

Unit: Foundations of Digital Graphics	Concept: Career and Professional Skills
<p>Standard</p> <ul style="list-style-type: none"> 3.5.9-12.BB Assess how similarities and differences among scientific, technological, engineering, and mathematical knowledge and skills contributed to the design of a product or system. 	
<p>Key Learning</p> <ul style="list-style-type: none"> (LTTG) Students will be able to engage as technological and engineering literate members of a global society. 	<p>Unit Essential Question</p> <ul style="list-style-type: none"> How can I engage as a technological and engineering literate member of a global society?
<p>Essential Question</p> <ul style="list-style-type: none"> How does technology and engineering relate to other content areas? 	
<p>Key Vocabulary</p> <ul style="list-style-type: none"> Assess, Relate, Similarity, Difference, Interdisciplinary, Development, Improving, Expertise, and Contribute 	
<p>Learning Experience</p> <ul style="list-style-type: none"> Students who demonstrate understanding can assess how similarities and differences among scientific, technological, engineering, and mathematical knowledge and skills contributed to the design of a product or system. Clarifying Statement: Developing and improving products or systems require scientific, engineering, and technical expertise. Articulating how knowledge and skills from each contributed or will contribute to a product or system is a necessary component of innovation and design. One way this can be accomplished is by evaluating a completed engineering design task and identifying the elements from other academic disciplines that contributed to the completion of the task. 	
<p>(Big Idea) Technology & Engineering Curriculum Framework Big Ideas</p> <ul style="list-style-type: none"> Technology and engineering are interdisciplinary, relating to more than one content area. 	
<p>(SEP) Science and Engineering Practices</p> <ul style="list-style-type: none"> Engaging in Argument From Evidence - Evaluate the claims, evidence, and/or reasoning behind currently accepted explanations or solutions to determine the merits of arguments. 	
<p>(DCI) Disciplinary Core Ideas</p> <ul style="list-style-type: none"> NAEP D.12.2 - Engineers use science, mathematics, and other disciplines to improve technology, while scientists use tools devised by engineers to advance knowledge in their disciplines. This interaction has deepened over the past century. 	
<p>(TEP) Technology and Engineering Practices</p> <ul style="list-style-type: none"> Making and Doing - Demonstrates the ability to regulate and improve making and doing skills. 	

- Systems Thinking - Designs and troubleshoots technological systems in ways that consider the multiple components of the system.

Terms

- (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