Focus Topic: Standard 8.1: Educational Technology

TSW = The Student Will

Objective(s)	NJCCCS Alignment	Essential Questions	Understandings	Suggested Assessment & Activities
TSW demonstrate effective input of text and data using an input device	8.1.5.A.1	Why do I need to use technology?	The use of technology and digital tools requires knowledge.	Ongoing observation & questioning during class discussions
TSW create a document with text enhancement formatting using a word processing program	8.1.5.A.2	What are common uses of technology?	Media rich resources enhance creativity.	Performance tasks
TSW use a graphic organizer to organize information about a problem	8.1.5.A.3	Why is safety important?	Digital tools assist in gathering and managing information.	Self-Assessment
TSW create a spreadsheet entering data and interpreting information	8.1.5.A.4	What purpose do digital tools serve?	Technological development creates societal concerns.	NJ TAP IN Checklist
TSW create and use a database to answer basic questions	8.1.5.A.5	What impact do global issues have on technology?	Technology impacts our lives	Projects
TSW export data from a database into a spreadsheet	8.1.6.A.6	How do digital tools affect our lives?		Differentiated Instruction
TSW collaborate to produce a digital story about a significant local event	8.1.5.B.1			Technology Integration
TSW engage in online discussions with learner to investigate an issue from multiple perspectives/sources	8.1.5.C.1			
TSW analyze the resource citations in online materials for proper use	8.1.5.D.2			

TSW explain the purpose and consequences of an acceptable use policy	8.1.4.D.3			
TSW understand the need to practice cyber security and cyber ethics when using technology and social media	8.1.5.D.3			
TSW understand the personal consequences of inappropriate use of technology	8.1.5.D.4			
TSW utilize digital tools to collect and organize data and evaluate the accuracy of the material	8.1.5.E.1			
TSW apply digital tools to collect, organize, and analyze data that supports a scientific finding	8.1.5.F.1			

Focus Topic: Standard 8.2: Technology Education, Engineering, and Design   TSW = The Student Will

Objective(s)	NJCCCS Alignment	Essential Questions	Understandings	Suggested Assessment & Activities
TSW compare and contrast how products (nature made v. human made) are produced and used	8.2.5.A.1	How does technology help us in our everyday lives?	Technological systems impact the world	Ongoing observation & questioning during class discussions
TSW investigate factors that influence the development and function of a product	8.2.5.A.2	What are the advantages vs. disadvantages of technology?	The design process is a systematic approach to solving problems	Performance tasks
TSW discuss how technologies have changed over time (compare and contrast)	8.2.5.A.4	How does technology affect our environment?	Digital tools promote communication and collaboration in design	Self-Assessment

TSW understand how the improvement of materials impacts technology	8.2.5.A.5	How do parts of a system work together?	Products and systems are created through application and resources	NJ TAP IN Checklist
TSW examine ethical considerations in the development of a product through its life cycle	8.2.5.B.1	Why recycle?		Projects
TSW examine systems used for recycling and recommend simplifications of the systems	8.2.5.B.2	How do parts work together in a system?		Differentiated Instruction
TSW investigate ways that various technologies are being developed and used to reduce improper uses	8.2.5.B.3			Technology Integration
TSW research technologies that have changed due to society	8.2.5.B.4			
TSW understand the purpose of intellectual property law (refer to Glossary)	8.2.5.B.5			
TSW collaborate with peers to illustrate components of a designed system	8.2.5.C.1			
TSW explain how specifications can be used to direct development	8.2.5.C.2			
TSW research how design modifications have lead to new products	8.2.5.C.3			
TSW brainstorm to solve a problem and then evaluate solutions	8.2.5.C.4			
TSW explain the functions of a system and subsystem	8.2.5.C.5			

TSW examine a malfunctioning tool and identify the process to troubleshoot	8.2.5.C.6			
TSW work collaboratively to redesign an existing product for a different purpose	8.2.5.C.7			
TSW identify and collect information about a problem that can be solved by technology	8.2.5.D.1			
TSW evaluate and test alternative solutions to a problem	8.2.5.D.2			
TSW follow step by step directions to assemble a product or solve a problem	8.2.5.D.3			
TSW explain why human designed products need to be monitored and maintained	8.2.5.D.4			
TSW describe how resources are used in products and systems	8.2.5.D.5			
TSW explain the positive and negative effects of products and systems	8.2.5.D.6			
TSW explain the impact that resources have on our environment	8.2.5.D.7			
TSW identify how computer programming impacts our everyday lives	8.2.5.E.1			
TSW understand how a computer takes input of data and then processes and stores the data through commands	8.2.5.E.2			

TSW use a simply, visual programming language to create a program (refer to Glossary)	8.2.5.E.3			
TSW use appropriate terms in conversation (debug, storage, processing, coding)	8.2.5.E.4			