Learning Problem	Technologies	Relative Advantage	Expected Outcomes
Students do not understanding how technology impacts our every day lives.	Web based site that explores human needs and wants	Hold class discussion about our basic needs and wants. Explore how our wants drive invention and innovation.	Students will understand how our needs drive invention and innovation that has an impact on our daily lives.
Students do not know the components of the basic technological systems model	My website for viewing the systems model with explanations for each step in the model.	The screen cast allows students to view and listen to the presentation of the systems model. This gives immediate feedback and stimulation.	Students will know the steps in the technological systems model and understand their relationship between each step.
Students are unfamiliar with the design principles (loop) and how to use them when developing a process or product.	My website for viewing the design loop with explanations for each step in the model.	Students are able to view the screen cast at any time for a review of the design loop and how it applies to their problem. The presentation provides interest through video and audio effects.	Students will understand how the design loop will assist the students in solving technological problems.
Students are unaware of the basic trade-offs that are made when producing existing and new technologies.	Institute for Manufacturing My website for viewing the examples of how trade-offs work when producing a product.	The websites allow for the students to gain two perspectives on how trade-offs work. Provides direct information that	The students will understand how trade-offs effect the way products are manufactured in most countries. They will

		is relative to the student's lives.	also understand that is trade-offs are ignored the manufacturing process can have long lasting negative effects on our environment and population.
Students do not know how to use resource tools, materials, and processes safely and efficiently.	My website for viewing safety videos for using machines and tools. (Still under construction) Machine Safety Code YouTube videos for each machine, the channel is called Ask the Builder.	The students will watch a safety video, go through a demonstration done by me and take a safety test. The videos will allow the students to go back and re-watch the video for review if they do not pass a safety test. This method creates interest for the students by watching self-navigated videos on YouTube. Safety tests are given online and provide immediate feedback. Retakes are possible with a time limit.	The students are required to pass all tests with a score of 100% before using the machine or tool. This will help facilitate that accomplishment. Online testing allows for immediate feedback.
Students are unfamiliar with identifying components and properties to build a representation in all areas of technology.	My website for viewing components and properties. This will include doing worksheets and research projects.	The students will use my website with a combination of a few other websites to identify the components and properties of technology systems.	Student will be able to identify the components and properties of communications, construction, electronics, transportation, energy,

			manufacturing, Biotech, mechanical and fluid systems.
Students are unaware of the key terms associated with each category of technology.	Class textbook will be used along with selected websites based on the lesson plan at the time. An example would be, West Point Bridge Builder for construction lessons and physics lessons.	Students will be able to use the various websites to locate information about the different key terms and how they apply to the existing project(s).	Students will understand the key terms and their relationship with the project(s) for the given lesson. This will increase the student's knowledge base.
Students are not familiar with the differences between invention and innovation.	The Technology Liberation Front Innovation vs. Invention Textbook research	The students will use the websites and textbook to find the differences between the two terms.	The students will know the differences between the two terms and a how to apply the terms to a given object to identify it's original origin.
Students are unfamiliar with using my website to access information about each lesson.	My website doing a research project.	The students will complete a scavenger hunt using my website to find information about the class and myself. This is a self-directed search project.	The students will know how to locate my website in the school directory or directly on the internet. The students will also know where to find all the information they need for each lesson and project on my website.

References:

http://www.uen.org/cte/technical/index.shtml

http://www.tpub.com/content/administration/14172/css/14172_164.htm

https://sites.google.com/a/dhms.washk12.org/desert-hills-ms-technology/

http://info.bannersalesforce.com/xpedio/groups/public/documents/literature/ms_t8_t3_e.pdf

http://www.youtube.com/user/AsktheBuilder

http://www.billbuxton.com/innovationInvention.pdf