

Syllabus for [21Things4students](#):

Goal: The goal of the 21things4students project is to raise Michigan students' technology proficiency by providing cost-effective resources to their classrooms and that also gives local districts a more authentic means for state reporting of 8th grade technology proficiency.

Aligned to Standards: The purpose of the *21things for the 21st Century Student (21Things4Students.net)* web resource is to provide "Just in Time" training through an online interface based on the National Educational Technology Standards for Students (NETS-S) and Michigan Educational Technology Standards for Students (METS-S) at grade levels 6-8 and/or 9-12. These standards are the basic technology skills every student should possess.

Project-based: The *21Things4Students* is a performance-based assessment tool. The REMC Instructional Technology Specialists from across the state that developed the 8th grade technology literacy multiple-choice test for Michigan, has been planning to move toward providing a more summative assessment. Districts may use this course for compliance with the Michigan Technology plan and state reporting of 8th grade technology proficiency.

Online Learning: Student participants will complete 21 online lessons within a virtual or hybrid classroom to learn basic technology skills using a variety of web tools. Each lesson, or "thing", includes a "how to" video, hands-on activities, ties to the NETS-S and METS-S standards, and an overview of how this tool can be used. Participants will demonstrate proficiency in each of the 21things by creating an end-product, or a Digital Portfolio based on the NETS-S standards.

Basics- This section contains basic skill information and terminology which may have been covered previously in your classes, but is important information to know about:

- List of Accounts needed to complete these projects (such as Google and Scratch)
- Applications - Students need to have an email account, or one set up by the teacher at some of the sites. This has a down loadable list of programs which may need to be installed. Everything used in the 21things4students is FREE. There are very few things which need to be downloaded, but some are critical to success in a 'thing'
- Capture your screen contains directions for the PC and Mac
- Finding a Username- help finding a unique one to use
- Links to and definitions of: AUP, Domain Names, File Formats, NETS-S, Passwords, Portfolio, Rubric, and Storage Devices
- Keyboarding/Typing – links to several online and free keyboarding programs.
- Video tutorial on how to resize the browser window
- Shortcuts (PC and Mac) handout to download
- Activity: Quiz on vocabulary
- Activity: Check your Typing Test
- Standards addressed: NETS-S: 6.a; METS: 6-8.RI.4, 6-8. TC.1, 6-8.TC.6.

Digital Footprint

- You can think of these digital footprints are the trail of your activity online: the information you access, the details you share, the games you play, the groups with whom you interact with. Activity: Create a list of sites you may have left a footprint on.
- Activity: Organize the list, putting similar sites together.
- Activity: Create a visual representation of you using your list.
- Activity: Writing Reflection: Thinking about the specific "footprints" or information you leave behind on the sites on your map.
- Standards: [NETS-S](#): 1.b, 5.a; [METS](#): 6-8:CI.2, 9-12:CI.3; 6-8: DC.6

Staying Organized

- This contains lessons about saving, organizing and sharing bookmarks on the web.
- Two alternatives are featured: [delicious.com](#) or [diigo.com](#)
- Introduces the concept of 'tagging' and the concept of the 'cloud'
- The activity requires students to create their own bookmark site, tag and organize a variety of bookmarks
- Standards addressed: NETS-S 2b, 3b; METS 6_8.RI - 1, 6_8.TC - 5, 9_12.CC – 1, 2, 6

Visual Organizers

- Lesson about using a free online graphic organizer using [bubbl.us](#)
 - Alternative is [gliffy.com](#)
- Activity: Cedar Point activity for planning a trip
- Standards: [NETS-S](#): 1.a, 2.a, 2.d, 4.a, 4.b, 6.d [METS](#): 6_8.CI.1, 6_8.CI.2, 6_8.CI.3, 6_8.TC.1, 6_8.TC.2

Troubleshooting

- Identifying what the problem is when something doesn't work
- 3 video tutorial lessons: Introduction, Basic Computer and Network troubleshooting, and Malware and Viruses
- Activity: To create flowcharts showing trouble-shooting steps for three different scenarios
- Activity: Learning about applications that can be run directly on a flash drive. Reflection focusing on why a school might not allow USB drives to be used in school computers.
- Activity: Project Help
- Standards: NETS-S 6.a, 6.b, 6.c, 6.d; METS-S PK-12.TC - Technology Operations and Concepts

Digital Citizenship

- Learn about Cyberbullying, Netiquette and Internet Safety
 - 9 Themes of Digital Citizenship
- Stand up to Cyberbullying Video, Shrink the Cyberbully Game
 - 10 rules of Netiquette
- Activities: Emoticons, Project creation using a Web2.0 tool of their choice to deal with: the 9 themes, how to stop or prevent cyberbullying, netiquette
- Part 2: Internet Safety tips and ID Theft
 - Activity: Danger

Be Legal and Fair

- Lessons on: Intellectual Property Rights, Copyright, Creative Commons, and Citing Sources
- Flash quiz on Copyright and Flash video for Taking the Mystery Out of Copyright
- SchoolTube videos: aCopyright and FairUse, Plagiarism and Copyright perspective
- BlipTV video about Creative Commons Licensing
- Citation Maker sites
- Activity: Match That Slogan (includes a presentation about cheating), includes a student worksheet and lesson plan
- Activity: It's Mine - Write a reflective essay explaining copyright with examples from their own experience
- Small Group Activity: Match That Slogan - Create a presentation teaching others about an aspect learned from this unit
- Activity: Cheating & Citing – practice citing sources correctly
- Activity: Mission Possible – locate and use an image from the web legally
- Activity: Copyright Quiz
- NETS-S 1.b, 5.a, 5.d; METS: 6-8: CI.2, RI.3, DC.1, DC.2, DC.5, DC.7

Search Strategies

- In the "Search Strategies" section, you will learn some new techniques to help you search for and find information using the Internet. We will use the Big6 model in this exploration. This section also explores evaluating web sites to find valid and good sources of information through using the Mel databases, evaluating blog, wikis and searching for information on them.

- Videos: Blogs in Plain English, Wikis in Plain English
- Activity: Bogus and Hoax Sites
- Activity: Fact vs. Fiction
- Standards: NETS-S: Research & Information Strategies: 3. a., 3. b., 3. c., 3. d.
METS: Grades 6-8.RI 1, 2, 3, 4; CC.1 ;Grades 9-12.RI.1, 2, 3, 4, 5, 6, 7, 8; CC .2

Personal Networks

- In this section you will learn about sharing information with others and learning with others in a “Network” with others such as Facebook or MySpace.
- Videos: about Social Networks, Blogs
- YouTube video about “The Networked Student”
- Activity: Life Online - create a presentation, video, poster, or podcast (multimedia representation) of your ideas after completing the Life Online activity. Share this with classmates and provide feedback on theirs.
- Activity: Learn about Edublogs and the assignment is to create a blog with help from your teacher.
- Standards: NETS-S: 2.a., 2.d., 5.b., 5.c.; METS: 6-8.CC.1., 6-8.CC.3., 6-8.RI.1.

Learning Online

- In this section you will explore online learning. Watch some videos by students about online learning and get an idea of what it takes to be a successful online learner and if it meets your style of learning. You will also have a chance to browse through some online courses
- Videos: Student Perspectives on teaching ; On Blended Courses from SchoolTube; Student reflections
- Activity: Am I Ready for Online Learning? - take the readiness assessment, write a reflection from your own perspective and a profile of yourself as an online learner
- Activity: Saved by the Bell
- Activity: Learning Online Reflection
- Standards: NETS-S: 2 a, b, c 5 b ; METS: 6-8.CC.1, 6-8.CC.3, 9-12.CC.2, 9-12.CC.4, 9-12.DC.3, 9-12.TC.1, 9-12.TC.6

Interactive Learning

- In this section you will explore some neat interactive learning sites which are online. These are all designed for students to interact and have fun while learning. Students will learn how to create an online Quizlet, use Google Maps to explore the world, and go on Google Treks.
- Activity: Pick an interactive from Thinkfinity which helps you learn about one of the areas you are studying in school
- Activity: Use Quizlet to create a vocabulary quiz for one of your classes and share it with other students
- Activity: Use GoogleMaps for different directions
- Activity: Stimulating Simulator
- Standards: NETS-S 3.b, 3.c, 4.a, 4.d, 6.b; METS-S 6-8.CI.3

Digital Images

- Learn about editing your digital images and photos with free online tools

- Activity: Visit 3 of the digital image editing sites provided and view the tutorials to learn about them. Then visit FREE image sites from the list provided. Bookmark these sites and select a photo or image to edit. Take a screenshot of the before and after to provide in your portfolio or on your web presence. You will need to cite your sources.
- Activity: Create a digital slideshow using digital photos you took or images from one of the free sites.
- Standards: [NETS](#): 1 a, b; 3 b, c; 5 a; 6 a, b; [METS](#): CI 1, 2; RI 1; DC 1

Productivity Suite

- Learn about using Google docs, a free online suite for word processing, presentations, spreadsheet, email, calendar, forms, and much more. Learn about collaborating with others as you work
- Activity: Create a Google account if you don't have one
- Activity: Creating a Google Document Activity
- Activity: Create a Google Presentation
- Activity: Create a Google Spreadsheet
- Activity: My Wish List
- Activity: Party Planner
- Activity: Book Review and Book Chat collaboration
- Standards: [NETS-S](#): 1.b.; 5.b.; 6.d [METS](#): 6-8.TC.1. & 2; 6-8 CT. 2; 6-8 CI.1D

Dig the Data

- Learn about charts and graphs
- Video from the Partnership for 21st Century Skills
- Activity: Identify and define a real problem in your setting, carry out research by collecting data, organize it in a spreadsheet, analyze the data and create a chart. Make a presentation of your investigation to your class.
- Activity: Lucrative Lemonade
- Activity: Car Cruising
- Activity: Cell Phone Usage
- Standards: [NETS-S](#): 1.a, 1.b, 4.a, 4.b, 4.c, 4.d. 6.b; [METS-S](#): 6-8 CI.2, CT.2, CT.3, RI.1, RI.2, RI.5, CC.3

Career Prep

- This section begins the exploration of careers for your future. This is a life-long process. You are introduced to the 16 Federal Career Clusters, Personality types and Interest Inventories, and the planning process
- Activity: Who are you? Who am I personality Type file
- Activity: Exploring career options that fit you. Explore two careers chart
- Extension Activity: Write a Cover letter and Resume
- Standards: [NETS-S](#): 3.b, 3.c, 4.c, 5.c; [METS](#): Basic (6-8): 6-8.CI.3, 6-8.CT.3, 6-8.TC.7, 6-8.TC.8, Advanced (9-12): 9-12.CT.1, 9-12.CT.2, 9-12.TC.3

Buyer Beware

- This section is about e-Commerce, or doing business on the Internet. What do you need to know about shopping online, and what are some of the dangers. How do you protect yourself?
- Activity: Play the Online Lineup game
- Activity: Locate the ratings of different companies before you buy online
- Activity: Cell phone plans
- Activity: Home makeover trip
- Standards: NETS-S:RI. 3.a, 3.b, 3.c, 3.d; CT.4.a, 4.b, 4.c, 4.d; DC.: 5.a; METS 6-8: CC.1, RI.1, 2, 3; CT.2, DC. 2,3,4,5,7

Mobile Computing

- What about cellphones in the classroom? Learn what is going on across the country.
- Video: Cellphones in the classroom
- Small group activity: Create a presentation on one of the topics suggested for your School Board of Education or administration
- Standards: NETS-S: 2B, 3C, 4D, 5A, 5B, 5C, 5D, 6A, 6B; METS: 6-8. RI.1, 6-8.RI.5, 6-8. DC.4

Video Creation

- Explore elements of making a video.
- Video: SchoolTube Smoking PSA
- Activity: Be a media maker and create a video using still images for younger students about digital citizenship or online safety. Follow the steps for video creation provided.
- Activity: School Etiquette
- Standards: [NETS-S](#) 4.b, 1.b, 5.a; [METS](#) 6-8.CI.2, 6-8.DC.1, 6-8.DC.5

Powerful Presentations

- Learn about creating presentations with the a free online Web 2.0 tool called Prezi.
- Watch the tutorials, get a student account
- Activity: Your Dream Vacation
- Activity: 30 Things About Me
- Additional Activity: Fun with Glogster to create a multimedia poster online
- Standards: NETS-S: 1.CI.b, 2.CC.b, 3.RI.b, 4.CI.b, 6.TC.b; METS 6-8: CI.1, CI.2, CC.2, RI.1

Screencasting

- Learn to create videos by recording from your computer screen.
- Learn about two Free to use programs, Jing and CamStudio and lots of tips from experts
- Activity: Create a screencast tutorial to demonstrate how to solve a problem for one of your classes (math, science, computer tip...)
- Activity: Nursery Rhymes
- [NETS-S](#): 1.a, 1.b, 1.c, 2.a, 2.b, 2.d, 6.1, 6.b, 6.d; [METS](#): 6-8. CI.2, CT.2.

Game Design

- Learn about programming a game or animation using the free program from MIT called Scratch. Students will try some out and create their own with this great program.
- Activity: Create a Scratch project that demonstrates a process or cycle (water cycle, food chain, scientific process, writing process, supply and demand, etc.
- Tutorials to watch on Scratch
- Standards: [NET-S](#): CI a, b, c ; CC a, b, d; CT a, b; TC a, b, d ; [METS](#): 3-5.CT.1 & 3, 6-8.CI.2 & 3, 9-12.CI.3, 9-12.CC.3, 9-12.CT.1