

Title: Doing the design project

Overview

After we decide on a problem we want to solve, we use the engineering design process to help us find possible solutions. We are using a design process that is a combination from Engineeringlens.org and Olin college of engineering.

Essential Questions

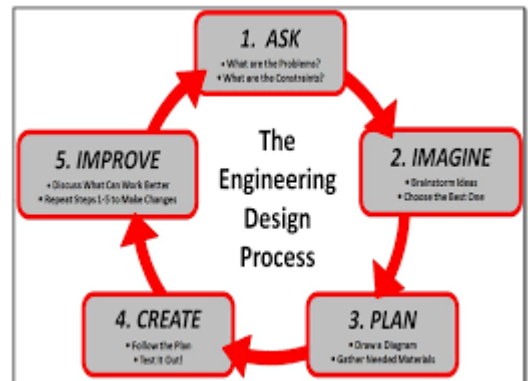
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| What are we looking to do? |
| How would we judge success? |
| What do we have to design to solve this issue? |
| What is the purpose of this design? |
| What would the goals and objectives be? |
| Can we break the problem/design into parts? |
| When we reach a road block, we will be able to decide an new path |

Basic definition:

Engineering designs creates useful products and process for society based on all disciplines but mainly math and science.

Tasks

- Understand what the problem is? Need to solve the root issues versus just a band-aid
- What are the requirements for this problem that society needs
- How are we going to measure success of this project
- Research the problem
- Find many possible designs
- Sort/ Shape a few best
- Test and check ideas with other
- Decide the best
- Report finding



Learning Skills

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|-------------------|-------------------|
| Questioning | Creative thinking |
| Critical thinking | Reflection |
| Decision making | System thinking |
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Note: the Iterate nature and the divergent / convergent nature of the process

