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| **Lesson Name:** | **Is Engineering Your Future?-Career Fair** |
| **Grade Level(s):** | 9-12 |
| **Goal/Objective(s):** | * Identify and differentiate between mechanical, electrical, civil, and chemical engineering fields and the subfields for those areas. * Evaluate the skills required for career success in most engineering fields and determine what additional skills might be necessary for engineering specialties. * The student will research career opportunities and educational requirements for engineering, and explain their job functions. * Students will produce a display that highlights a particular field of engineering and role play as a representative of the career to give an informative presentation to peers and other evaluators in regarding expectations should they choose that field as their career. |
| **Standard(s):** | **ET.O.IED.1.8** Determine career opportunities in a given engineering field, explain their job functions, and list the educational requirements for that profession.  **ET.O.IED.15.1** search online using a range of technology tools and media to access relevant information needed for problem solving.  **ET.O.IED.15.2** create information for oral, written, and multimedia communications, adhering to copyright laws.  **ET.O.IED.15.6** model legal and ethical behaviors in the use of technology.  **School Counseling – Student Success Standards:**  **ALP.SS.1.1.7** demonstrate the ability to work independently or collaboratively in various learning environments.  **ALP.SS.2.1.1** use a variety of resources to explore career options in relation to personal abilities, skills, interests, values, and the current job market.  **ALP.SS.2.1.2** evaluate roles, responsibilities and requirements for progressions of career levels from entry to advanced positions.  **ALP.SS.2.1.7** model expected workplace dispositions, skills and behaviors in school, community, and occupational experiences to prepare for career success. |
| **Instructions:** | Day 1- Handout Engineering Careers project sheet. Go over expectations and grading. Answer any questions related to the project. Using the projector have students follow along on their own computer and listen to the following steps performed by the instructor:   * Have students go to the CFWV website: <https://cfwv.com/> * Click on Career Planning then Explore Careers * In the search bar type: Engineering   Have students explore a variety of engineering fields, answering the questions found on the project sheet.  Day 2 and 3- Students will review and discuss materials collected from day 1 of the activity. Each student will select a different engineering career to more fully explore. For their career they will create the following:  3 fold display that communicates   * Career title * Education Level * Avg. income (for your area) at entry level * Job outlook * What they do * Skills required * Work environment * Schools (college/university) that offer that career major * Similar careers * The display should include several images to represent that career * All sources must be cited   Students should become familiar with all aspects of the job included in the display so that they may role play the part of someone from that career in a mock Career Fair.  Divide the class into two groups. Group 1 will put on their Career Fair on day 4 and Group 2 will do so on day 5.  Days 4 and 5 – Depending on which group students are assigned to, they will either play the part of the career professional for their field or as a potential candidate for that career. Presenters conduct themselves in a professional manner to attempt to recruit the candidates into their field. Candidates visit a minimum of ½ of the presentations and complete section 2 of the Engineering Career Project Sheet(s).  Print out as many of the final pages of the project as required so that students may review at least ½ of the displays/presentations. |
| **Materials:** | Computers/laptops/tablets – 1 per student with internet access  3 fold display boards – 1 per student  Printer with paper  Engineering Career Project Sheets |
| **CFWV Tools Used:** | Explore Careers (all aspects) |
| **Assessment** | Grading Rubric |