

<b>Unit: Applying Multimedia Knowledge and Skills</b>	<b>Concept: Applying Technical Skills</b>
<b>Standard</b> <ul style="list-style-type: none"> <li>3.5.9-12.E Evaluate how technology and engineering advancements alter human health and capabilities.</li> </ul>	
<b>Key Learning</b> <ul style="list-style-type: none"> <li>(LTTG) Students will be able to demonstrate integrity and conscientiousness, considering ethical issues involved.</li> </ul>	<b>Unit Essential Question</b> <ul style="list-style-type: none"> <li>How can I demonstrate integrity and conscientiousness, considering ethical issues involved?</li> </ul>
<b>Essential Question</b> <ul style="list-style-type: none"> <li>How does changing technology impact the individual, culture, and environment?</li> </ul>	
<b>Key Vocabulary</b> <ul style="list-style-type: none"> <li>Evaluate, Advancement, Alteration, Capability, Examine, Effect, and Impact</li> </ul>	
<b>Learning Experience</b> <ul style="list-style-type: none"> <li>Students who demonstrate understanding can evaluate how technology and engineering advancements alter human health and capabilities.</li> <li>Clarifying Statement: Evaluative tools can be used to examine existing or proposed technologies to assess their positive and negative effects on humans. For example, CRISPR-Cas9 technology has been hailed as a tool for modifying human genetic material to reduce the risk of inherited disease. At the same time, there are medical and ethical concerns surrounding application of this technology to humans.</li> </ul>	
<b>(Big Idea) Technology &amp; Engineering Curriculum Framework Big Ideas</b> <ul style="list-style-type: none"> <li>Use of technology can lead to fundamental changes in individuals, human cultures, and the environment.</li> </ul>	
<b>(SEP) Science and Engineering Practices</b> <ul style="list-style-type: none"> <li>Engaging in Argument From Evidence - Evaluate the claims, evidence, and/or reasoning behind currently accepted explanations or solutions to determine the merits of arguments.</li> </ul>	
<b>(DCI) Disciplinary Core Ideas</b> <ul style="list-style-type: none"> <li>NAEP T.12.13 - Disparities in the technologies available to different groups of people have consequences for public health and prosperity, but deciding whether to introduce a new technology should consider local resources and the role of culture in acceptance of the new technology.</li> </ul>	
<b>(TEP) Technology and Engineering Practices</b> <ul style="list-style-type: none"> <li>Critical Thinking - Uses evidence to better understand and solve problems in technology and engineering, including applying computational thinking.</li> </ul>	
<b>Terms</b>	

- (ETS) Engineering, Technology, and Applications of Science – Standards applicable across the Science, Environmental Literacy & Sustainability, and Technology & Engineering content areas.
- (LTTG) PDE Technology & Engineering Long Term Transfer Goals
- (Learning Experience) A learning experience refers to any interaction, activity, or other experience in which students acquire new understanding, knowledge, behaviors, or skills.
- (Big Idea #) PDE Technology & Engineering Curriculum Framework Big Ideas
- (SEP) PDE Science and Engineering Practices
- (DCI) PDE Disciplinary Core Ideas
- (TEP) PDE Technology and Engineering Practices