CLIXO
Classroom

When and Then Building Challenge

Activity Guide

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Online Activity Page

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Overview

In this activity, students have the opportunity to engage in imaginative building using Clixo materials while practicing cause–and–effect storytelling. Adults can ask guiding questions to drive the building and make students' thinking visible.

Objective

Students build cognitive and problem–solving skills as they decide what happens next and work out how to build it. Planning each "when" and its "then" supports executive function development, and talking through their cause–and–effect stories strengthens early literacy and language skills.

Materials for Each Student

- Clixo pieces

Skills

- Critical thinking
- Memory
- Language
- Storytelling
- Planning

Ages

Pre–K & Kindergarten

Duration

10–15 minutes

Group Size

2–5 students per group



Introduce 5 min

- **Before class:**
  - Arrange a workspace large enough for each student to have their materials laid out in front of them.
  - Have Clixo pieces ready to hand out to each student or group.
- **Step 1:** Gather your small group on the floor. Do not show the students the Clixo pieces yet.
  - **Ask:** If you could invent any machine in the world, what would it be? What would it do?
- **Step 2:** Show the group a small variety of Clixo pieces (not for group, just a few for you to hold)
- **Step 3:** Model the way two pieces connect together. Model folding, and simply connecting your pieces.
  - **Say:** I've just made a machine that can do anything in the world!

- **Step 4:** Model the language you're about to use with each child. Explain elements of your machine saying things like...
  - When... I push this button Then... water squirts out
  - When... I turn this knob Then... the lights turn off
  - **Ask:** Are you getting some ideas? Allow the students to share their thoughts for a moment.



Build and Create 5 min

- Bring out all the Clixo pieces, and ask them to create their own machines and devices individually or as a group.



Share and Reflect 5 min

- While students work on their creations, ask them to describe the function of their machine as they build using "When..." and "Then..." as guiding anchors.
- If possible, photograph your students' creations. Capturing their work can help ease hesitation about taking it apart or cleaning up. Displaying these photos in the classroom alongside their dictations creates a meaningful anchor for future building, literacy development, and self-confidence.
- **Key takeaways:**
  - Using "when" and "then" encourages critical thinking by helping students reflect on their actions and predict outcomes.
  - Verbalizing the steps with "when" and "then" also improves working memory and planning skills, as students recall what they did and consider next steps.
  - This process helps students understand story structure, improving their ability to tell and later write stories with clear sequences.
  - This activity expands students' vocabulary and reinforces cause-and-effect relationships, both of which are key milestones for pre-K language development.



Tips

- ✓ Keep a piece of paper handy for adult dictation to capture how students describe their creations. Include the child's name and prompts like "When..." and "Then..." to guide their storytelling.