

Family Design Challenge

a student-driven experience designed to share learning with the community

Interested in providing your students with an authentic opportunity to demonstrate their learning? Looking for an option to garner community support for the great things going on in your Technology and Engineering classroom? Searching for a way to challenge your students to hone those essential soft skills? If so, the Family Design Challenge might be for you!

The primary goal of the Family Design Challenge is to provide students with an opportunity to demonstrate their accumulated knowledge and experiences through the design and implementation of a design challenge. Working individually or in small groups, students begin by authoring a unique design brief. Students then communicate their ideas to an audience of their peers, in both written and oral format. Upon conclusion of these presentations, students will vote for the most viable, creative challenge. Students then begin the preparatory work necessary to facilitate the challenge for an authentic audience. Families will visit the school for a fun evening of design and problem solving. Large spaces, like a gym or a cafeteria, work well for the event. Students should be empowered to facilitate as much of the Family Design Challenge as possible including but not limited to material and tool preparation, explanation of the challenge to participants, providing answers to participant questions, and testing of solutions.



While the Family Design Challenge was originally designed to encourage a connection between home and school, this challenge could also easily be adapted for other audiences such as another class within the school, a group of younger students perhaps in a neighboring elementary school, or a group of teachers as part of a staff development day. The Family Design Challenge also provides opportunities for other real-world connections and service learning. For example, a previous design challenge encouraged participants to bring old towels and/or blankets that could be used as a material in construction of their solutions. Any towels/blankets left after the design challenge were then donated to SPCA through the school library's annual Cats vs. Dogs Challenge.

Lauren Lapinski
Bala Cynwyd Middle School
Lower Merion School District, PA
lapinsl@lmsd.org