virtual Learning Environments

Teachers can use multiple measures to monitor student engagement in virtual learning (e.g., the average hours spent on a virtual platform, the number of videos viewed per week). Figure 8 presents a variety of indicators used to monitor student engagement in virtual settings.⁵⁹

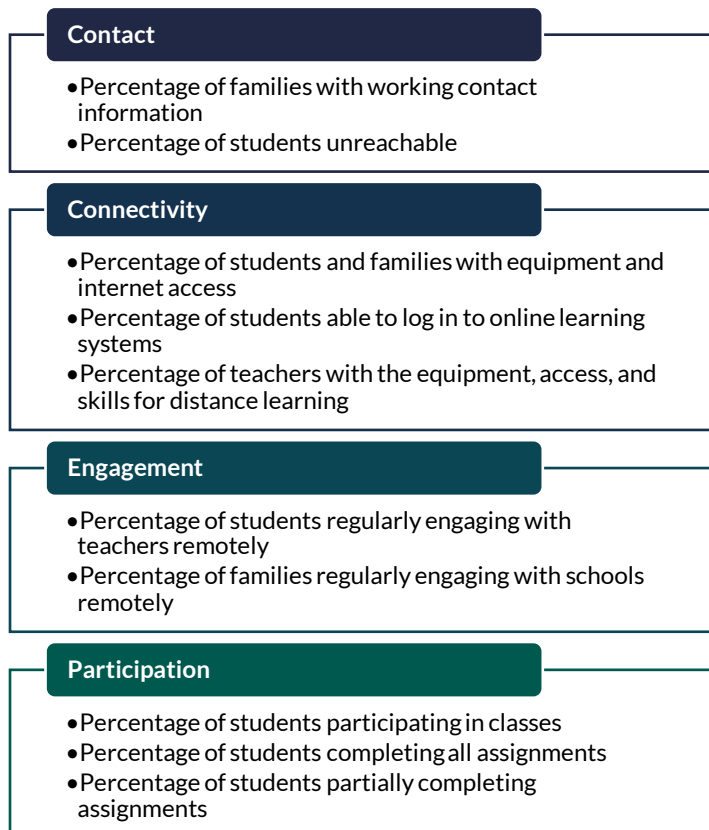
Figure 8: Measures of Virtual Student Engagement



Source: Insight Policy Research⁶⁰

Attendance Works, an organization focused on school attendance, and FutureEd recommend focusing on four main categories for measuring student participation during virtual learning: contact, connectivity, engagement, and participation. Figure 9, below, presents sample metrics for each category.⁶¹

Figure 9: Categories and Metrics for Supporting Student Attendance



Source: Attendance Works⁶²

Teachers can also use the strategies listed below to monitor students' performance in online courses and provide motivation as needed.












- Checking on progress and reminding students to keep working and stay on schedule;
- Encouraging students to keep working when feeling unsuccessful;
- Encouraging and praising students for staying engaged in the course; and
- Regularly checking student grades and providing praise and encouragement as needed.

Source: Journal of Online Learning Research⁶³

Additional Resources and Tools

The following resources provide tools, examples, and additional information to enable educators to engage student participation in virtual learning.

Figure 10: Supplementary Resources

RESOURCE THEME	RESOURCE DESCRIPTION	HYPERLINK
Student-Peer Relationships		
Online Discussion Tools	Common Sense Education lists resources for facilitating online discussions among students.	
Facilitating Online Discussions	Resource on strategies for facilitating effective online discussions, including a checklist of tips and example activities.	
Adapting Collaboration for Online Learning	Think CERCA offers guidance on how to facilitate peer collaboration as well as guides for adapting think-pair-share , last/final word , and silent conversation collaboration strategies for online learning.	
Discussion Board Strategies	Pearson Education offers tips to maximize student engagement in discussion boards.	
Lesson Plan using Discussion Boards	Example lesson plan (Grade 5-12) from the International Literacy Association that utilizes online literature circles to engage students in discussion. Includes example handouts for students.	
Connecting Class Content to Student Interests		
Setting Online Learning Goals	Article from Edgenuity on setting personalized learning goals for online learning.	
Learning Playlists	Examples of using learning playlists to support differentiation in instruction, including many online learning activities.	
Online Learning Choice Boards	Examples of choice boards and brief video on using digital choice boards.	
Strategies for Building Engagement in Online Learning	Better Lesson provides a range of strategies and tips from instructional coaches for teachers seeking to develop engaging and effective online learning. While these strategies cover a range of areas, some relate directly to supporting content engagement specifically, including: goal-setting , flipped learning , and choice boards .	
Increasing Student Engagement with Choice and Relevancy	This report from the Education Trust offers definitions and discusses strategies for increasing student motivation to improve engagement.	
Student Expectations for Virtual Learning		
Sample Student Expectations for Virtual Learning	White Settlement Independent School District (Texas)	
	Egg Harbor Township School District (New Jersey)	
	Richardson Independent School District (Texas)	
	DSST Public Schools (Colorado)	

Project Evaluation Form

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