

A U G M E N T E D

Technology Literacy Standards for Students

This graph is designed to help educators see how C3 concepts (cyber-safety, cyber-security, and cyber-ethics) can be integrated into existing standards. A teacher or technology coordinator may refer back to the C3 Matrix for ways to address safety, security, and ethics while teaching concepts from the national standards.

How content addresses:

- ISTE/NETS•S Standards
- **AASL Standards for the 21st Century Learner**
- **AASL/AECT Information Literacy Standards for Student Learning**
- **iKeepSafe Digital Citizenship C3 Matrix**
- **21st Century Framework.**

Activity/Module:

* Completion of any activity does not certify competency in the identified area; however, it will contribute to development of the competency

ISTE/NETS•S Standard and Outcomes	Indicators	Addressed in this activity	EXAMPLE
<p>1. Creativity & Innovation</p> <p>Students demonstrate creative thinking, construct knowledge, and develop innovative products & processes</p> <p>AASL 1.1.1, 1.2.1, 1.2.3., 2.1.1., 2.1.6., 2.2.4., 4.1.5., 4.1.8. AASL/AECT 1.3, 3.2, 3.3, 5.3, iKeepSafe C3 Matrix 21st 1.1, 1.4, 2.4, 2.5, 3.1,</p>	<p>Students:</p> <ol style="list-style-type: none"> a. apply existing knowledge to generate new ideas, products, or processes b. create original works as a means of personal or group expression c. use models and simulations to explore complex systems and issues d. identify trends and forecast possibilities. 	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>2. Communication and Collaboration</p> <p>Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.</p> <p>AASL 1.1.9., 1.3.2., 1.3.4., 2.1.4., 2.1.5., 2.2.4., 2.3.2., 3.1.1.,3.1.2., 3.1.4., 3.2.1., 3.2.3., 3.3.1., 3.3.2.,3.4.3.,4.2.1.,4.3.1.,4.4.4. AASL/AECT 3.4, 5.3, 9.1, 9.2, 9.3, 9.4, 7.1, C3 Conceptual Framework 21st 1.2, 1.3, 3.1, 4.1, 4.2, 4.3,8.1, 8.2,10.1, 10.2, 10.3,</p>	<p>Students:</p> <ol style="list-style-type: none"> a. interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media. b. communicate information and ideas effectively to multiple audiences using a variety of media and formats. c. develop cultural understanding and global awareness by engaging with learners of other cultures. d. contribute to project teams to produce original works or solve problems. 	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>3. Research and Information Fluency</p> <p>Students apply digital tools to gather, evaluate, and use information</p> <p>AASL 1.1.4, 1.1.5, 1.1.6., 1.1.7, 2.1.1., 2.1.2., 2.2.3., 2.2.4., 3.1.1.,3.1.4., 3.4.2., 4.1.6. AASL/AECT 1.2, 1.4,1.5, 2.1, 2.2, 2.3, 2.4, 3.1, 4.1, 4.2, 6.1, iKeepSafe C3 Matrix 21st 2.4, 2.5, 5.1, 5.2, 6.3, 7.1, 7.2, 11.2, 12.3</p>	<p>Students:</p> <ol style="list-style-type: none"> a. plan strategies to guide inquiry. b. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media. c. evaluate and select information sources and digital tools based on the appropriateness to specific tasks. d. process data and report results. 	<input type="checkbox"/> Yes <input type="checkbox"/> No	

<p>4. Critical Thinking, Problem Solving and Decision Making</p> <p>Students use critical thinking skills to plan & conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools & resources</p> <p>AASL 1.1.1, 1.1.3, 1.1.4., 1.2.2., 1.2.4.,1.3.2., 2.1.3.,3.1.4., 3.2.3., 3.3.4., 4.2.3. AASL/AECT 6.2, iKeepSafe C3 Matrix 21st 2.1, 2.2,2.4, 2.5,4.1, 4.2,8.1, 8.2, 9.4, 9.5,</p>	<p>Students:</p> <ol style="list-style-type: none"> identify and define authentic problems and significant questions for investigation. plan and manage activities to develop a solution or complete a project. collect and analyze data to identify solutions and/or make informed decisions. use multiple processes and diverse perspectives to explore alternative solutions. 	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>5. Digital Citizenship</p> <p>Students understand human, cultural, and social issues related to technology & practice legal and ethical behavior</p> <p>AASL 1.3.1., 1.3.3., 1.3.5., 2.3.3., 3.1.6., 3.2.2.,3.3.7.,4.3.4., 4.4.3., 4.4.4., 4.4.5. AASL/AECT 8.1, 8.2, 8.3, 7.1, C3 Conceptual Framework 21st 4.1, 4.2, 4.3, 5.2, 6.2, 6.3, 7.2, 9.6, 10.1, 10.2, 10.3, 12.3</p>	<p>Students:</p> <ol style="list-style-type: none"> advocate and practice safe, legal, and responsible use of information and technology. exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity. demonstrate personal responsibility for lifelong learning. exhibit leadership for digital citizenship. 	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>6. Technology Operations & Concepts</p> <p>Students demonstrate a sound understanding of technology concepts, systems, and operations</p> <p>AASL 1.1.8., 2.1.4., 3.4.2. C3 Conceptual Framework</p>	<p>Students:</p> <ol style="list-style-type: none"> understand and use technology systems. select and use applications effectively and productively. troubleshoot systems and applications. transfer current knowledge to learning of new technologies. 	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Correlation of the ISTE/NET•S & AASL/AECT, 21st Century Framework and C3 Matrix

AASL Addressed				AASL/AECT Addressed									ISTE/NETS*S Standards	C3 Matrix	21 st Century Framework Addressed											
1	2	3	4	1	2	3	4	5	6	7	8	9			1	2	3	4	5	6	7	8	9	10	11	12
X	X		X	X		X		X	X	X			1. Creativity & Innovation	X	X	X	X									
X	X	X	X			X		X		X		X	2. Communication & Collaboration	X	X		X	X				X	X			
X	X	X	X	X	X	X	X		X				3. Research & Information Fluency	X		X		X	X	X				X		
X	X	X							X				4. Critical Thinking, Problem Solving and Decision Making	X		X	X				X	X				
X	X	X	X							X	X		5. Digital Citizenship	X			X	X	X	X		X	X		X	
	X												6. Technology Operations & Concepts	X												

© Internet Keep Safe Coalition 2009. All rights reserved. Educational Technology Policy, Research and Outreach. For information contact Davina Pruitt-Mentle, Ph.D. – (410) 531-3910 – dpruitt@umd.edu
NETS•S - Educational Technology Standards and Performance Indicators for Students: http://www.iste.org/Content/NavigationMenu/NETS/ForStudents/2007Standards/NETS_for_Students_2007.htm
AASL - <http://www.ala.org/ala/mgrps/divs/aasl/aaslproftools/learningstandards/standards.cfm>
AASL/AECT - http://www.ala.org/ala/mgrps/divs/aasl/aaslproftools/informationpower/InformationLiteracyStandards_final.pdf
Partnership for 21st Century Skills http://www.21stcenturyskills.org/index.php?Itemid=120&id=254&option=com_content&task=view
Numerical ordering of skill/definitions are assigned for brevity within table format.
NETS for Students: National Educational Technology Standards for Students, Second Edition, © 2007, ISTE® (International Society for Technology in Education), [www. ISTE.org](http://www.iste.org)<<http://www.iste.org>>. All rights reserved.