Chapter 7
“Imagioneering” a New Mission Space

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EXECUTIVE SUMMARY

Incorporating STEAM into classroom practice can be both challenging and daunting. “Imagioneering” a new Mission: Space showcases a way to utilize STEAM into the environmental earth science classroom. Using the familiarity many students have with Disney, critical analysis is applied to the design of a famous park ride. Ride-layout is critiqued and improved upon via student collaboration. Students then use their ability to analyze design to build a structure that fits a particular purpose. This project is geared towards the high school level and students redesign the exterior and line-queue for Mission: Space.

LEARNER OUTCOMES

Next Generation Science Standards

- **HS-ESS1**: Earth’s Place in the Universe.
- **HS-ETS1**: Engineering Design.

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National Visual Arts Standards

- **MA: Cr1.1.III:** Integrate aesthetic principles with a variety of generative methods to fluently form original ideas, solutions, and innovations in media arts creation processes.
- **MA: Cr2.1.III:** Integrate a sophisticated personal aesthetic and knowledge of systems processes in forming, testing, and proposing original artistic ideas, prototypes, and production frameworks, considering complex constraints of goals, time, resources, and personal limitations.

Common Core Mathematics Standards

- **N.Q.02:** Define appropriate quantities for the purpose of descriptive modeling.
- **S.IC.06:** Evaluate reports based on data.

LITERATURE REVIEW

Walt Disney World: The New Standard

Even though most think of Walt Disney World when they hear Walt Disney, the company got its start in animation. The most famous creation of the Walt Disney Company is Mickey Mouse. By using Mickey Mouse as the mascot, Walt Disney was able to convey messages and elicit emotions from audiences around the world. Walt’s transition from animation to theme park design was inspired by a family trip to a carnival. While his daughters rode the carousel, Walt reflected on the grounds that surrounded him. He noted the poor conditions and the lack of family-friendly entertainment. These observations would be the seeds to what would become California’s Disneyland.

As Walt Disney animators continued to pioneer music, film, and TV, Walt Disney was exploring other avenues. He wanted to provide safe, wholesome family entertainment to all ages. Upon completion of Disneyland, Walt continued to seek better a design for his ‘land of make believe.’ His restless pursuit of perfection gave rise to one of the most famous places on Earth:

In 1964, Walt Disney began secretly buying millions of dollars worth of Central Florida farmland. Some thought it was Howard Hughes; others, the space program. Speculation was rife almost to the very day, November 15, 1965, when Uncle Walt