

Niskayuna Technology Standards

<i>Niskayuna faculty will provide experiences and support in order that students will:</i>		Elementary Prior to Grade 6	Middle School Prior to Grade 9	High School Prior to Graduation
1	Creativity and Innovation			
a	Use technology to compile, synthesize, and disseminate original information, models, simulations and other creative works.	I	E	E
b	Demonstrate knowledge of current advancements in technologies, and the effect those changes have on the workplace and society.	I	E	E
c	Use Models and simulations to explore complex systems and issues.*	I	E	E
2	Communication and Collaboration			
a	Collaborate and share remotely with peers, experts, and others using telecommunication tools (e.g. email, videoconferencing, blogs, wikis).	I	E	E
b	Acquire, organize, analyze and prepare information for communication via multimedia presentation applications (e.g. PowerPoint, iMovie), other software (e.g. spreadsheet, word processor, database), or in printed form.	I	E	E
c	Develop cultural understanding and global awareness by engaging with learners of other cultures.*	I	E	R
d	Contribute to project teams to produce original works or solve problems.*	I	E	R
3	Research and Information Fluency			
a	Routinely identify, acquire, organize and use information from a variety of electronic media and other nonprint resources for research, problem solving and sharing.	I	E	E
b	Identify capabilities and limitations of various search engines and databases to make appropriate choices for gathering relevant information.	I	E	E
c	Distinguish between appropriate/inappropriate, complete/incomplete information in nonprint or electronic resources (e.g. relevance, fact vs. opinion, and point of view).	I	E	E
4	Critical Thinking, Problem Solving & Decision Making			

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	a	Analyze information, solve problems, make informed decisions and consider alternative solutions through the use of appropriate technologies.	I	E	E
	b	Use models of inquiry to identify and define authentic problems and significant questions for investigation.	I	E	R
5	Digital Citizenship				
	a	Understand and demonstrate a cooperative, collaborative and respectful working relationship with others when using technology (e.g. respecting the files of others, maintaining virtual communication, sharing computer time).	I	E	R
	b	Understand and demonstrate ethical behaviors when using technology (e.g. use appropriate Internet sites and etiquette, observe copyright and privacy conventions), and recognize consequences for inappropriate use of technology.	I	E	E
6	Technology Operations and Concepts				
	a	Display proper keyboarding skills to produce a text.	I	R	R
	b	Understand basic computer architecture, including hardware, software, memory, storage & networking.	I	E	R
	c	Use input devices (e.g. mouse, keyboard, etc.) to successfully operate a computer.	I	E	R
	d	Successfully operate various pieces of electronic equipment such as a graphing calculator, audio/video playback & recording devices, telephony, and peripheral computer devices (eg. printer, scanner, digital camera, CD/DVD drives, text inputting devices, data collection probes).	I	E	R
	e	Develop a working knowledge of various operating environments and multiple platforms (e.g. menus, buttons, toolbars, hyperlinks, etc.).	I	E	E
	f	Use accurate and developmentally appropriate technology terminology.	I	E	E
	g	Judge which device, application, or capability will produce the desired results.	I	E	E
	h	Manage and organize files.	I	E	R
	i	Translate electronic files into various formats (e.g. AAC > MP3, Quicktime > MP4, Word > PDF).	I	E	E
	j	Use appropriate logic when troubleshooting technical difficulties (e.g. half-split method).	I	E	E
	k	Transfer current knowledge to learning of new technologies.*	I	E	E

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