

10 IDEAS...

...to Prepare Engaging Online Learning



IDEA	EXAMPLES
 Ask all of your students to set up an optimal workspace for photo/video assignments and online lessons.	Encourage them to include: • Adequate space for building models • Plenty of light • A strong internet connection
 Pique your students' interest in a new project by making their task available before the online lesson so they'll have independent think time.	Try: • Recording a short video introducing the task • Assigning a topic for online discussion • Asking your students to pre-build a model and/or segment of code to bring to the online lesson
 Design online lesson interactions to include a social element.	Try: • Opening the virtual classroom a few minutes early and keeping it open for a few minutes after to allow time for your students to get settled and socialize • Assigning your students to randomized breakout rooms during model building to encourage collaboration • Using web conferencing features (e.g., chat, annotation, polls, emojis) to encourage active engagement during group discussions
 Assign leadership roles during online lessons.	Here are some suggestions: • Timekeeper • Note-taker • Small group dialog facilitator

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 During online lessons, plan for screen breaks every 30-45 minutes. Remind your students (and yourself) to stand and stretch. Have fun!	Try: • "Brain breaks" (physical activity) • A short model-building challenge • A scavenger hunt for specific LEGO® elements in the set
 Create, monitor, and moderate spaces for student discussions and collaboration during and outside of online lessons.	Here are some suggestions: • Discussion threads • Cloud-based group folders and documents with revision history enabled • Prompt your students to share and comment on ideas by using photos and videos of physical prototypes, screenshots of code, or digital whiteboard notes/diagrams
 Plan online lesson activities that encourage active engagement and collaboration.	Try: • Asking your students to provide code for you to run on your physical model, while they watch via webcam • Giving your students a segment of code to discuss and debug; apply and test their suggested changes • Set students up for pair programming - one student writes code and sends it to the other, who's building the model
 Encourage your students to explore their interests by offering choices and relevance within project-based learning.	Prompt your students to: • Propose a final product that will give them real-world practice in a career area that interests them (e.g., by producing a video, creating an advertising campaign, improving a physical prototype, building a website or app) • Create a "client profile" describing the user for their product • Look for design inspiration in nature or objects in their surroundings
 Provide clear directions, rubrics, and scoring criteria for tasks in multiple formats.	Here are some suggestions: • Self- or peer-assessment checklists (including text and/or pictures) • Guided examples (e.g., videos or screencast) • Virtual office hours with live support and feedback
 Plan ahead for how you'll monitor progress and differentiate support.	Try: • Keeping an anecdotal recording sheet for check-ins with your students during class • Having pre-class meetings with students who could benefit from previewing content and activities • Assigning students to breakout sessions based on their project challenges, questions, working preferences, etc.