I learned today that STEM skills are important in many jobs that I had not previously thought about. I feel like I need to work on the following skills:

1. The Importance of STEM Skills Video and Discussion

Introduce the video by asking students to define the acronym STEM (science, technology, engineering and mathematics) and help them list some of the courses offered in their middle and high schools. Examples include Algebra, Biology, Chemistry, Computer Applications, Computer Science, Technical Writing, Physics, etc.

Ask them to watch the video and write down the skills required for the three careers: fashion designer, filmmaker and landscape architect.

After the video, show them the list of Ten STEM Skills that is attached and ask them to list the STEM skills required in the three examples. Here are few possible answers.

- Fashion design: measurement, mathematics, analysis, research, problem-solving, accounting, technology of digital tablets and other devices;
- Filmmaker: cameras and equipment and calculations, mathematics and physics of speed, sound, distance, editing, problem solving, analysis and decision making, budgeting and predicting;
- Landscape architect: Earth science, design tools, decision making, engineering, research and mathematics, measurement

2. Write a Job Posting Activity

Using the copy of the Ten STEM Skills handout (in hard copy or on the projector) discuss the likelihood that many of these will be required in most jobs they pursue after college. Many jobs often go unfilled because people do not have the STEM skills required.

Ask them to pretend they are an employer who is looking for a worker to fill a certain position. They are to create a posting for a job and describe the STEM skills the person needs to have for the job. When all are completed, ask them to read their postings and let the rest of the class guess what job they are describing. NOTE: Provide an example of a job posting for students to review before beginning their own.
THE IMPORTANCE OF STEM SKILLS

TEN SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH (STEM) SKILLS

1. Maintain accuracy in record-keeping and communicate findings.

2. Research topics and determine good, reliable sources of information.

3. Analyze small parts of systems and see relationships; notice details in content and process.

4. Recognize cause and effect relationships and distinguish fact and opinion.

5. Use mathematical skills for calculations and measurements.

6. Predict and draw conclusions using data.

7. Read and understand technical materials.

8. Repair equipment and use software.

9. Communicate with others and listen.

10. Think creatively and solve problems and experiment.

JOB POSTING ACTIVITY

Use the space to the right to write your ad. Think of a job that requires some or all of the STEM skills. Write 3-4 sentences that explain what the person will be doing and what skills are most important for the job. Don’t say what the job is—later your classmates will guess the job you have described.