Englewood Public School District
Technology
Grades 6-8

Educational Technology

Overview: Over the course of the school year, students will learn important technological skills to facilitate and amplify their learning and their knowledge of 21st century skills.

Time Frame: One school year

Enduring Understandings:
Technological tools facilitate learning.
Technological skills and knowledge are important in 21st century life.

Essential Questions:
What is Netiquette?
How can technology be used to help us learn?
What technologies are useful in the classroom?

Standards	Topics and Objectives	Activities	Resources	Assessment
8.1.8.D.1 Understand and model appropriate online behaviors related to cyber safety, cyber bullying, cyber security, and cyber ethics including appropriate use of social media. 8.1.8.D.2 Demonstrate the application of appropriate citations to digital content. 8.1.8.D.3 Demonstrate an understanding of fair use and Creative Commons to intellectual property.	**Topics** Netiquette Online Safety Digital Citizenship Twenty-First Century Themes and Skills include: • Informational Literacy • Media Literacy • ICT Literacy • Creativity and Innovation • Critical Thinking and Problem Solving • Communication and	Choices & Cheaters Students will play the NSTeens interactive comic *Choices & Cheaters* as an introduction to the concept of digital ethics. They will then complete an activity to learn about plagiarism. Netsmartz Netiquette Students will watch a Prezi Presentation about Netiquette. Prezi Cyberbullying Students learn about what Cyberbullying is and become familiar with different forms it	Choices and Cheaters, Netsmartz.org http://www.netsmartz.org/Resources/ActivityCards Netiquette: A Lesson for Middle School Students http://prezi.com/22d2l-tvray6/?utm_campaign=share&utm_medium=copy&rc=ex0share Cyberbullying, B-Safe Cherokee County http://www.cherokeek12.org/boe/departments/tech/cos/internet-safety/internet-safety-	Students will be evaluated on their participation and completion of the activities: 1. Choices & Cheaters 2. Cyberbullying 3. My Online Self 4. Digital Life 101

8.1.8.D.4 Assess the credibility and accuracy of digital content. 8.1.8.D.5 Understand appropriate uses for social media and the negative consequences of misuse.	Collaboration **Objectives** • Students will use safe-reliable search engines. • Students will use cyber safety, cyber security, and cyber ethics. • Students will avoid cyber bullying.	can take. B-Safe Cherokee County My Online Self After discussing their own unique identities, students investigate how these identities are expressed through different offline and online roles. By reflecting on their own online and offline roles, students discover that they have choices about how they present themselves to others on the Internet. Common Sense Education Digital Life 101 Students are introduced to the 24/7, social nature of digital media and technologies, and gain basic vocabulary and knowledge for discussing the media landscape. Common Sense Education	curriculum-6-8/ My Online Self, Common Sense Media https://www.commonsensemedia.org/educators/lesson/my-online-self-6-8 Digital Life 101, Common Sense Education https://www.commonsensemedia.org/educators/lesson/digital-life-101-6-8 Internet Safety - Newsround Caught In The Web https://youtu.be/kgCNGvL0g1g	
8.1.8.A.2 Create a document (e.g. newsletter, reports, personalized learning plan, business letters or flyers) using one or more digital applications to be critiqued by professionals for usability.	**Topics** Microsoft Word Twenty-First Century Themes and Skills include: • Informational Literacy • ICT Literacy **Objectives** • Students will create/organize file folders. • Students will create documents with advanced formatting and graphics. • Students will merge documents.	Students will review and learn advanced features of operating system and word processing skills to improve the quality of their writing assignments across the curricula. Students will learn to merge documents and use network resources to store and retrieve data. Instructors select from a large variety of lessons to hone students' ability to apply Microsoft Word. South Robeson High School	Microsoft Word Activities, South Robeson High School http://www.robeson.k12.nc.us/Page/21526 Microsoft Word, Digital Literacy.gov http://www.gcflearnfree.org/word/ Biography Report, Digital Wish http://www.digitalwish.com/dw/digitalwish/view_lesson_plans?id=4268 Collaborative Writing Using	Essays, Poems Business Letters Flyers/Posters Newsletters Students will create word processing documents. The students will proof, save, and print copies to be saved in their NJTAP-IN portfolio. Students will be evaluated on their participation and

	• Students will create documents with cutting/pasting and resizing graphics, WordArt. • Students will identify/locate/use network saving/retrieving steps.	Biography Report Students will be able to utilize basic features of Microsoft Word to create a report that showcases who they are as individuals. Digital Wish Collaborative Writing Using Blogs Students will create a paragraph that shares details of our weekly classroom learning. They will illustrate their paragraph with one or two appropriate pictures or photos. Then it will be put into our classroom blog. Digital Wish Mail Merge The mail merge feature in Microsoft Word allows you to type one letter and individualize it for a number of people. For this activity, students will type a letter inviting friends to a special event. PJ Nicholson Amazing Mazes Students will design a maze in Microsoft Word using the Tables and Borders toolbar. Choose a theme for your maze. PJ Nicholson Team Times Your class has been awarded the journalist for *The Teen Tribune*, a section of the local paper that focuses on teen news. It is your job to gather data that would be of interest to teens your age. The Teen Tribune has three areas of	Blogs, Digital Wish http://www.digitalwish.com/dw/digitalwish/view_lesson_plans?id=4669 Mail Merge, PJ Nicholson http://pjnicholson.com/mailmerge.htm Amazing Mazes, PJ Nicholson http://pjnicholson.com/amazingmazes.htm Teen Times, PJ Nicholson http://pjnicholson.com/mjcomapp/newspaper.htm	completion of the activities: 1. Biography Report 2. Collaborative Writing Using Blogs 3. Mail Merge 4. Amazing Mazes 5. Team Times

		focus, Recommended Teen Reading, Theme Park Recommendation, and Current Movie Review. PJ Nicholson		
8.1.8.B.1 Synthesize and publish information about a local or global issue or event (ex. telecollaborative project, blog, school web). 8.1.8.C.1 Collaborate to develop and publish work that provides perspectives on a global problem for discussions with learners from other countries. 8.1.8.A.3 Use and/or develop a simulation that provides an environment to solve a real world problem or theory. 8.1.8.E.1 Effectively use a variety of search tools and filters in professional public databases to find information to solve a real world problem. 8.1.8.F.1 Explore a local issue, by using digital tools to collect and analyze data to identify a solution and make an informed decision.	**Topics** Internet Research Twenty-First Century Themes and Skills include: • Informational Literacy • Media Literacy • ICT Literacy • Creativity and Innovation • Critical Thinking and Problem Solving • Communication and Collaboration **Objectives** • Students will locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media. • Students will evaluate and select information sources and digital tools based on the appropriateness for specific tasks. • Students will learn how to cite sources. • Students will access safe Internet sites to conduct research. • Students will use a variety	21st Century Internet Research The students will conduct research on the Internet for a curriculum project. Innovative Internet research will include videoconferencing, digital storytelling, and podcasting. The students will share their research with the class. Learning to Focus Internet Research This lesson is designed to help students effectively find information on the Internet using the basic features of a kid-friendly search engine. They learn how to use keywords to conduct an effective Internet search and how to refine a keyword search to yield more relevant results. They also learn how to scan search results to identify the best sites for the desired information. Read, Write, Think Virtual Fieldtrips Instructors will select on a large variety of virtual field trips. The Teacher's Guide • Tour The American Museum of Natural History You can find 360 degree tours of dioramas, pictures, and video. • Tour an Ancient Roman Villa In this virtual tour, you can	Learning to Focus Internet Research, Read, Write, Think http://www.readwritethink.org/classroom-resources/lesson-plans/keywords-learning-focus-internet-1122.html Virtual Field Trips, The Teacher's Guide http://www.theteachersguide.com/virtualtours.html Online Collaborative Projects, Education World http://www.educationworld.com/a_tech/archives/projects.shtml	Students will be evaluated on their participation and completion of the activities: 1. 21st Century Internet Research 2. Learning to Focus Internet Research 3. Virtual Fieldtrips 4. Online Collaborative Projects

	of research techniques.	see the villa from all sides and enter the inside rooms. • Tour The Collection at The National Gallery of Art You can perform a search by artist, title, or subject. • Museo Galileo Institute and Museum of the History of Science The Online Catalogue of the museum presents the more than 1,200 objects on permanent exhibition through color images and detailed descriptions. Holocaust Museum Tour Find pictures, video, and art from the Holocaust Museum. Tour The Museum of Unnatural Mystery Tour the Seven Wonders of the Ancient World, learn about geology, and some strange things. Online Exhibitions from the Natural History Museum in London Explore art themes, botanical illustrations, and save images of your favorite exhibits. Tour the Sistine Chapel Explore the paintings on your computer. Online Exhibits from Colonial Williamsburg See restorations of paintings, examine types of currency, and explore colonial maps. Explore Plymouth Plantation Explore Plymouth and interact with some of its people.

The Great Wall of China Virtual Tour
A 360 degree your of parts of the wall. You can advance on the wall as if walking.
Ancient Greek Artifacts
View paintings, sculptures, and artifacts. Some are in 360 degree view.
Yellowstone Park Webcams
Not a virtual tour, but they do have web cams from the park.
Virtual Gettysburg

Online Collaborative Projects
Instructors can select from a large variety of online collaborative projects. Education World

- Did You See That Poem?
- Students Use Technology to Preserve Inuit Heritage
- SchoolWorld Projects Bring Together Schools Around the World
- Rural Students Produce High-Tech Projects
- Fairy Tale and Folk Tale Cyber Dictionary
- Canadian School Weaves Web of Peace
- How Do You Eat YOUR Oreos?
- Fourth Graders Transform History Lesson Into Web Site
- And the Winner Is ...
- Computers and Phys Ed *Do* Mix!
- Cinco de Mayo WebQuest Includes a Fiesta!
- Science and Math e-Projects Connect Students Worldwide

		• Kids Build Computers -- and a Future • Creating a WebQuest: It's Easier than You Think! • You've Got E-Mail --- But Can You Make It *Really* Deliver? • Log On and Learn More: Ten On-Line Projects to Enhance Your Curriculum • Senior Pals: Bridging the Generation Gap with Technology • Scavenger Hunts: Searching for Treasure on the Internet! • "Flat Students" Go Down on the Farm! • Apple and Pumpkin PIE (Poetry Is Exciting)! • Take a Museum Field Trip -- Without Leaving Your Classroom!		
8.1.8.A.2 Create a document (e.g. newsletter, reports, personalized learning plan, business letters or flyers) using one or more digital applications to be critiqued by professionals for usability. 8.1.8.D.2 Demonstrate the application of appropriate citations to digital content.	**Topics** PowerPoint Twenty-First Century Themes and Skills include: • Informational Literacy • ICT Literacy • Creativity and Innovation • Critical Thinking and Problem Solving • Communication and Collaboration **Objectives** • The students will create curriculum based PowerPoints using subject	Career Research Projects Students will research a selected career using the Internet to create a PowerPoint presentation to share with the class. Cal Career Research PowerPoint Projects Instructors can select from a variety of PPT Projects. Warrensburg School District • PowerPoint Talking Books http://www.talkingbooklibrary.net/ • Education World PowerPoint Article http://www.educationworld.com/a_tech/tech/tech013.shtml	Career Research Projects, Cal Career Research https://calcareercenter.org/Uploads/Links/mscareerresearchlessonplan9.doc PowerPoint Projects, Warrensburg School District http://www.warrensburgr6.org/education/components/scrapbook/default.php?sectiondetailid=383	Students will be evaluated on their participation and completion of the activities: 1. Career Research Projects 2. PowerPoint Projects

	appropriate sounds, images, design templates, color schemes, animation schemes, slide transitions and concise, powerful phrases. • Students will give credit for graphics on Works Cited slide – MLA style. • Students will proof for spelling, usage, clarity, and fluency.	• Vicki Blackwell's Technology Ideas (and Let's Book It with Tech Knowledge) http://www.vickiblackwell.com/classrm.html • Vicki Blackwell's PowerPoint Templates http://www.vickiblackwell.com/ppttemplates.html • PowerPoint and KidPix Project Ideas http://www.cobbk12.org/sites/literacy/fetc/ppt/ppt_index.htm • TechTrekers PowerPoint Ideas http://www.techtrekers.com/PP/ • World of Teaching (large collection of pre-made PowerPoints for every subject) http://www.worldofteaching.com/ • PowerPoint Features to use in the Classroom http://www.amphi.com/departments-programs/technology/training-materials/microsoft-powerpoint.aspx		
8.1.8.A.4 Graph and calculate data within a spreadsheet and present a summary of the results. 8.1.8.A.5 Create a database query, sort and create a report and describe the process, and	**Topics** Spreadsheets Twenty-First Century Themes and Skills include: • Informational Literacy • ICT Literacy	Build Your Awesome Life Students identify career interests and use Excel to calculate whether the student's expenses are more or less than their income. Digital Wish The students will write thank you	Build Your Awesome Life, Digital Wish http://www.digitalwish.com/dw/digitalwish/view_lesson_plans?id=7645 Microsoft Excel Activities, Parry Dawg	Students will be evaluated on their participation and completion of the activities: 1. Build Your Awesome Life 2. Microsoft Excel Activities 3. Create a Graph

explain the report results. 8.F.5 Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.	• Creativity and Innovation • Critical Thinking and Problem Solving • Communication and Collaboration **Objectives** Students will learn how to calculate mean, mode and median; format graph changes and review spreadsheets and graphs expanding their knowledge of graphing. How to view different graph options with your spreadsheet data How to change graph defaulted fonts, colors, styles, etc. Produce a report using sort/query	letters to chaperones for making time to go on a class trip. They will use a database to personalize the same letter for a few chaperones. Students will gather curriculum related data. They will generate a spreadsheet to calculate, graph, and present curriculum related information. They will share their information. Students will create a collaborative database with classmates who each enter their data for a survey completed on a relevant content area topic that addresses a problem and increases community awareness. Students will critically analyze the data by querying, sorting, and developing a graphical display. Use the analysis to validate any conclusions or hypothesis to persevere in solving the problems. Write an explanatory text to support the development of a public service document conveying ideas and concepts. <u>Microsoft Excel Activities</u> Instructors can select from a large variety of activities. Parry Dawg Activity - 1 Activity - 2 Activity - 3 Activity - 4 Activity - 5 Activity - 6 Activity - 7	http://parrydawg.weebly.com/microsoft-excel.html Create a Graph, Kids Zone http://nces.ed.gov/nceskids/createagraph/ Energy Drink Spreadsheet, Frost Middle School http://www.frostmiddleschool.org/apps/pages/index.jsp?uREC_ID=41724&type=u&pREC_ID=227731 Drive-Thru Nutrition, Education World http://www.educationworld.com/a_tech/techlp/techlp029.shtm Google Sheets or other spreadsheet application Create a Graph http://nces.ed.gov/nceskids/createagraph/	4. Energy Drink Spreadsheet 5. Drive-Thru Nutrition

		Activity - 8 Activity - 9 Activity - 10 Activity - 11 Activity - 12 Create a Graph Students learn how to make a simple graph using Microsoft Excel. Kids Zone Energy Drink Spreadsheet Students will use formulas to create a spreadsheet on energy drinks. Frost Middle School Drive-Thru Nutrition Students can individually record their intake for a designated time period, do research to evaluate personal nutritional habits, and enter into a collaborative database to increase the amount of data for analysis. Education World		
8.1.8.F.1 Explore a local issue, by using digital tools to collect and analyze data to identify a solution and make an informed decision.	**Topics** Digital Tools and Devices Twenty-First Century Themes and Skills include: • Informational Literacy • Media Literacy • ICT Literacy • Creativity and Innovation • Critical Thinking and Problem Solving • Communication and Collaboration **Objectives**	100 Ways to Use Digital Cameras Instructors consider 100 ways to use digital cameras in the classroom, Scholastic Using Digital Cameras in the Classroom Instructors consider a plethora of ways to use digital cameras in the classroom, Terp Connect Portrait of the Year Using the Internet, students will investigate a year of the twenty-first century. After researching the year, students will create an electronic image commemorating	**Digital Cameras:** 100 Ways to Use Digital Cameras, Scholastic http://www.scholastic.com/teachers/lesson-plan/100-ways-use-digital-cameras Using Digital Camera in the Classroom, Terp Connect http://terpconnect.umd.edu/~toh/image/DigitalCameraUses.htm Portrait of the Year, Digital Wish http://www.digitalwish.com/d	Students will be evaluated on their participation and completion of the activities: 1. 100 Ways to Use Digital Cameras 2. Using Digital Cameras in the Classroom 3. Portrait of the Year 4. A Different View 5. Digital Storytelling 6. 50 Ideas for Using Skype in Your Classroom

	• Students will explore a local issue and identify a solution using digital tools. • Students will apply a large variety of digital tools. • Students will communicate virtually with content experts (authors, scientists, etc.) • Students will use and apply Google Earth. • Students will use digital cameras and video. •	that year. Digital Wish A Different View This is a visual art lesson, which involves writing and technology. Essential Question: "How do you see yourself?" Digital Wish Digital Storytelling Students will be challenged to create a digital story using digital camera and PowerPoint. Digital Wish Skype, Webinars or Video Conferencing Software 50 Ideas for Using Skype in Your Classroom Instructors can select from a large variety of lessons using Skype: • Practice a foreign language • Peace One Day • Around the World with 80 Schools • Talk about the weather • Collaborative poetry • Practice interviews: • Hold a contest • Hold a debate • Make beautiful music together • Who are the people in your neighborhood? • Combine with augmented reality • Mystery call • Art critics • Interviews • Tour a museum	w/digitalwish/view_lesson_plans?id=4214 A Different View, Digital Wish http://www.digitalwish.com/dw/digitalwish/view_lesson_plans?id=327 Digital Storytelling, Digital Wish http://www.digitalwish.com/dw/digitalwish/view_lesson_plans?id=3713 **Skype, Webinars, or Video Conferencing Software** Microsoft Skype Lesson Plans https://education.microsoft.com/skype-in-the-classroom/skype-lessons Exploring with an Explorer, Skype Lesson, Microsoft https://education.microsoft.com/Story/SkypeLesson?token=fd36f 50 Ideas for Using Skype in Your Classroom, Teach Thought http://www.teachthought.com/the-future-of-learning/50-ideas-for-using-skype-in-your-classroom/

- Guest lecturers
- Simulcast performances
- Storytime
- Participate in town hall meetings

Modifications:

- New Jersey Department of Education – Instructional Supports and Scaffolds
- Suggested Strategies for English Language Learners
- The educational technology curricula provides enrichment activities that allow for greater personalized learning to meet the needs of all learners including students with gifts and talents.

Vocabulary:

Applications - Programs that allow you to accomplish certain tasks such as write letters, analyze numbers, sort files, manage finances, draw pictures, and play games.
Cell - The space at the intersection of a row and column in a spreadsheet.
Chart - A way to present information from a spreadsheet in the form of graphs or tables.
CPU (Central Processing Unit) - The main chip that allows computers to do millions of calculations per second and makes it possible for users to write letters and balance your checkbook.
Cyberbully - The electronic posting of mean-spirited messages about a person (as a student) often done anonymously.
Database - An organized collection of related information.
Domain - The part of an Internet address that identifies where a person's account is located. For example, in the address jdoe@dpi.state.nc.us, the domain is everything after the @.
Firewall - Technology that prevents users from visiting inappropriate web sites, and protects the network from unauthorized users.
Formatting Tools - Tools that are used to give shape, size, and general makeup (as of something printed).
Gif (Graphic Interchange Format) (Pronounced "jiff.") - A file format for pictures, photographs, and drawings that are compressed so that they can be sent across telephone lines quickly.
GPS - A navigational system using satellite signals to fix the location of a radio receiver on or above the earth's surface.
Graph - A picture showing the relationship of one or more sets of numbers to each other. Some graph types are line, bar, area, and pie graphs.
Graphic - Images/pictures created, edited, and/or published using a computer.
Green screen - The technique of photographing or filming an actor or object against a green monochrome backdrop, and replacing the backdrop with material from a different image using a color filter.
Hardware - Part of the computer system such as a keyboard, screen, mouse, joystick, printer, speakers, etc.
Home page - An introductory screen on a web page on the World Wide Web, used to welcome visitors. A home page can include special text or graphics on which you click to jump to related information on other pages on the Web.
Host - The name given to a computer directly connected to the Internet. Host computers are associated with computer networks, online services, or bulletin board systems.

Hyperlink or Hypertext - Special text when clicked jumps the user to the site.
Jpeg (Joint Photographic Experts Group) - A standard for shrinking graphics so they can be sent faster between modems and take up less space on your hard drive.
Landscape - The page setup that permits a document to be printed in a horizontal position.
Line graph - A graph used to display trends and compare data.
Line spacing - The span between lines of text.
Linear - Moving in a straight line or path; a multimedia presentation that moves in a straight line from image to image.
Links - Connections that bridge one image, page, or word to another by clicking.
Multimedia - To use a combination of text, pictures, sounds, movies, and/or animation in a presentation.
Network - A system of connected computers that allows the sharing of files and equipment. There are two types of networks: local area network (LAN) and wide area network (WAN).
Non-linear - Not moving in a straight line or path; a multimedia presentation that transitions from one image to another in an order that is preset, but not necessarily in a straight path.
Numeric - Keypad The portion of a keyboard, set up like an adding machine or calculator used to enter numbers and equations quickly into the computer.
OR - Formal name given to advanced search strategies using AND, OR and NOT connectors. Boolean logic was created by English mathematician George Boole 150 years ago.
Pictogram - Pictures used to create a bar graph chart.
Pie graph - Circle graph divided into pieces that look like portions of a pie.
Piracy - The unauthorized use of another's production, invention, or conception especially in infringement of a copyright.
Security - Protection of computer, computer files or a computer network from use without permission of the owner or owners.
Server - A special computer used to store programs and files, and then sends it out to other computers one or all at a time.
Software - Programs that allow you to accomplish certain tasks such as write letters, analyze numbers, sort files, manage finances, draw pictures, and play games.
Sort - Arranging information in a specific order (usually ascending and descending).
Spreadsheet - An application that can be used to do calculations, analyze and present data. It includes tools for organizing, managing, sorting and retrieving data and testing "what if " statements.
Storyboard - A graphic organizer used for planning and developing a multimedia report/presentation. The contents, layout, and formatting of each card/slide and the linking together of the cards/slides.
Table - Columns and rows of cells that can be filled with text that are used to organize information.
Telecommunication - The act of sending and receiving information, such as data, text, pictures, voice, and video. The exchange of information can be within a building or around the globe.
URL Address - Uniform Resource Locator Website address. Example: http://www.iss.k12.nc.us.
User name - First part of an e-mail address. Example: jmwinton is the user name of the following e-mail address. jmwinton@iss.k12.nc.us.
Value - The term for a number in a spreadsheet that can be added, subtracted, multiplied or divided.
Video - A recording similar to videotape but stored in digital form.
Virus - A computer program designed to damage computer files.
Visualization - The act or process of interpreting in visual terms or of putting into visible form.
Web Browser - A computer program used for accessing sites or information on a network (like the World Wide Web).

Wiki - A web site that allows visitors to make changes, contributions, or corrections to a site. It is a collaboration tool.
Word processing- Using keyboarding skills to produce documents such as letters, reports, manuals, and newsletters.
Word wrap- This occurs when you get to the end of a line and continue typing the text will then go to the next line.
WWW (World Wide Web)- The section of the Internet that allows access to text, graphics, sound, and even video. A lot of free information can be found on the WWW.
WYSIWYG- an acronym for "What You See Is What You Get" and is pronounced "whizzy wig." WYSIWYG simply means that the text and graphics shown on your screen exactly match your printouts.