Technology Integration 3: 8th Grade

This course endeavors to develop technological literacy to empower students to acquire necessary technology based knowledge and skills. While along the way, developing critical thinking, problem solving, and career-focused soft skills through project-based learning, promoting innovation, creativity, and collaboration.

Course Information:

Frequency & Duration: Averaging 42 minutes; 5 days per week; approx. 7 weeks

Text: none

Content: : Intro/Virtual Classroom/ Keyboarding Skills/Digital Citizenship **Duration:** 1 week

Big Project:	Illustrated Introduction PowerPoint
Skill:	• Understand the expectations and scope of the technology integration course • Utilize social media based virtual classroom structure • Virtually submit assignments/manage deadlines • Basic computer file management • Create, format, and edit Microsoft PowerPoint presentation • Analyze online identity and decision-making process in creating and maintaining this identity

Instructional/Engagement Activities:	• Daily Activators (Word document students must edit and save over the course of each week, typing and answering daily questions) • Typing Tuesday – keyboarding skills practice (continues weekly for duration of class. • TI: Illustrated Intro PPT (presentation with 4 questions/slides to re-introduce students and their interest in technology) • "To share, or not to share…" Worksheet containing possible social media posts to be analyzed as safe or possibly problematic.
Assessment:	• Daily activators typed accurately and answered, then submitted digitally at each week's end • TI: Illustrated Intro PPT (12 pictures), typed answers to all questions completed and submitted virtually • "To share, or not to share…" completed worksheet
Resources:	www.edmodo.com www.typing.com Microsoft Word Daily Activators Questions, Promethean Flipchart Daily Activators, Word document TI: Illustrated Intro, PPT presentation
Standards:	15.4.8.A **Analyze the influence of emerging technologies on daily life.** 15.4.8.B **Interpret and apply appropriate social, legal, ethical, and safe behaviors of digital citizenship.** 15.4.8.K **Create a multimedia project using student-created digital media.**

	CC.3.6.6-8.C **Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.** CC.3.6.6-8.E **Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.**

Comments: …moving forward, intro project will center around creation of example social media profile to allow for discussion of digital citizenship, safe and appropriate use of social media…

Content: Research/Data Analysis **Duration:** 2 weeks

Big Project:	Candy Infographic
Skill:	• Understand the process of internet search • Select keywords to conduct internet search for specific information • Execute efficient & accurate advanced internet searches • Analyze and interpret search results and sources • Create infographic using piktochart.com • Collect poll data and compile digitally
Instructional/Engagement Activities:	• Google Search Lesson Plans – Strategies for tough searches • Search strategy challenge • Factitious game – practice identifying fake news vs. trusted sources • Candy Infographic, includes history, favorite flavor opinion poll results, data on candy counts
Assessment:	• Complete and accurate researched answers to all internet search assignment questions. • Score achieved playing Factitious game • Candy infographic (History/Info, Fun Fact, Survey Data, Data Counts)
Resources:	Google Search Education Lesson Plans – from Google Factitious – online game, http://factitious.augamestudio.com Video: "The Internet: How Search Works" (YouTube – code.org's channel) Candy research and data notes (Word) Website: www.piktochart.com

Standards:	Standard - 15.4.8.A **Analyze the influence of emerging technologies on daily life.** Standard - 15.4.8.B **Interpret and apply appropriate social, legal, ethical, and safe behaviors of digital citizenship.** Standard - 15.4.8.D **Create projects using emerging input technologies.** Standard - 15.4.8.G **Create an advanced digital project using appropriate software/application for an authentic task.** Standard - 15.4.8.K **Create a multimedia project using student-created digital media.** Standard - 15.4.8.L **Evaluate the accuracy and bias of online sources of information; appropriately cite online resources.** Standard - 15.4.8.M **Explore and describe how emerging technologies are used across different career paths.**

Comments:

Content: Coding **Duration:** 2 weeks

Big Project:	CombatCode lessons
Skill:	• Define: coding, algorithm • Write, run, and debug code (Python) • Write block-based code (JavaScript) utilizing loops, functions, and conditionals
Instructional/Engagement	
Activities:	• CombatCode lessons • Blockly games
Assessment:	• Completed CombatCode lessons • Completion of levels in all Blockly games categories
Resources:	Website(s): https://codecombat.com/ https://blockly-games.appspot.com
Standards:	15.4.8.A **Analyze the influence of emerging technologies on daily life.** 15.4.8.G **Create an advanced digital project using appropriate software/application for an authentic task.** 15.4.8.H **Explain the differences between a scripting language and a coding language.** 15.4.8.I **Solve a problem with an algorithm.** 15.4.8.J **Explain the basic differences between encoding and decoding.** 15.4.8.M **Explore and describe how emerging technologies are used across different career paths.**

Comments:

Content: Creative computing **Duration:** 2 weeks

Big Project:	Scratch project
Skill:	• Define and utilize an algorithm • Understand and apply the basics, definitions, and process of coding • Create an animation or game using block-based code • Create and design a Microsoft PowerPoint presentation • Utilize a Microsoft Office template
Instructional/Engagement Activities:	• Create animation, game, art, and/or music project using block-based JavaScript coding on Scratch website. • Using Microsoft PowerPoint, and provided template, create a multi-slide sales pitch presentation for coded creation
Assessment:	• Scratch: ▪ Intro project – short animation to teach basics of using Scratch ▪ Starter project – Step by step directed creation in category of student's choice: game, animation, art, music ▪ Remix – Scratch creation using another Scratcher's creation as a jumping off point to be improved upon or customized ▪ Final project – Full creation of student's choice • PowerPoint sales pitch (6 slides, ID market, Scratch creation screenshots)
Resources:	Website: https://scratch.mit.edu/ Microsoft PowerPoint PowerPoint sales pitch template

Standards:	15.4.8.B **Interpret and apply appropriate social, legal, ethical, and safe behaviors of digital citizenship.** 15.4.8.D **Create projects using emerging input technologies.** 15.4.8.G **Create an advanced digital project using appropriate software/application for an authentic task.** 15.4.8.K **Create a multimedia project using student-created digital media.** 15.4.8.M **Explore and describe how emerging technologies are used across different career paths.** CC.3.5.6-8.D **Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.**

Comments: