EAST RUTHERFORD SCHOOL DISTRICT

EDUCATIONAL TECHNOLOGY CURRICULUM Grades 3-5



Giovanni A. Giancaspro Superintendent of Schools Marlene Krupp
Interim Curriculum Coordinator

New Jersey Student Learning Standards NJSLS 2016

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The following maps outline the New Jersey Student Learning Standards for Technology for Grades 3-5. Below is a list of assessment tools that are recommended for tracking student progress in these areas. In addition, resources that can be used in conjunction with instruction of these standards are provided but not limited to the list below.

Assessment:

Formative Assessment Class- Work Review Project- Based Assessment Self- Assessment Teacher Observation Group & Cooperative Work Student-Created Rubrics

Resources & Programs

www.weblender.com

https://tech4learning.com

Google Classroom & Applications (Docs, Slides, Sheets, Forms, Maps, Sites, etc.)

Microsoft Office Excel

Word Web Lender Pixie 2 & 3 Google Image

References:

NJ Technology Standards: http://www.state.nj.us/education/cccs/2014/tech/81.pdf

NJ 21st Century Life & Career Standards: http://www.state.nj.us/education/cccs/2014/career/9.pdf

<u>Interdisciplinary Connections</u> are listed as their own category throughout the curriculum map. These connections include but are not limited to the following:

- Language Arts
- Science
- Social Studies
- Mathematics

Standard: 8.1 **Educational Technology:** All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

Strand: A. Technology Operations and Concepts: Students demonstrate a sound understanding of technology concepts, systems and operations.

Career Ready Practices:

CRP2. Apply appropriate academic and technical skills.

CRP4. Communicate clearly and effectively and with reason.

CRP6. Demonstrate creativity and innovation.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

CRP10. Plan education and career paths aligned to personal goals.

CRP11. Use technology to enhance productivity.

- Mathematics
- Science
- Language Arts

Content Statements	Cumulative Progress Indicator	Example Activities	Resources
Understand and use technology systems.	8.1.5.A.1 Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.	 Letter to Teachers Inserting Images Text Structure Inserting Borders 	 Microsoft Excel Microsoft PowerPoint Microsoft Word

Select and use applications effectively and productively.	8.1.5.A.2 Format a document using a word processing application to enhance text and include graphics, symbols and/ or pictures.	 Letter to Teachers Inserting Images Text Structure Inserting Borders 	 Microsoft Word Microsoft PowerPoint Microsoft Excel
	8.1.5.A.3 Use a graphic organizer to organize information about problem or issue.		
	8.1.5.A.4 Graph data using a spreadsheet, analyze and produce a report that explains the analysis of the data.		
	8.1.5.A.5 Create and use a database into a spreadsheet; analyze and produce a report that explains the analysis of the data.		
	8.1.5.A.6 Export data from a database into a spreadsheet; analyze and produce a report that explains the analysis of the data.		

How can students use technology to enhance, develop, and demonstrate creativity?

Standard: 8.1 **Educational Technology:** All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

Strand: B. **Creativity and Innovation:** Students demonstrate creative thinking, construct knowledge and develop innovative products and process using technology.

Career Ready Practices:

CRP2. Apply appropriate academic and technical skills.

CRP4. Communicate clearly and effectively and with reason.

CRP6. Demonstrate creativity and innovation.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

CRP11. Use technology to enhance productivity.

- Mathematics
- Science
- Language Arts

Content Statements	Cumulative Progress Indicator	Example Activities	Resources
Apply existing knowledge to generate new ideas, products, or processes.	8.1.5.B.1 Collaborative to produce a digital story about a significant local event or issue based on first-person interviews.	Creating Quizzes	 Microsoft PowerPoint Microsoft Word
Create original works as a means of personal			

or group expression.		

How can students use technology to communicate and begin to work collaboratively.

Standard: 8.1 **Educational Technology:** All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

Strand: C. Communication and Collaboration: *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.*

Career Ready Practices:

CRP2. Apply appropriate academic and technical skills.

CRP4. Communicate clearly and effectively and with reason.

CRP6. Demonstrate creativity and innovation.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

CRP11. Use technology to enhance productivity.

- Mathematics
- Science
- Language Arts
- Social Studies

Content Statements	Cumulative Progress Indicator	Example Activities	Resources
Interact, collaborate, and publish with peers, experts, or others by employing a variety of digital environments and	8.1.5.C.1 Engage in online discussions with learners of other cultures to investigate a worldwide issue from multiple perspectives and sources, evaluate findings and present	Student surveyStudent tablesStudent spreadsheets	 Images Microsoft Excel Microsoft PowerPoint Microsoft Word

media. Communicate information and ideas to multiple audiences using a variety of	possible solutions, using digital tools and online resources for all steps.	
media and formats.		
Develop cultural		
understanding and		
global awareness by		
engaging with		
learners of other		
cultures.		

How can technology be used to develop legal and ethical behavior?

Standard: 8.1 **Educational Technology:** All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

Strand: D. Digital Citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

Career Ready Practices:

CRP2. Apply appropriate academic and technical skills.

CRP4. Communicate clearly and effectively and with reason.

CRP6. Demonstrate creativity and innovation.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

CRP11. Use technology to enhance productivity.

- Mathematics
- Science
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Content Statements	Cumulative Progress Indicator	Example Activities	Resources
Advocate and practice safe, legal, and responsible use of information and technology. Demonstrate personal	8.1.5.D.1 Understand the need for and use of copyrights. 8.1.5.D.2 Analyze the resource citations in online materials for	BudgetsSpreadsheetsBar charts	 Microsoft Excel Microsoft PowerPoint Microsoft Word

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responsibility for	proper use.
lifelong learning.	
E 1314 1 11 6	8.1.5.D.3 Demonstrate
Exhibit leadership for	an understanding of the
digital citizenship	need to practice cyber
	safety, cyber security,
	and cyber ethics when
	using technologies and
	social media.
	8.1.5.D.4 Understand
	digital citizenship and
	demonstrate an
	understanding of the
	personal consequences
	of inappropriate use of
	technology and social
	media.

How can students use digital tools to gather information?

Standard: 8.1 **Educational Technology:** All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

Strand: E: Research and Information Fluency: Students apply digital tools to gather, evaluate, and use information.

Career Ready Practices:

CRP2. Apply appropriate academic and technical skills.

CRP4. Communicate clearly and effectively and with reason.

CRP6. Demonstrate creativity and innovation.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

CRP11. Use technology to enhance productivity.

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Content Statements	Cumulative Progress Indicator	Example Activities	Resources
Plan strategies to guide inquiry. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.	8.1.5.E.1 Use digital tools to research and evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a	 Famous landmarks Resources PowerPoints 	 Researching Microsoft PowerPoint Microsoft Word Microsoft Excel

	variety of tasks.	
Evaluate and select		
information sources and		
digital tools based on		
the appropriateness for		
specific tasks.		

How can technology be used to enhance, develop and demonstrate critical thinking skills?

Standard: 8.1 **Educational Technology:** All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

Strand: F: Critical thinking, problem solving, and decision making: *Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.*

Career Ready Practices:

CRP2. Apply appropriate academic and technical skills.

CRP4. Communicate clearly and effectively and with reason.

CRP6. Demonstrate creativity and innovation.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

CRP11. Use technology to enhance productivity.

- Mathematics
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Content Statements	Cumulative Progress Indicator	Example Activities	Resources
Identify and define authentic problems and significant questions for investigation.	8.1.5.F.1 Apply digital tools to collect, organize, and analyze data that support a scientific finding.	 United states Research Collecting Data Brosur 	 Researching Microsoft PowerPoint Microsoft Word Weblender
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		