

REMODELING SPACE

GRADE: 6-8

TIME: Three 60-minute sessions

Exploring, and engaging, with familiar common spaces through the lens of design can help one understand how adjustments can positively alter the way spaces are used and experienced. In this lesson, students explore an underutilized space within their school (or at home) with the intention of redesigning the space. Through observation and sketching, students reimagine how the space can be designed to maximize engagement. Then, students will design furniture for the space.

INTEGRATED SUBJECTS: Visual Arts, Math, Social-Emotional Learning

OBJECTIVES

MATERIALS | RESOURCES

Tinkercad (available for free online at <http://www.tinkercad.com>)

Student computer or tablet

Images of remodeled spaces in Frank Lloyd Wright's Oak Park Home and Studio

Paper

Pencil

3D printer (optional)

Photos and/or drawings of a particular space within the school

1. Recognize that Frank Lloyd Wright was a creative and innovative architect.
2. Improve a familiar space to make it more appealing and functional.
3. Design a piece of furniture to reflect a remodeled space.

ESSENTIAL QUESTIONS

1. How can I improve my surrounding environment?
2. How can I redesign a space to make it both visually appealing and functional?
3. How can I create something site-specific?

LESSON PROCEDURE

EXPLORE

Session One

- **Introduce Frank Lloyd Wright and the job of an architect.** Use Wright's Home and Studio to illustrate how Wright remodeled many interior spaces in his home, including the dining room and Catherine's dayroom. Images can be found at <https://www.teachingbydesign.org/multimedia/>. Have students consider: Why would Wright make changes to his own home? Why and how are spaces remodeled? **Emphasize that Wright made these changes to accommodate the changing needs of his family.**
- **Schedule an in-school field trip to a space in your school building that is underutilized or might be in need of remodeling.**
- (Tip: It may be helpful to preview the space with the students by viewing pictures or roughly drawn layouts of the space. Students could generate questions about the space in advance.)
- **Consider asking the building engineer to visit with students for a Q&A session about the underutilized space or how to better maintain and utilize various school spaces.**

ENGAGE

Session One

- **Give students time to independently walk through the space you have selected in your school building.**
- **Encourage students to sketch the space.**
- **While in the space, have a discussion about any unique or special structural elements. The building engineer might be helpful for this question.**
- **Have students consider:** What is the current use or purpose of the space? What could be another use or purpose of the space? What changes can be made to enhance the use of the space? What furniture can be used to enhance the purpose or functionality of the space?

DESIGN

Session Two

- **Instruct students to brainstorm new uses for the space and sketch their ideas.**
- **With students, explore how Wright incorporated furniture in his remodeled spaces.**
- **Have students consider:** How is the furniture designed specifically for this space? How do you think it impacts the way the room is used?
- **Have students design furniture pieces for the remodeled school space using the program Tinkercad. If a 3D printer is available, a winning piece can be selected to print.**

CRITIQUE & INTERPRET

Session Three

- **Encourage students to write and reflect on their new designs, noting how their redesign will improve the space and how it is used.**
- **Have students present their design ideas to a panel of school personnel, including administrators, faculty, and support staff.**