

The Airplane Activity

Playful Learning Activity Card



Purpose

To provide a playful experience to reflect on the documentation processes of observing, recording, interpreting, and sharing information with learners.

Preparations

- ▷ Collect materials and tools for your students to create paper airplanes:
 - ▽ Materials: Paper of different weight and sizes, tape, paper clips, wooden coffee stirrers or small sticks, small denomination coins.
 - ▽ Tools: Scissors, pens, markers.
- ▷ Display materials in an inviting manner.

Process

- ▷ Split the class into small groups. Groups of 3-5 players and 2 documenters—are ideal. Help groups identify who will be the players and the documenters
- ▷ Introduce activity:
 - ▽ Instructions for Learners: Please come up with two different designs for paper airplanes that can fly at least 10 feet, carrying at least small coins
 - ▽ Instructions for Documenter/Observers: Please observe with the following question in mind: What do you notice about the individual and group's process of building knowledge about aerodynamics, and what can you point to that makes you say that? Watch for interesting or important moments or shifts in the ways ideas are being developed. Afterward, we would like you not just to describe, but to interpret how those moments advanced the knowledge-building of the group. Please document your observations individually. You can document in any way you wish—jot down bits of conversation or notes, draw pictures or diagrams, take photos or video with your cell phone—but you must document somehow!
- ▷ Provide time to play and document (15-20 minutes)
- ▷ Debrief in small groups:
 - ▽ Observers: Share with the learners 1-2 interesting or important moments/ shifts regarding the ideas about aerodynamics that were being developed and offer an interpretation of how they advanced the learning process

- ▽ Learners: Share responses to the documenters' observations and interpretations. Share your own reflections about interesting or important moments/shifts regarding how or what you or the group learned about aerodynamics
- ▽ As a Small Group: Choose one thing you learned about documentation or how individuals and the group built knowledge about aerodynamics to share with the whole group.
- ▽ Whole group discussion: Small groups report one thing they learned about documentation or how the group built knowledge about aerodynamics
- ▽ You can also ask: What did you notice or learn from other's documentation processes?

More than One Way

- ▷ Modify the timing of the process to suit your context
- ▷ Join a small group as a documenter. Often, students unfamiliar with aerodynamics will focus their documentation on group dynamics. To illustrate, the documentation can also apply to content learning; focus your documentation on aerodynamic issues, questions, and ideas. For example, you can collect a list of words players use that touch on aerodynamics (e.g., weight, balance, drag, lift) or issues about the flight that surfaced (wing size, shape of plan, force used to throw the plane)
- ▷ Consider how to make connections to the Playful Participatory Research assignment