



MASON
PREPARATORY SCHOOL



Mini Golf Design Challenge
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Student Goals

- Collaboration
- Creative resource use
- Problem-solving
- Practice resilience
- Build peer- and self-reliance



Faculty Goals

- See the design process in action
- Work collaboratively to accomplish a goal
- Unleash student potential



Preparing Students

- On Tuesday, you will be divided into teams. Mixed grades and genders.
- Your team must build a mini-golf hole.
- All teams will have similar parameters.
- Each team will have a unique feature challenge.

*YOU WILL LEARN YOUR TEAMS AND
UNIQUE FEATURE CHALLENGE
ON TUESDAY.*



Preparing Students

School supplied:

- Cardboard
- Tape
- Box cutters
- Putter and ball
- Packet for designing and testing.
- Space

Students could bring:

- Supplies for the team.
- Max 5 feet in length
- Max \$15 value
- Recyclable / reusable materials

Design Challenges

Moat / Water Hazard

Jester / Sand trap

Princess / Funnel

Wagon / Spinning
Element

Dragon / Banked Turn



Design Process

- Brainstorm
- Assign Tasks
- Create Blueprint
- Build a Prototype
- Final Design



Curriculum Tie-Ins

- Calculating Area and Perimeter
- Determining Par
- Artistic Expression of the Theme













Biggest Challenges for Students:

Collaboration

Getting “stuck in the weeds”

Time management



Biggest Challenges for Teachers:

The right good idea.

Planning a full-scale collaborative project.

Finding time to do the project.



What Worked:

Building anticipation.

Mixed-ability groups.

Invitation of younger children.

Faculty buy-in.

The Question Bank.



Future Improvements

- More time for building and playing
- Increase design space
- More connections to curriculum
- Clearly defined faculty roles
- Timing of design challenge



Questions?

