



What is a STEM Classroom





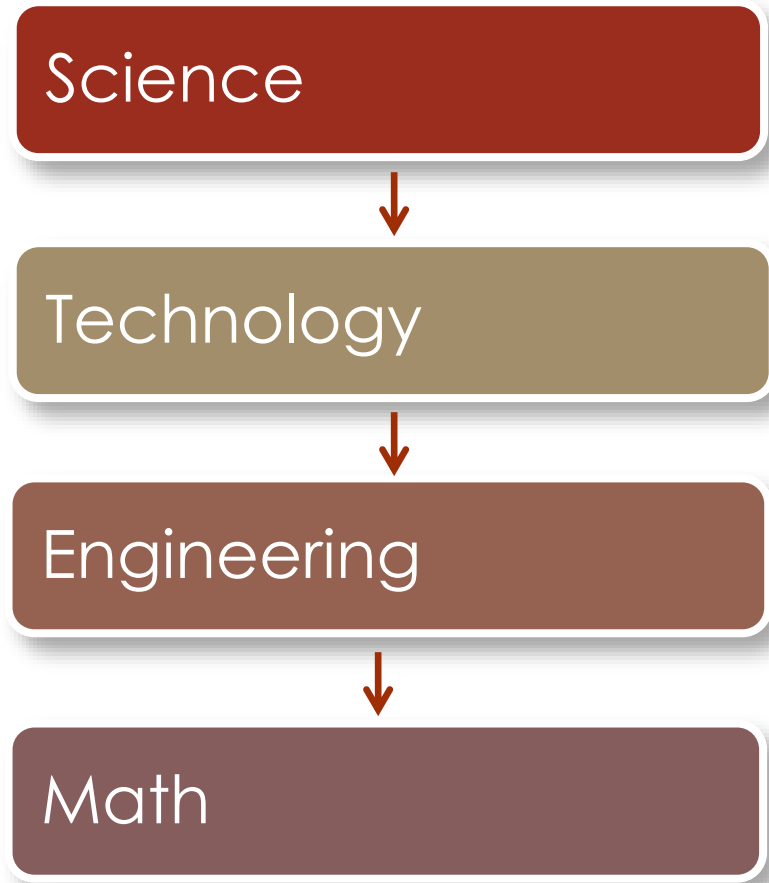
STEM Disciplines

Science: The study of the natural world.

Technology: Any product made by humans to meet a want or need.

Engineering: The design process used to solve problems by building.

Math: The numbers, shapes, and quantities within the process.





STEM Classroom Attributes

Hands-On

Interactive

Interactive

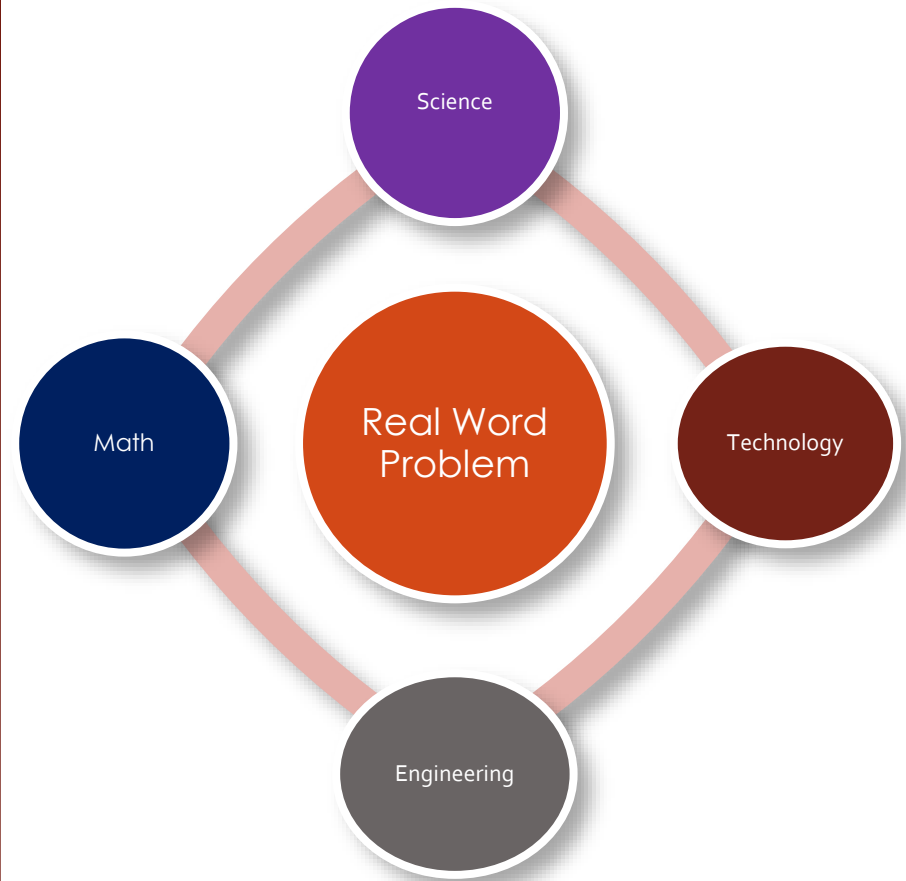
Critical Thinking

Decision Making

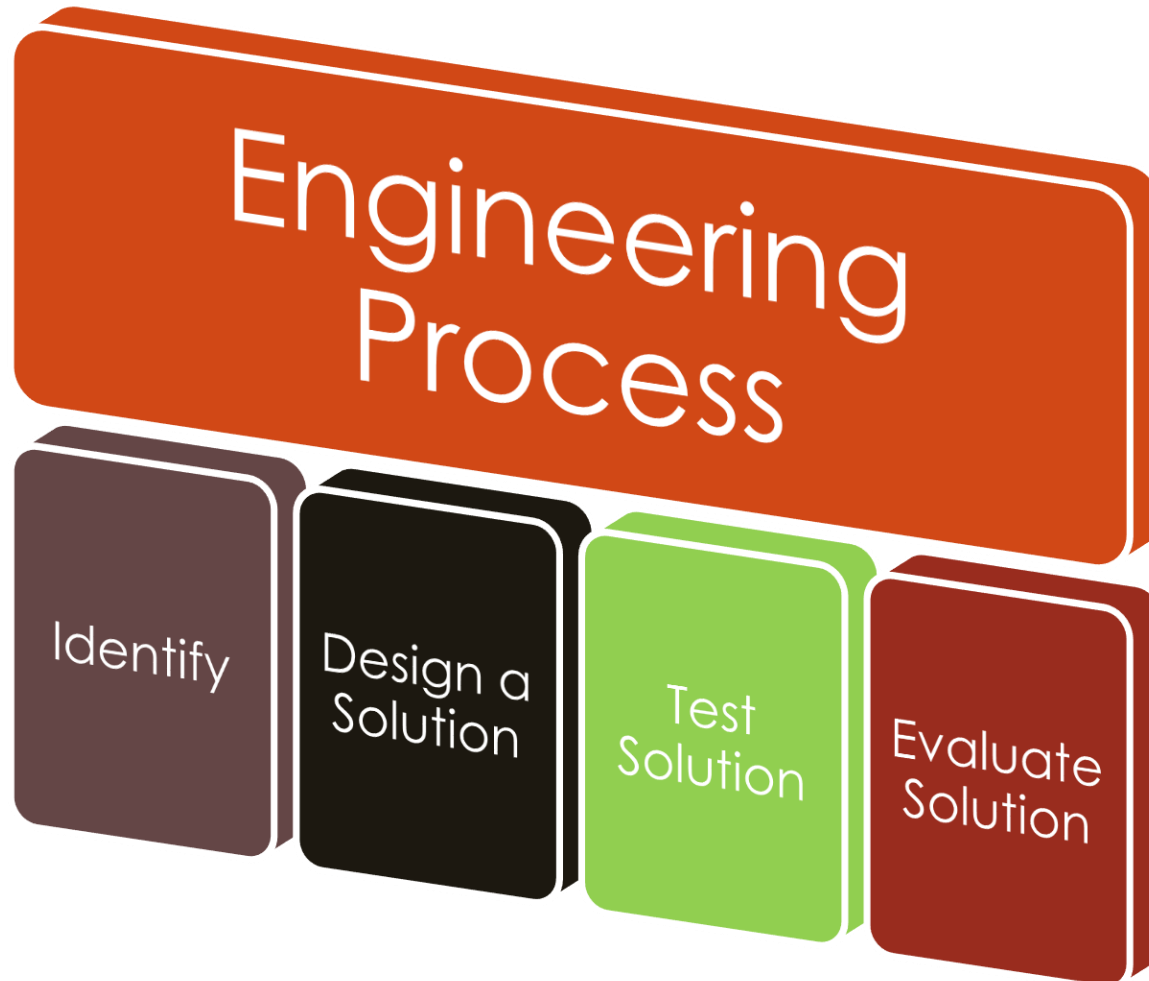
Organized Chaos

Visualize the Classroom

1. Uses all 4 disciplines to solve real world problems.
2. Chaotic learning and collaborative spaces.
3. Student driven and teacher facilitated.
4. Requires higher-order thinking.
5. Interchangeable

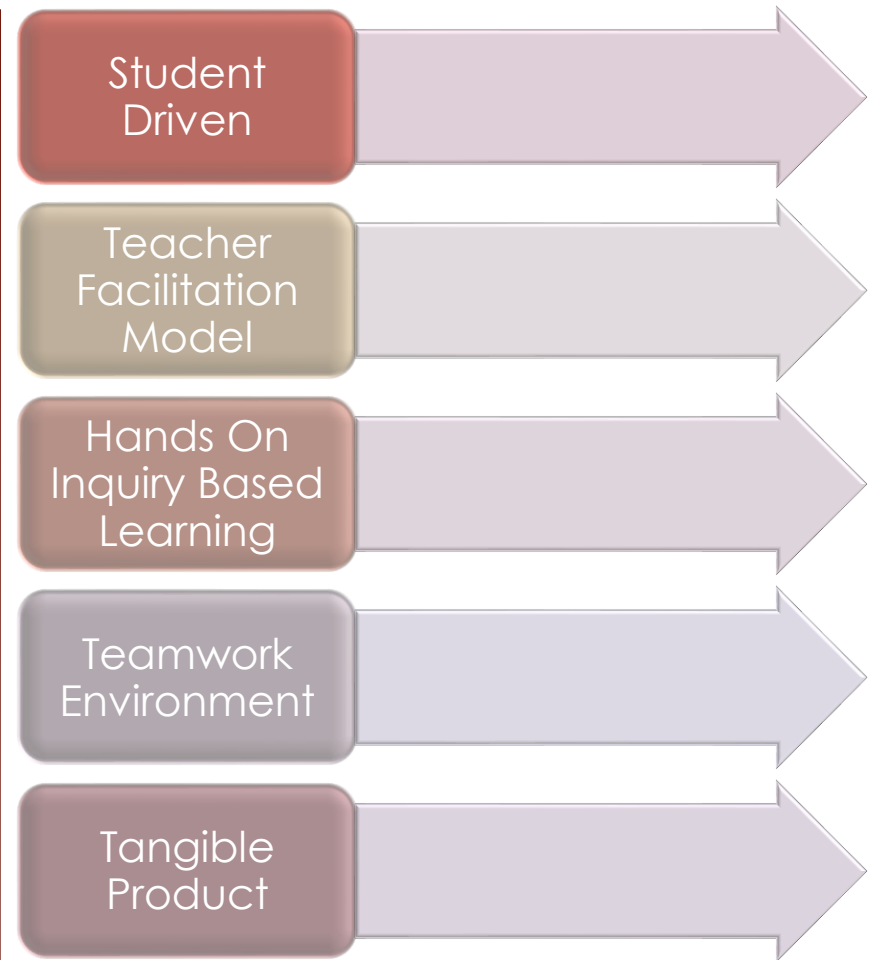


The Scope



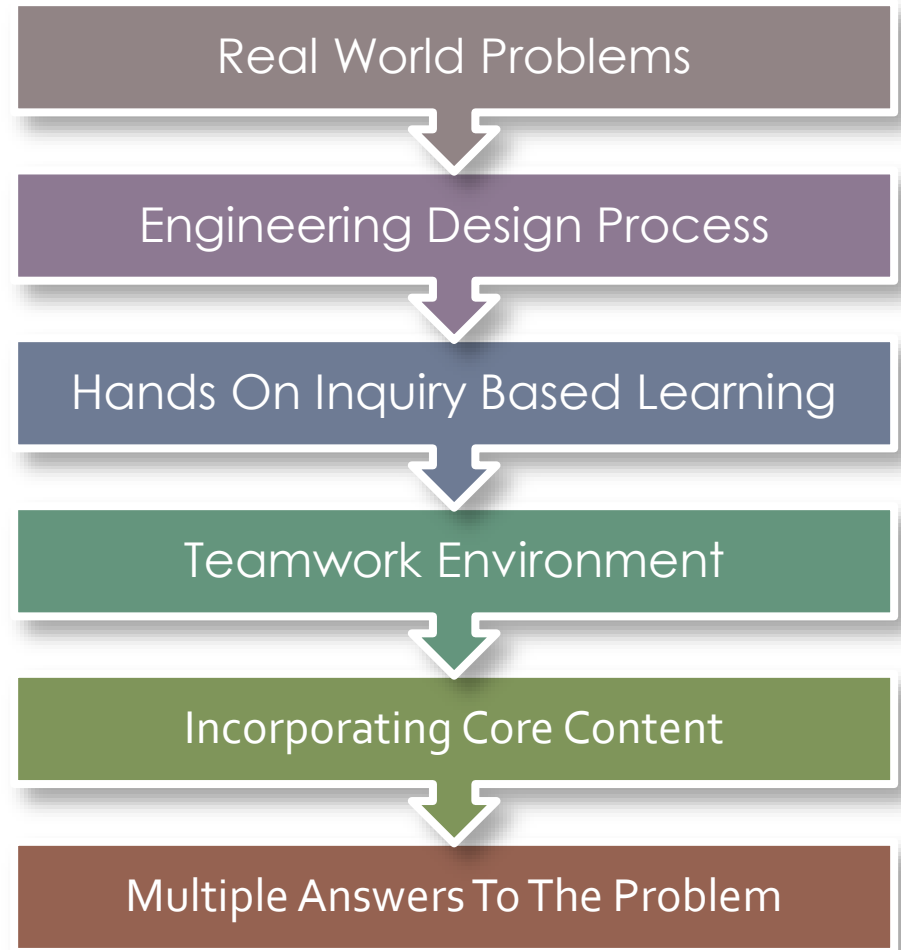
Project-Based Learning

PBL is a student-centered pedagogy that involves a dynamic classroom approach allowing students to acquire a deeper knowledge through active exploration of real-world challenges and problems.





Characteristics of Quality STEM Classroom



5 Tips for STEM Integration

3 R's of 21st Century Learner

Find common interest

Connecting real life careers

Pose interesting questions related to decision making and critical thinking

Lead with the engineering process

