

How to frame a Design Challenge for your students

1

The framing of a Design Challenge sets the stage for student teams to explore characters and problems within a situation. The best framing does not constrain them to one problem to solve nor leave it too broad that they have trouble finding tangible problems.

This two page worksheet is designed to guide you through two or more rapid iterations of creating a Design Challenge. So don't worry about getting it right the first time.

2

List Settings that are both interesting to your students and have the potential to embed curricular content. Each setting should have between 3 and 6 potential Characters and at least 4 Potential Problems. It is common during the course of the Design Challenge for students to discover unanticipated problems.

Settings	Characters	Potential Problems
Ex. A local park	Kids who play there Parents Animals (wild & domesticated) Local proprietors	Litter Habitat disruption Park financial viability Recreation safety

3

Chose a setting and write 3 versions of a statement that captures the situation. Use the scaffolds below to help. If you get stuck, try a new setting.

Redesign the (situation) experience .

Design a way for (specific group of people) to better (situation) .

How might we help (achieve some goal) ?

Ex. How might we keep the park clean?

Design a way for people at the park to better support native animal life.

4

Pick one of the statements you generated. Imagine your students in teams of 3-5 faced with this challenge. Within the situation are there...

Multiple Characters

Similarities Between Characters

Multiple Problems

Similarities Between Problems

Multiple Needs of the Characters

Similarities Between Needs

If not, go back to step 3 and make the statement more broad.

If not, go back to step 3 and make the statement more narrow.

5

When you feel you have a Design Challenge, write it below and have each team start their worksheet. We would love to hear what you came up with.

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