**Engineering and Technology Teacher Recruitment Lesson Plan**

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| **Class:** Any Engineering and Technology Course | **Unit:** Careers |
| **Lesson Topic**: Engineering and Technology Teacher Education and Careers | **Length:** 2 days of 50 min class periods (Approximately, based on class size) |
| **Standards**: (from [Indiana Middle School Engineering and Technology program](http://www.doe.in.gov/sites/default/files/standards/middle-school-et-standards2016final.pdf) – Standards 12.1-12.3)Domain: Students will explore engineering and technology related careers.* Investigate careers in engineering and technology pathways.
* Analyze education and skill requirements for engineering and technology professions.
* Explore the outlook, demand, and projected wages for engineering and technology careers.

*These standards may be different depending on the course where this lesson is applied. All courses include or should include an emphasis on careers.*  |
| **Objectives:** *The students will be able to. . .* * Analyze job availability in Engineering and Technology Education and related careers.
* Identify and describe the job description and benefits of becoming and Engineering and Technology teacher.
* Create a poster to summarize research information about degree programs in Engineering and Technology Education.
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| Methods / Learning Experiences | Content |
| **Time** | **Activity** |  |
| 5-10 min. | **Lesson Intro/Interest Activity:****Engineering and Technology Teacher Supply/Demand Graph**Resource: Moye, Johnny. December 2016.“The Supply and Demand of Technology and Engineering Teachers: Who Knows?” *The Technology and Engineering Teacher*. Retrieved from <https://www.iteea.org/File.aspx?id=102742> *Possible Alternative:**Read and Discuss Article on Engineering and Technology Teacher Demand from The Technology Teacher Journal.* | Show students graph about supply/demand for Engineering and Technology Teachers and ask them the following questions (or others that you come up with):* *What does this data mean for our future teaching force?*
* *What does this data mean for engineering and technology courses?*
* *How does a teacher shortage impact engineering and technology and other elective courses?*
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| 20 min. | **Engineering and Technology Education PowerPoint**  | Present PowerPoint about Engineering and Technology Education. See PPT notes for specific details about what to include on each slide. *This is a great time to share your own experience as to why you became a teacher or what your path has been to teaching.*  |
| 50 min.  | **Poster Project**Note: Any form of information gathering/presentation would work for this project. Other examples included PowerPoint, writing a report, preparing a video, etc. | Have students complete a poster in groups of 2-3 about universities in Indiana that offer Engineering and Technology Education as a college major. Some groups will complete a poster about the same university program. See sample rubric for sample point values. **Items to include:*** Location
* Enrollment numbers
* Tuition Costs
* Scholarship Opportunities in Engineering and Technology Education
* College where Engineering and Technology education is “housed” or located
* Sample course list for this college major
* Contact for the Engineering and Technology Program
* Other Important statistics
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| 20-30 min.  | **Poster Presentations or Gallery Walk** | Allow students to present their posters or hang up around the room and allow students to walk around the room and fill in an information sheet about the three different universities. Other university programs can be included if desired or if you live close to OH or IL. |
| 5 min.  | ***Lesson Summary/Closing***Exit Ticket Question: Are you interested in pursuing Engineering and Technology Education?What more are you interested in learning about this as a college major and career choice? | Have students answer these questions on their listening guide. Have students turn in before the end of class or online in a forum if a learning management system (like Canvas) is available.  |
| Next Day | ***Follow-Up**** *Based on exit slip or interest in lesson, give interested students the* [*#TeachTechEd flyer*](http://www.doe.in.gov/sites/default/files/cte/20161128-teachteched.pdf) *and talk to them and their parents about a potential career in Engineering and Technology Education.*
* *Have students interested in becoming future E&T Teachers complete the survey at* [*https://goo.gl/forms/WbXZ9oD6ef1Okyny2*](https://goo.gl/forms/WbXZ9oD6ef1Okyny2) *to let universities know there is interest in the profession. This data is critical! They may be contacted by the university program.*
* *Share pictures or thoughts from your lesson on social media using the hashtag* ***#TeachTechEd***
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| **Teacher Preparation / Materials Needed** * [Supply/Demand in Technology Education Article](https://www.iteea.org/File.aspx?id=85503&v=f4c3be3e) – Read Ahead of Time
* Engineering and Technology Education PowerPoint
* Engineering and Technology PowerPoint Listening Guide – Make Copies
* Poster Project Directions and Rubric
* Book computer lab
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## Potential Extension Activities:

* [Technology Student Association (TSA)](http://tsaweb.org/) Future Technology Teacher Competitive Event
* Have students create a lesson plan around an engineering and technology concept and present their lesson to the class
* Read full Teacher Education Supply/Demand article and write an analysis