

EAST RUTHERFORD SCHOOL DISTRICT

EDUCATIONAL TECHNOLOGY CURRICULUM

Grades K-2



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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 K-2. 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

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

Microsoft Office
Word
Pixie 2 & 3
Jumpstar

Excel
Web Lender
Google Image
Tech4Learning

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>

Interdisciplinary Connections 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

Essential Question(s): How can students demonstrate navigational 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: A. Technology Operations and Concepts: <i>Students demonstrate a sound understanding of technology concepts, systems and operations.</i>			
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.			
Interdisciplinary Connections: <ul style="list-style-type: none"> ● Mathematics ● Science ● Language Arts 			
Content Statements	Cumulative Progress Indicator	Example Activities	Resources
Understand and use technology systems.	8.1.2.A.1 Identify the basic features of a digital device and explain its purpose.	<ul style="list-style-type: none"> ● Learning parts of a computer ● How to type ● How to use a mouse 	<ul style="list-style-type: none"> ● Jumpstar
Select and use	8.1.5.A.2 Create a document using a word	<ul style="list-style-type: none"> ● Learning parts of a 	<ul style="list-style-type: none"> ● Jumpstar

<p>applications effectively and productively.</p>	<p>processing application.</p> <p>8.1.5.A.3 Compare the common uses of at least two different digital applications and identify the advantages and disadvantages of using each.</p> <p>8.1.5.A.4 Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums)</p> <p>8.1.5.A.5 Enter information into a spreadsheet and sort the information.</p> <p>8.1.5.A.6 Identify the structure and components of a database.</p> <p>8.1.2.A.7 Enter information into a database or spreadsheet and filter the information.</p>	<p>computer</p> <ul style="list-style-type: none"> ● How to type ● How to use a mouse ● Letter books 	<ul style="list-style-type: none"> ● Microsoft Word ● Pixie
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Essential Question(s): How can students use digital tools to communicate?			
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.			
Interdisciplinary Connections: <ul style="list-style-type: none"> ● Mathematics ● Science ● Language Arts 			
Content Statements	Cumulative Progress Indicator	Example Activities	Resources
Apply existing knowledge to generate new ideas, products, or processes. Create original works as a means of personal	8.1.2.B.1 Illustrate and communicate original ideas and stories using multiple digital tools and resources.	<ul style="list-style-type: none"> ● All about me booklets 	<ul style="list-style-type: none"> ● Google Images ● Google Sheets ● Microsoft PowerPoint ● Microsoft Word ● Jumpstar

or group expression.

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Essential Question(s): How can students use technology to work with their peers?			
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: <i>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.</i>			
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.			
Interdisciplinary Connections: <ul style="list-style-type: none"> ● 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 media.	8.1.2.C.1 Engage in variety of developmentally appropriate learning activities with students in other classes, schools, or countries using various media formats such as online collaborative tools, and social media.	<ul style="list-style-type: none"> ● Letter Books 	<ul style="list-style-type: none"> ● Google Images ● Microsoft PowerPoint ● Microsoft Word ● Jumpstar

<p>Communicate information and ideas to multiple audiences using a variety of media and formats.</p> <p>Develop cultural understanding and global awareness by engaging with learners of other cultures.</p>			
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Essential Question(s): How can students demonstrate internet safety?			
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: <i>Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.</i>			
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.			
Interdisciplinary Connections: <ul style="list-style-type: none"> ● Mathematics ● Science ● Language Arts ● Social Studies 			
Content Statements	Cumulative Progress Indicator	Example Activities	Resources
Advocate and practice safe, legal, and responsible use of information and technology.	8.1.2.D.1 Develop an understanding of ownership or print and nonprint information.	<ul style="list-style-type: none"> ● All about me books ● Letter to teachers ● Letter booklets ● Inserting Images ● Inserting Borders 	<ul style="list-style-type: none"> ● Google Images ● Microsoft PowerPoint ● Microsoft Word ● Microsoft Excel ● Jumpstar ● Pixie 2 & 3

Essential Question(s): How can technology enhance problem solving 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: E: Research and Information Fluency: <i>Students apply digital tools to gather, evaluate, and use information.</i>			
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.			
Interdisciplinary Connections:			
<ul style="list-style-type: none"> ● Mathematics ● Science ● Language Arts ● Social Studies 			
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. Evaluate and select	8.1.2.E.1 Use digital tools and online resources to explore a problem or issue.	<ul style="list-style-type: none"> ● Data Project ● Inserting bar graphs 	<ul style="list-style-type: none"> ● Google Images ● Microsoft PowerPoint ● Microsoft Word ● Microsoft Excel

information sources and digital tools based on the appropriateness for specific tasks.			
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Essential Question(s): 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: <i>Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.</i>			
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.			
Interdisciplinary Connections: <ul style="list-style-type: none"> ● Mathematics ● Science ● Language Arts ● Social Studies 			
Content Statements	Cumulative Progress Indicator	Example Activities	Resources
Identify and define authentic problems and significant questions for investigation. Plan and manage activities to develop a solution or complete a project.	8.1.2.F.1 Use geographic mapping tools to plan and solve problems.	<ul style="list-style-type: none"> ● Solar System Project 	<ul style="list-style-type: none"> ● Google Images ● Microsoft PowerPoint ● Microsoft Word ● Microsoft Excel ● Jumpstar ● Pixie 2 & 3

<p>Collect and analyze data to identify solutions and/or make informed decisions.</p> <p>Use multiple processes and diverse perspectives to explore alternative solutions</p>			
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<u>Modifications</u>			
<u>English Language Learners</u>	<u>Special Education</u>	<u>At-Risk</u>	<u>Gifted and Talented</u>
Scaffolding	Visual aides	Teacher tutoring	Curriculum compacting
Sentence frames	Graphic organizers	Peer tutoring	Challenge assignments
Bilingual dictionaries/translation	Multimedia	Counseling	Enrichment activities
Think alouds	Assistive technology	Graphic organizers	Tiered activities
Highlight key vocabulary	Notes/summaries	Extended time	Independent research/inquiry
Annotation guides	Extended time	Parent communication	Collaborative teamwork
Think-pair- share	Answer eliminator	Modified assignments	Higher level questioning
Visual aides	Highlighter		Critical/Analytical thinking tasks
Modeling	Color contrast		Self-directed activities