LEGO® Education Camps in a Virtual Environment

Due to various circumstances, schools or organizations may opt to run a camp virtually for students. Use these helpful tips for moving a LEGO® Education camp online.

Tips for virtual camp planning

Moving a camp to a virtual space takes time upfront. You will need to allocate plenty of time to gather materials, decide on procedures and create helpful resources for your students.

The questions below may help with initial camp planning.

- Which camp are you planning to use?
- If it is a robotics camp, will students have access to a device with the software installed?
- How long will the camp run?
- How many hours a day is a child expected to attend virtual camp?
- Will you run your camp completely asynchronous or do you plan to have synchronous check-ins with students either through a video chat or phone call?

Tips for virtual camp organization

Once you have made some initial decisions regarding your virtual camp, the next step is organization.

To ease the process of moving materials online, it helps to create an organization structure for yourself. One way to organize materials is by day.

- Create a digital folder for the camp on your computer or shared space.
- Inside the camp folder, create additional folders for each day.
- Place any items needed for each day in the folder, including documents and images.
- If students will have an online learning space to access materials, consider organizing it in a similar way.

Determine procedures for tasks

Just like in a face-to-face classroom, you will need to make decisions on what tasks need to have a procedure defined. Some tasks might include:

- Distributing and collecting materials to students

- How students can obtain help if needed
- Sharing projects or culminating activities
- How students can collaborate online if that is an option
- How feedback to students will be provided

Consider what other tasks need a procedure defined for your specific situation.

Decide on what parts of the camp you want to include

Our camps are designed for a 6 hour camp day over a 4 to 5 day period. A virtual camp may only be 2 or 3 hours long. Read through each day of the camp to determine what parts you would like to include. You might consider:

- Age of the camper
- Amount of help available to the camper in the remote location
- Reading and writing skills of the camper
- Access to internet connectivity
- Access to materials
- Amount of time needed for a task
- Task difficulty, especially if student is working independently
- If a task can be completed individually when it was designed as a team building challenge.

Some tasks outlined in the camp may not be suited for a virtual space. Below are some ideas of ways you can modify the tasks if you decide to include them:

Camp Task	Purpose	Typical Face to Face Task	Virtual Suggestions
Introductions (day 1)	Getting to know each other	Build activity with bricks and verbal introductions	Students build but share out: • In a document • In a forum post • In a video to share • In a journal entry (i.e. I am excited to attend camp this week because…)
Welcome	Setting the stage for the day; reflecting on previous work	Students share journal entries from the previous day's debrief	Have students share: • Verbally in a video call • In a forum discussion • In a document Change to Set a Goal • Have students set a simple goal for the day and write it in their journals.
Group Rules and Regulations	Establishing procedures;	Verbally, every morning in a group	Teacher could • Include a bulleted list in the course

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	setting expectations		• Create a video to outline expectations
Team Building Activity	Build team work; encourage creative thinking	Usually a build activity designed for two or more people.	Option 1: If camp includes the option of video calls, these activities could be modified slightly and used: • Bricktionary • Create a Creature • Build something that…
			Option 2: Change to a Warm Up Build (Individual task) These tasks can be completed independently: • Tallest tower • Build a Bridge • Create a Creature Build something that… Ask students to use LEGO® bricks to build a model around the theme. You can provide constraints, such as the number of bricks to use or specific elements you would like them to include (i.e. gear, pulley). These builds should be quick and fun for the campers.
Briefing (i.e. mission, design)	Introduce to the challenge	Verbally	Teacher created • document • video
Readings and Wonderings	Provide background information on the topic; to spark interest, curiosity and wonder; begin to uncover misconceptions	Teacher selected readings, books or videos that are shared either with the whole group or individually followed by a discussion	Teacher selected readings or videos in a format that can be easily accessed online Discussion could include: • Online forum • Shared collaborative document • Video or phone call • Journal reflection Teacher may provide research site and have students conduct their own research.
Inventory Checks	Materials management	Dedicated time for partners to check to	Suggest time during the camp week for campers to spot check

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		make sure they have pieces in the set organized	sets (inventory a part of the set at a time)
LEGO Education Lessons	Building to learn	Completed in pairs or small groups and facilitated by teacher. For robotics solutions, lessons are available online or within the software. Any modifications or additional lessons are included in the camp document	For robotics solutions, reference lesson within the app or online.

For non-robotic solutions, download and include student worksheets associated with the lesson online.

For modified lessons in camp document:
Copy and paste directions into learning management system for lesson, making modifications as needed for student understanding. |
| Break/Physical Exercise | Time to recharge | Time dedicated for restroom break and moving around | Include the idea of taking breaks and exercise as needed in the daily camp schedule. |
| Culminating Activities | Big project to apply learning in a creative way; opportunity to share learning with a larger audience | Often occurs on the last day of camp.

Students work in teams to complete.

Some camps are structured so students work on parts of the culminating project all week. | Modify culminating activity to

• A simple individual project.
• A portfolio of work from the week |
| Daily Debrief and Wrap up | Wrap up the day; Reflect | Journal Entries Verbal sharing | Journal Entries |

Decide on what additional pieces you want to add to the camp

In addition to the content currently in the camp, there might be additional considerations to delivering a camp virtually, which could include the items below. Consider what additional pieces might support students and parents in completing the camp.

Today's New Words	Vocabulary	Typically addressed by the teacher within the lesson or reading activity	Teacher created document, video or activity to introduce new vocabulary to student they may find in an activity or a reading.

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Helpful Hints	Tips for getting stuck or frustrated; tips for success	Often handled by the teacher during facilitation of a lesson	Short list of ideas to try, listed in a space easily accessible to students
Technical Help	Information for how to get help if you are having technical problems with the LMS		A document in the course that explains the process for getting technical help.
Note for Parent or Guardian	Tips for how to help their child at home		Camp expectations, daily schedule; how to get help if needed; materials management suggestions; tips for success

Create a daily plan for students

One you have determined the number of days, the number of hours for each day and the tasks you want to include, it is helpful to create a daily plan. An example is provided below.

Gather and create materials

The next step is to gather or create needed digital materials. You may elect to print some materials for students to use as well if access to reliable internet connectivity is a problem.

- Readings or videos for each day on various topics (if selected)
- Student worksheets from LEGO (note these are all in PDF format)
- Documents or short video to introduce an activity
- Questions or prompts you would like students to answer and how students will answer these questions (journal entry, questions in an LMS, digital format).
- Daily overview for students

Today's Plan	
Activity	🕐
1. Warm Up Build	10 min
2. Set a goal	5 min
3. Readings and Wonderings	15 min
4. Today's new words	5 min
5. Challenge 1	45 min
6. Challenge 2	75 min
7. Break down and inventory	15 min
8. Daily Debrief	5 min

If using PDF files, it may be difficult for students to print the document or write on it in a digital format. You may consider having students complete any written documentation in a journal or create a question as part of an assignment.

Remember to consider the reading level of students in the camp, especially students who may need additional support. Videos are a great tool and can help provide a scaffold for campers.

Because students will be completing tasks at different rates, you may opt to include activity extensions for students who grasp concepts quickly as well as support for students who may need additional help.

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