1. **BIG IDEAS** -
   - We want our students to think, design, and solve problems in a systematic process like ENGINEERS.
   - We want students to be creative, inventive, and resourceful.
   - The student should improve in the following areas:
     - critical AND abstract thinking
     - creative and imaginative thinking
     - working cooperatively within a team
     - reading comprehension
     - oral comprehension
     - moral and ethical responsibility
   - Teachers will direct investigations using Engineering Design Process:
     - IDENTIFY the challenge(s)
     - EXPLORE ideas
     - PLAN and DEVELOP
     - TEST and EVALUATE
     - PRESENT a solution

2. **TIMELINE** -
   a. during first quarter:
      Teachers will integrate STEM in lesson planning, be given model lessons to observe, and a career pre-assessment will be given to all 6th graders.
   b. during second quarter: (November- Career Awareness Month)
      We propose activities such as a LIVING MUSEUM using key members of the community.
   c. during third quarter:
      We propose grade level field trips (for students in EXCELLENT academic and behavioral standing) to local manufacturing facilities to witness first-hand the various careers.
   d. during fourth quarter:
      6th graders will research a career they find interesting and include the science, technology, engineering, and math skills required. They will also be given another career-assessment survey.
3. RESOURCES -
   a. STEM resources and web site
   b. BUSINESS PARTNERS- critical to our success

4. LEARNING EXPERIENCES -
   a. Using the Engineering Design Process ii all curriculum, we should include a
      minimum of one STEM project in each of the nine week quarters that focuses on
      the grade level content of each class.

5. EXAMPLE -
   • At least one on the projects will be a collaborative effort ‘crossing the
     curriculums:’
   • Changes in Communication: In the 4 core curriculum courses, the
     student will focus on changes of communication with the focus on
     THE TELEPHONE- models of the phone can be built, timelines can
     be drawn from rotary dial to cell phone usage... etc.
   • The communication challenges to be addressed are to help the student
     realize we now live in a world of INSTANT technology and in the past
     lines of communications were no where near as instant, but were more
     complicated, too.