**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.

By the end of Grade 2

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

**Rationale:** Digital tools offer opportunities for new experiences and means of outreach and collaboration that support creative and innovative approaches to problem solving and product development.

#### **Technology CPI**

#### 8.1.2.B.1

Illustrate and communicate original ideas and stories using multiple digital tools and resources.



#### **Content Area CPI**

# Health & PE 2.4.2.A.2

Distinguish the roles and responsibilities of different family members.

#### **Common Core English**

# CCSS.ELA-LITERACY.CCRA.W.6

Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

#### **Instructional Design Ideas**

- Interdisciplinary Learning: Content area curriculum is developed while using relevant technology applications and cultivating skills.
- Multiple Means of Representation: Provide the assignment in both written and digital formats. Share the file online for use of parents and students. Digital copies can then be printed by

# Sample Activity

Use a variety of digital tools and resources to produce, illustrate and publish a digital scrapbook. Collaborate with peers discussing the roles and responsibilities of family members. Include information about each member's responsibilities in the family and anything that makes the person special. With guidance and support from adults, images (hand drawn/ scanned, digital pictures or clip art) can be inserted.

parents or students and can be customized for the user (change print size, adjust contrast, use a screen reader to hear the content, etc.) meeting the needs of any learner.





#### **Technology Options**

- <u>CAST Bookbuilding</u>: A free resource to create, save, print and publish if desired.
- MyEbookMaker: Create books in the cloud.
- PicGrid-Photo Collage: A free app for android Maker.
- Pics4Learning: A free gallery of photos and clipart.
- Scrap It for iPad: Free scrapbooking app for iPad.

**Tech Tip:** The saying is "A Picture is Worth a Thousand Words." Did you know copyright applies to images too! If the images used are not the original work of the student, this is a teachable moment for increasing understanding and methods to give credit.

12 Most Perfect Ways to Ensure You're Legally Using Online Photos.

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By the end of Grade 2

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| Legend Symbols are used as a quick reference indicating additional resources have been identified.  Additional information to locate resources is provided on a supplemental page. |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| 7 6 5 4 Ti   | Time Tips That Transform Practice Supporting Research  |  |  |  |  |  |
|  | Professional Development and/or Classroom Resources  Multiple Means of Representation  |  |  |  |  |  |
| L Le   | Lessons Multiple Means of Actions and Expressions  |  |  |  |  |  |
| Te   | Technology Resources Multiple Means of Assessment  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | CCSS.ELA-Literacy.W.2.6: http://www.corestandards.org/ELA-Literacy/W/2/  |  |  |  |  |  |
| 1  | Health and Physical Education: http://www.state.nj.us/education/cccs/2014/chpe/  |  |  |  |  |  |
|  | Technology 8.1.2.B.1: <a href="http://www.state.nj.us/education/aps/cccs/tech/">http://www.state.nj.us/education/aps/cccs/tech/</a>  |  |  |  |  |  |
| 012 3<br>87 6 5  | CAST UDL and Book Builder can be used to prepare and distribute the assignments increasing access to the directions while reducing the need to repeat directions: <a href="http://www.cast.org/learningtools/book_builder/">http://www.cast.org/learningtools/book_builder/</a>                                    |  |  |  |  |  |
|  | Taking Photos of Curious George: Exploring Character Through Images: <a href="http://www.readwritethink.org/classroom-resources/lesson-plans/taking-photos-curious-george-986.html?tab=2#tabs">http://www.readwritethink.org/classroom-resources/lesson-plans/taking-photos-curious-george-986.html?tab=2#tabs</a> |  |  |  |  |  |
| L  | What do you know about your town?:   |  |  |  |  |  |
|  | http://www.digitalwish.com/dw/digitalwish/view_lesson_plans?id=4331  Year of Memories: http://www.digitalwish.com/dw/digitalwish/view_lesson_plans?id=2432   |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | CAST Bookbuilding: <a href="http://www.cast.org/learningtools/book_builder/">http://www.cast.org/learningtools/book_builder/</a>   |  |  |  |  |  |
|  | MyEbookMaker: http://www.myebookmaker.com/   |  |  |  |  |  |
| PicGrid-Photo Collage:   |  |  |  |  |  |  |
|  | https://play.google.com/store/apps/details?id=com.rcplatform.photocollage&hl=en  |  |  |  |  |  |
| 80   | Pics4Learning: Pics4Learning   |  |  |  |  |  |
|  | Scrap It for iPad: https://itunes.apple.com/us/app/scrap-it-hd/id496854171?mt=8  |  |  |  |  |  |
|  | What is Plagiarism: <a href="http://kidshealth.org/kid/feeling/school/plagiarism.html">http://kidshealth.org/kid/feeling/school/plagiarism.html</a>  |  |  |  |  |  |

**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.

By the end of Grade 5

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

**Rationale:** Digital tools offer opportunities for new experiences and means of outreach and collaboration that support creative and innovative approaches to problem solving and product development.

#### **Technology CPI**

# 8.1.5.B.1

Collaborate to produce a digital story about a significant local event or issue based on first-person interviews.



# Content Area CPI

# Social Studies 6.3.4.A.2

Examine the impact of a local issue by considering the perspectives of different groups, including community members and local officials.

#### **Common Core English**

# CCSS.ELA-Literacy.CCRA.W.8

Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

#### **Instructional Design Ideas**

- Interdisciplinary Learning: Content area curriculum is developed while using relevant technology applications and cultivating skills.
- Multiple Means of Action and Expression: "There is no medium of expression that is equally suited for all learners or for all kinds of communication. On the contrary, there are media, which seem poorly suited for some kinds of expression, and for some kinds of learning. While a learner with dyslexia may excel at story-telling in

#### **Sample Activity**

Collaborate to write a digital story examining the impact of a local issue. Take notes from first person-interviews and print and digital sources to convey ideas and information clearly. Consider the perspectives of different groups, including community members and local officials. Categorized information and provide a list of sources. Make an entry (audio, video, picture, written) to a shared digital file explaining how individual perspective and experience cause different interpretations.



conversation, he may falter when telling that same story in writing. It is important to provide alternative means for expression to allow the learner to appropriately (or easily) express knowledge, ideas and concepts in the learning

environment" (udlcenter.org).

#### **Technology Options**

- <u>Podomatic:</u> Students create radio announcements as one option to share information while not being in front of a camera.
  - Smartphones can be used to capture video.
- Wikispaces Classroom: Create a class page shared with all learners. Students see entries of their classmates. Individual pages can be created too where students may draft a response and copy to the shared page. The creator and/or instructor can see all pages and historical entries.
- Wise Mapping: A graphic organizer for brainstorming. The file is stored online, can be shared and embedded into other programs.

**Tech Tip:** Interpreting the URL can keep you safer. The "S" in https stands for secure.



**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.

By the end of Grade 5

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

| Time Tips That Transform Practice  Professional Development and/or Classroom Resources  Multiple Means of Actions and Expressions  Multiple Means of Actions and Expressions | Legend Symbols are used as a quick reference indicating additional resources have been identified.  Additional information to locate resources is provided on a supplemental page. |                                   |                     |   |  |  |
|--|--|-----------------------------------|---------------------|---|--|--|
| Resources Multiple Means of Actions and Expressions  | 0 12 1<br>9 3<br>8 7 6 5 4   | Time Tips That Transform Practice |                     | Supporting Research                       |  |  |
| Lessons Multiple Means of Actions and Expressions  | 80   | •                                 | 20%                 | Multiple Means of Representation          |  |  |
|  | L  | Lessons                           |                     | Multiple Means of Actions and Expressions |  |  |
| Technology Resources Multiple Means of Assessment  |  | Technology Resources              | $\overline{\Delta}$ | Multiple Means of Assessment              |  |  |



CCSS.ELA-LITERACY.W.4.2: <a href="http://www.corestandards.org/ELA-">http://www.corestandards.org/ELA-</a>

Literacy/W/4/#CCSS.ELA-Literacy.W.4.8

Social Studies 6.1.4.D.19: <a href="http://www.state.nj.us/education/cccs/2014/ss/">http://www.state.nj.us/education/cccs/2014/ss/</a>

**Technology 8.1.5.B.1:** http://www.state.nj.us/education/aps/cccs/tech/



Introduction to UDL: an online module

http://udlonline.cast.org/page/module1/l3/;jsessionid=31AB536435D7B5B57965EAA061101DFB



**UDL Guideline 5: Provide Options for Communication and Expression:** 

http://www.udlcenter.org/aboutudl/udlguidelines/principle2



#### **Celebration of Cultures:**

http://www.digitalwish.com/dw/digitalwish/view\_lesson\_plans?id=54

 $\textbf{Self Portrait:} \ \underline{\text{https://www.teachervision.com/multiculturalism/lesson-plan/5.html?} \underline{\text{detoured=1}}$ 



Google Drive: Customizing the experience – when working online students can highlight and change the size of text: https://support.google.com/docs/answer/1663349?hl=en

**Podomatic:** <a href="https://www.podomatic.com/login">https://www.podomatic.com/login</a>

Wikispaces Classroom: https://www.wikispaces.com/content/classroom

Wise Mapping: http://www.wisemapping.com

**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.

By the end of Grade 8

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

**Rationale:** Digital tools offer opportunities for new experiences and means of outreach and collaboration that support creative and innovative approaches to problem solving and product development.

#### **Technology CPI**

#### 8.1.8.B.1

Synthesize and publish information about a local or global issue or event (ex. telecollaborative project, blog, school web).



#### **Content Area CPI**

# CAREER READY PRACTICES CRP8

Employ valid and reliable research strategies.

#### CCSS.ELA-LITERACY.CCRA.W.8

Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

#### **Instructional Design Ideas**

- Interdisciplinary Learning: Content area curriculum is developed while using relevant technology applications and cultivating skills.
- Multiple Means of Action and Expression: When working memory
  is limited results can be disorganized. It is important to provide a
  variety of internal scaffolds so focus can be returned to the intended
  content rather than the process. Online resources like to do lists,
  mind mapping, Voice Thread, may be used to reduce misplaced

#### **Sample Activity**

Produce and publish a clear and coherent written community announcement informing readers about a local or global issue. Gather and synthesize relevant information from multiple print and digital resources, use search terms effectively, assess the credibility and accuracy of each source. Quote or paraphrase the data and conclusions of others while avoiding plagiarism and following standard format for citations.

Develop this announcement in a style appropriate to the task and the community served.

or lost resources returning time and focus to the intended topic.

<u>Live Binder</u> is an online replacement for a three ring binder.

#### **Technology Options**

- <u>C-Span Classroom</u>: Free resources for teaching government and civics. Watch video clips, download podcasts, read current news articles.
- Newser: Constantly updated news presented in a pictorial grid.
- Newseum: Today's Front Pages. Compare the same news item from different regions.
- <u>Weebly</u>: Create a free class website to store the announcements and share with community members.



**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.

By the end of Grade 8

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

| Legend Symbols are used as a quick reference indicating additional resources have been identified.  Additional information to locate resources is provided on a supplemental page. |  |          |   |  |
|--|--|----------|---|--|
| 10 2 1 2 3 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5   | Time Tips That Transform Practice                      | 1        | Supporting Research                       |  |
| 80   | Professional Development and/or Classroom<br>Resources | 2006     | Multiple Means of Representation          |  |
| L  | Lessons  |          | Multiple Means of Actions and Expressions |  |
|  | Technology Resources                                   | $\nabla$ | Multiple Means of Assessment              |  |



CCSS. Career Practice: <a href="http://www.state.nj.us/education/cccs/2014/career/CareerReadyPractices.pdf">http://www.state.nj.us/education/cccs/2014/career/CareerReadyPractices.pdf</a>
CCSS.ELA-LITERACY.W.8.8: <a href="http://www.corestandards.org/ELA-Literacy/W/8/#CCSS.ELA-Literacy.W.8.8">http://www.corestandards.org/ELA-Literacy/W/8/#CCSS.ELA-Literacy.W.8.8</a>

Technology 8.1.8.B.1: <a href="http://www.state.nj.us/education/aps/cccs/tech/">http://www.state.nj.us/education/aps/cccs/tech/</a>



#### **Multiple Means of Action and Expression:**

http://www.udlcenter.org/aboutudl/udlguidelines/principle2

**Live Binder:** is an online three ring binder. Organize links to external documents, files and evidence for evaluation. Compatible with multiple platforms and devices. http://www.livebinders.com/welcome/education?showsubtab=education



Live Binders Tips and Tricks: <a href="http://www.livebinders.com/play/play?present=true&id=3342">http://www.livebinders.com/play/play?present=true&id=3342</a>

#### **Digital Video Interviews:**

http://www.digitalwish.com/dw/digitalwish/view lesson plans?id=2206



#### **Interview with Ben Franklin:**

http://www.digitalwish.com/dw/digitalwish/view lesson plans?id=7557

**Weekly Current Event Podcast:** video or text version are alternatives to podcast - <a href="http://www.digitalwish.com/dw/digitalwish/view\_lesson\_plans?id=230">http://www.digitalwish.com/dw/digitalwish/view\_lesson\_plans?id=230</a>

C-Span Classroom: <a href="http://www.c-spanclassroom.org/">http://www.c-spanclassroom.org/</a>



Newser: http://www.newser.com

**Newseum:** <a href="http://www.newseum.org/todaysfrontpages/">http://www.newseum.org/todaysfrontpages/</a>

Weebly: online classroom to enhance onsite lessons https://education.weebly.com/

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.

By the end of Grade 12

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

Rationale: Digital tools offer opportunities for new experiences and means of outreach and collaboration that support creative and innovative approaches to problem solving and product development.

#### **Technology CPI**

# 8.1.<u>12.B.2</u>

Apply previous content knowledge by creating and piloting a digital learning game or tutorial.



#### **Content Area CPI**

#### Math/Content/HSA/CED/A/1/

Create equations and inequalities in one variable and use them to solve problems.

# **CCSS.ELA-**LITERACY.CCRA.W.2

Write informative/ explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.

#### **Instructional Design Ideas**

- Interdisciplinary Learning: Content area curriculum is developed while using relevant technology applications and cultivating skills.
- Multiple Means of Engagement: Students have choices of planning and expressing their results in various formats. The method used to achieve the end result will vary for each participant. Offer additional

tools to students such as: graphic organizers to create an outline and organize thoughts when writing

information and explanatory text.



#### Sample Activity

Challenge students to create an outline for a video game to teach equations and inequalities in one variable or encompass any curriculumbased, teacher-approved concept. Create a digital version of this game and a written informative/ explanatory text including user directions on how to use the game to examine and analyze in detail the complex ideas presented. Use peer review to examine the directions, confirming organization and accuracy. Debug and repeat as needed.

(See the Build a World Lesson)



# **Technology Options**

- Alice: Is educational software that teaches students programming in a 3D environment.
- Scratch: Enables students to make and share games. There are multiple levels of proficiency and resources for lesson planning and delivery.
- <u>Classcraft</u>: Embed your learning objectives into a role-playing game.
- GameSalad: Works on a variety of platforms. No coding required.
- Game Salad Cookbook Tutorial: An interactive tutorial which can be used as a classroom resource.
- Sploder: A collaborative environment to play, create and test games to submit for feedback. No programming skills are required.
- Wise Mapping: A graphic organizer for brainstorming. The file is stored online, can be shared and embedded into other programs.



**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.

By the end of Grade 12

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

| Legen                             | Legend Symbols are used as a quick reference indicating additional resources have been identified.  Additional information to locate resources is provided on a supplemental page. |     |   |  |
|-----------------------------------|--|-----|---|--|
| 101 12 1<br>100 3<br>3<br>7 6 5 4 | Time Tips That Transform Practice  |     | Supporting Research                       |  |
| 80                                | Professional Development and/or Classroom<br>Resources   | 200 | Multiple Means of Representation          |  |
| L                                 | Lessons  |     | Multiple Means of Actions and Expressions |  |
|                                   | Technology Resources   | V   | Multiple Means of Assessment              |  |

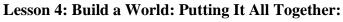


Math: Content HSA/CED/A/1/: <a href="http://www.corestandards.org/ELA-Literacy/W/11-12/2/CCSS.MATH.CONTENT.HSF.LE.A.1.B">http://www.corestandards.org/ELA-Literacy/W/11-12/2/CCSS.MATH.CONTENT.HSF.LE.A.1.B</a>:

http://www.corestandards.org/Math/Content/HSA/CED/A/1/

Research Spotlight on Project Based Learning: http://www.nea.org/tools/16963.htm

**Technology 8.1.12.B.2:** http://www.state.nj.us/education/aps/cccs/tech/





http://www.scholastic.com/browse/lessonplan.jsp?id=1421 NOTE: Scholarship opportunity provided by Scholastic Awards program. There are additional lessons provided for lower and higher skill levels.



Alice: <a href="http://www.alice.org/index.php?page=what\_is\_alice/what\_is\_alice">http://www.alice.org/index.php?page=what\_is\_alice/what\_is\_alice</a>

Activate: <a href="http://www.activategames.org/resources">http://www.activategames.org/resources</a>



Classcraft: www.classcraft.com

**GameSalad:** Works on a variety of platforms. No coding required.

https://help.gamesalad.com/hc/en-us/articles/201824316

Game Salad Cookbook Tutorial: https://help.gamesalad.com/hc/en-

us/categories/200134158/

**Spolder**: <a href="http://www.spolder.com">http://www.spolder.com</a>

Wise Mapping: A graphic organizer for brainstorming. <a href="http://www.wisemapping.com">http://www.wisemapping.com</a>