

**Focus Topic: Standard 8.1: Educational Technology**

TSW = The Student Will

<b>Objective(s)</b>	<b>NJCCCS Alignment</b>	<b>Essential Questions</b>	<b>Understandings</b>	<b>Suggested Assessments &amp; Activities</b>
TSW create a professional document using advanced word processing features	8.1.8.A.1	Why is technology needed?	The use of technology and digital tools requires knowledge.	Ongoing observation & questioning during class discussions
TSW demonstrate knowledge of a real world problem using digital tools	8.1.8.A.1	How is technology used?	Media rich resources enhance creativity.	Performance tasks
TSW create a document using one or more digital applications	8.1.8.A.2	Why is safety important?	Digital tools assist in gathering and managing information.	Self-Assessment
TSW create a basic multimedia presentation including images and sounds	8.1.8.A.2	What purpose do digital tools serve?	Technological development creates societal concerns.	NJ TAP IN Checklist
TSW create a simple spreadsheet entering data, interpreting information, and creating a graph	8.1.8.A.2	What impact do global issues have on technology?	Technology impacts our lives.	Projects
TSW use digital tools to accomplish tasks and solve problems	8.1.8.A.2	How do digital tools affect our lives?		Differentiated Instruction
TSW graph and calculate data within a spreadsheet	8.1.8.A.4			Technology Integration
TSW create a simple database, define fields, and input data	8.1.8.A.5			
TSW publish information about a local event on a collaborative web based service (blog, etc.)	8.1.8.B.1			

TSW engage in online discussions with other learners to understand perspectives relating to a problem	8.1.8.C.1			
TSW model appropriate online behaviors relating to cyber safety and cyber bullying	8.1.8.D.1			
TSW demonstrate the application of appropriate citations to digital content	8.1.8.D.2			
TSW discuss fair use and Creative Commons guidelines	8.1.8.D.3			
TSW discuss how information on a controversial issue may be biased	8.1.8.D.3			
TSW assess the credibility and accuracy of digital content	8.1.8.D.4			
TSW understand the appropriate uses for social media and its etiquette	8.1.8.D.5			
TSW gather findings using data collection technology to produce simple solutions to a problem	8.1.8.E.1			
TSW use a variety of search tools and filters within a database to find information	8.1.8.E.1			
TSW use electronic authoring tool to summarize a current event	8.1.8.F.1			
TSW explore a local issue using digital tools to collect data	8.1.8.F.1			

**Focus Topic: Standard 8.2: Technology Education, Engineering, and Design**

TSW = The Student Will

<b>Objective(s)</b>	<b>NJCCCS Alignment</b>	<b>Essential Questions</b>	<b>Understandings</b>	<b>Suggested Assessment &amp; Activities</b>
TSW understand the impact of a technological system over time	8.2.8.A.1	How does technology help us in our everyday lives?	The design process is a systematic approach to solving problems	Ongoing observation & questioning during class discussions
TSW research a product that was designed for a specific purpose	8.2.8.A.1	What are the advantages and disadvantages of technology?	Products and systems are created through application and resources	Performance tasks
TSW design and create a simple product that addresses a problem working with specific criteria	8.2.8.A.1	How does technology affect our environment and economy?	Resource selection affects the development of a product	Self-Assessment
TSW examine a system and understand how parts are related	8.2.8.A.2	How do parts of a system work together?	Choice of resources impacts the environment and economy	NJ TAP IN Checklist
TSW will understand a product and its impacts on the environment	8.2.8.A.4	What impact do parts have on a system?	Technology has an impact on our environment and economy	Projects
TSW examine the history and impact of development of a designed product	8.2.8.B.1	How does recycling affect our environment and economy?		Differentiated Instruction
TSW develop a prototype by completing a design problem	8.2.8.B.2			Technology Integration
TSW identify the desired consequences from the use of a product	8.2.8.B.2			

TSW research the ethical issues of a product and its effects on the environment	8.2.8.B.3			
TSW understand how humans can devise technologies to reduce negative consequence	8.2.8.B.4			
TSW identify new technologies based on need from industry	8.2.8.B.5			
TSW understand the need for patents and the registration of a patent	8.2.8.B.6			
TSW understand the historical impact of waste with regard to technology	8.2.8.B.7			
TSW understand the need for optimization in a design process	8.2.8.C.2			
TSW identify the steps in a design process that would be used to solve a problem	8.2.8.C.4			
TSW create a technical sketch of a product with materials listed	8.2.8.C.5			
TSW collaborate with peers and experts in the field research and develop a product using a design process	8.2.8.C.7			
TSW identify the role of ethics and bias on the development of a product in the United States	8.2.8.D.1			
TSW create a product that addresses a real world problem	8.2.8.D.1			

TSW build a prototype that meets STEM based design challenge using science, engineering and math principles	8.2.8.D.3			
TSW identify and explain how the resources used in the production of a current product can be modified	8.2.8.D.6			
TSW identify ways computers are used that have an impact on human activity	8.2.8.E.1			
TSW understand the relationship between hardware and software	8.2.8.E.2			
TSW use appropriate terms in conversation	8.2.8.E.4			