

5 WAYS

to bring the NOVA Fab Lab Design Challenge to your Classroom **Spring 2024**

Are you looking for something new for your classroom? Try the NOVA Design Challenge, where students are tasked to **design a product to improve the wellbeing of an animal!** Here are 5 ways to integrate the challenge into your classroom:



1. Extra Credit Assignment

Simply send your students to the Fab Lab website and follow all instructions for participation and submission about the Design Challenge! They receive extra credit by showing their submission.



2. Complete the Challenge with CAD

The Design Challenge is open ended, but if you are a teacher you may want to require the use of Computer Aided Design (CAD) for submissions. Follow the challenge instructions, then require students to submit their design as a CAD file. **Sign-up for our FREE TinkerCAD Workshops to get started.**



3. Short-Term Project (1-3 weeks)

a) Introduce students to the Design Thinking Process and document all of their steps, including research, brainstorming and how they chose their solution.

b) Students sketch their final design, physically build it, test and iterate their design with consumable materials, and send in their submission to the Fab Lab!



4. Long-Term Project (1 month or longer)

a) Students create a timeline, calendar, or Gantt Chart and assign due dates for:

- Work through the Design Thinking Process.
- Testing and iterating their design.
- Completing their final design in CAD and/or making physical product.
- Submitting to Fab Lab website.

b) Students set daily goals for classwork & homework based on their calendar.

c) Hold bi-monthly meetings with students to present individual or team progress.

d) Students present final product to class along with all documentation.



5. Workshops and Information Sessions

a) Students can **register** for our FREE design thinking and TinkerCAD workshops.

b) Join a **zoom info session** & project us on the big screen to introduce the challenge to your class.

