



Job Specific Tools and Tech Matching

This activity was created to be used primarily with:

18. Job-Specific Tools and Technologies

Secondary skills include:

2. Critical Thinking and Problem Solving
3. Initiative and Self-Direction
11. Big-Picture Thinking
14. Efficiency and Productivity
15. Information Literacy
16. Information Security
17. Information Technology
20. Professionalism
22. Workplace Safety

1. Teacher will define the Job-Specific Tools and Technologies skill as:

the ability to select and safely use industry-specific technologies, tools, and machines to complete job tasks effectively

drill down into this term: "**technology**"—when we use this term, we are often too narrow in our ideas of what it can imply. Most of us think of information technology and computer or device use, but it has much wider implications including being any tool we use for the simplest tasks. It can also mean this:

- the branch of knowledge that deals with the creation and use of technical means and their interrelation with life, society, and the environment, drawing upon such subjects as industrial arts, engineering, applied science, and pure science.
- the application of this knowledge for practical ends.
- the terminology of an art, science, etc.; technical nomenclature.
- a scientific or industrial process, invention, method, or the like.
- the sum of the ways in which social groups provide themselves with the material objects of their civilization.

Note. Lots of crossover exists with the following skills here: Information Technology, Critical Thinking and Problem Solving, Efficiency and Productivity, Big-Picture Thinking, and Workplace Safety



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2. Teacher will present various strategies students could use to improve choosing the correct tool for the job, including answering the following (go over this with students):

1. What do you want to accomplish? Can you define the task or is it about making a task safer or more efficient?
2. What tool, tech, or equipment do you want to replace? Or is this an absolute need? How dire is this need to replace?
3. What functionality of the new technology would make you better at performing your job? What might be its limitations?
4. How do you shop for this tool or technology? Can you narrow down your choice? What factors influence these consumer decisions?
5. What is the appropriate balance between want, need, and cost? Tech limitations, shelf-life, level of support and long-term goals can be important factors in finding the balance and informing your choice.

Note. Ask students which tools and machines they use in their daily lives. Transportation and infrastructure is often overlooked because they are such primary needs and provide crucial access.

3. Teacher might introduce this topic/activity by asking the students how tech and tool choices could benefit or hurt small business owners and entrepreneurs. What is at stake for purchasing any tool or equipment? What is risked and what is gained? What are other factors behind bringing on new technologies?

Note: Education and training is one of the most costly expenses that businesses face, yet any time a business changes the technology, tools, or machines, or even the protective equipment used on a job, employees must be trained. Even if the business owner has no employees, learning anything new is a cost of time and the owner must be assured that they will reap the intended benefits before making the decision to purchase new equipment. Students in public education may not be aware that these are the only years they can get education for free (even though their education is among the highest of costs to taxpayers, including those taxpayers who do not have children of their own in the system). You might ask your students why this cost is so highly valued by the public.

4. Use the questions in #2 to help students make a decision about purchasing a new tool, machine, piece of equipment, or technology upgrade for a scenario workplace based on the program you teach. Choosing not to make a purchase is still a choice. It will help them understand what's at stake in a workplace environment if they can walk through this decision tree. This can teach them about emerging tools and technologies used in your related industry.

5. Design a simple matching game wherein the teacher gives students the job (based on their program) and has them select from a list of potential tools or technologies they can choose from.



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Additional resources:

How to Choose the Right Tech Tool: <https://wholewhale.com/tips/choosing-the-right-tech-tool/>

10 Simple Rules for Choosing Your Productivity Tools:

<https://timemanagementninja.com/2013/03/10-simple-rules-for-choosing-your-productivity-tools/>