12th Grade Technology Studies Learning Activities

Sub unit 1: What is Technology?
1. Utilize WikiSummarizer, WikiMindMap, ZOMOBO, or Mashpedia to research relevant articles not only discussing what technology is but the impact of technology with regards to its relationship between people, the environment and how it is being currently utilized to solve ongoing, complex or future problems.
2. Develop a resource mashup of articles you have found pertinent to this discussion and post the title of the article, it's hyperlink and a short summary of what the article covered.
3. Communicate with your peers on the Discussion Board: 21st Century Technology Trends based on the information posted about the trends you have observed emerging for the 21st century with regards to technology.

Sub unit 2: What Does Technology Mean for the Future?
1. Read Wired's article "Why the future doesn't need us" by Bill Joy
2. Watch "How technology Evolves" by Kevin Kelly
3. Review SlideShare's PowerPoint presentation, Creative and Innovative Thinking Skills, starting slide 27 through 53. Please be prepared to utilize these materials in the following Application section. NOTE: SlideShare allows for a direct download of a PDF file.
4. Continue to the Application section.

Sub unit 3: Applications for Technology
1. Apply the information from Creative and Innovative Thinking Skills to begin the problem solving process.
2. Read the special report "20 Forecast's for 2011" developed by the World Future Society.
3. Peruse Battelle's Technology Forecast Archives. Research what technologies have been created to solve real world problems. Review what technologies did not hit their mark. Analyze what existing problems are still out there waiting to be solved.
4. Investigate either TechCast or Battelle's "Strategic Technologies for 2020 A.D."
5. Create small groups of four to six persons with a mutual interest in researching a particular technology trend.
6. Utilize an interactive tool such as Skype, TeamLab, SecondLife and brainstorm about where that particular technology trend might take us in the future.
7. Review the tool Mind Maps to get a sense of "mapping" ideas.
8. Download Freemind. Record your brainstorming session as a group, then submit your session via email.

Sub unit 4: Analyzing Technology Trends
1. As a group utilize FreeMind to brainstorm a list of problems that technology could be used to solve.
2. Select one problem to focus on. Break your problem into smaller segments using the Challenge Method. Determine what can be changed and what must stay the same.

3. Develop a list of attributes that a good solution should have. Rank the attributes (1=highly important attribute, 1=highly unimportant attribute).
4. Use existing resources, ideas and technologies to explore solutions that meet at least your top two attributes.
5. Forecast and vision the future. Try to imagine the future with as few constraints on your imagination as possible. Reverse engineer the solution in such a way that you already have the solution to your existing problem, then work backward from the future to the present explaining what has happened in between.
6. Gather your reference sources into one document.
7. Create a Prezi presentation. Provide a detailed outline of the steps your group used to solve your problem. Begin by stating your problem and conclude by summarizing how your technology resolves that problem. NOTE: Click here to learn more about Prezi. Review my Sample Prezi presentation Creative Problem Solving.

Sub unit 5: Forecasting Technology Trends of 2025 A.D
1. Forecast and Reverse Engineer a product or solution that is viable for addressing and solving your chosen problem
2. Design, Develop, Synthesize, Evaluate
3. Refine your project
4. Produce and Deliver your presentation. Feel free to utilize a White Paper, a Prezi Presentation, a Weebly website, a SecondLife class meeting, a Vimeo video, a Glog or a PbWiki. The options for producing a customized presentation are limitless.

Sub unit 6: Evaluation
1. Post your Project in the assigned area below by editing this page. Include a brief summary identifying the nature of your problem, some challenges you experienced-- technological or otherwise, how you solved your problem and what media you used in your Project.
2. Evaluate each group's individual presentation, look for accuracy of citations, quality of materials used and adequacy of the information, in other words, did the group complete the project as required.
3. Discuss how the future could be affected either positively or negatively by the solution offered. Think deeper into the future.
4. Email the instructor with comments describing what was successful about this course and what things you would change.