The Key to Aligning
YOUR K-5 CLASS
with Common Core State Standards

30 Projects that Integrate Technology into Core Lesson Plans

ASK A TECH TEACHER

The Key to Aligning Your K-5 Class with Common Core State Standards

30 Projects that integrate technology into core lesson plans

By the Structured Learning IT Team

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Part of the Structured Learning Technology for the Classroom series
Visit the companion website at http://askatechteacher.com for more resources to teach technology to
Kindergarten-Eighth Grade

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Introduction

In June of 2010, the National Governors Association Center for Best Practices (NGA Center) and the Council of Chief State School Officers (CCSSO) released a set of state-led education standards, the Common Core State Standards (CCSS). They spell out what students are expected to learn so teachers and parents know what they need to do to help. The standards are designed to be robust and relevant to the real world, reflecting the knowledge and skills that young people need for success in college and careers.

Developed in collaboration with content experts, states, teachers, school administrators and parents, their focus is the core subject areas of English-language arts (reading, writing, speaking, listening) and mathematics for grades K-12, establishing clear and consistent goals for learning that all stakeholders agreed would prepare America's children for success in life. With American students fully prepared for the future, our communities will be best positioned to compete successfully in the global economy.

Why a new set of educational standards when each state already has its own?

That's why. Fifty-two different educational guidelines means what students are expected to learn varies state to state. Common Core standards respond to the need for consistency in educational excellence, no matter where students live and educators practice.

If your state is one of the forty-six that have adopted CCSS, you know technology is considered not as a separate curriculum, but as a tool to assist English language and math meet their standards. This means if you are the technology teacher, integration specialist, or IT coordinator, you not only need to teach computer skills (like keyboarding, mouse use, software, digital citizenship), but must blend technology into classroom instruction via a combination of technological, pedagogical and content knowledge.

What motivated the integration of technology into the CCSS framework? After twenty years of using computers to move educational goals forward, experts have realized that facility with technology aids students in:

- *Demonstrating independence in academic pursuits*

- *Building strong content knowledge across the curriculum*

- *Responding to varying demands of audience, task, purpose, and discipline in unique ways*

- *Comprehending information as well as critiquing it, individually and collaboratively*

- *Using educational tools strategically and capably*

- *Understanding other perspectives and cultures*

Four particular goals of CCSS are uniquely suited to technology integration. Students are expected to know how to:

- Produce and publish documents

- Interact and collaborate

- Communicate using web tools

- Evaluate information presented in different media formats

The following thirty projects—five per grade level, kindergarten through fifth—serve as scaffolding for your goal of achieving CCSS goals. All lesson plans have been tested by the Ask a Tech Teacher teachers. All are supported by the Ask a Tech Teacher help team on the [website](#).

How to Use This Book

Before you start, scan the [Common Core State Standards](#) website and the overview provided in the Appendix. The language is easy to understand with helpful tie-ins to grade-level specifics and overarching Anchor Standards

Each lesson in this book is color coded for easy recognition of the CCSS standard being met, as follows:

Yellow   **Math**

Blue   **Reading—Literature**

Green   **Reading—Informational Text**

Purple   **Reading—Foundational Skills**

Red   **Writing**

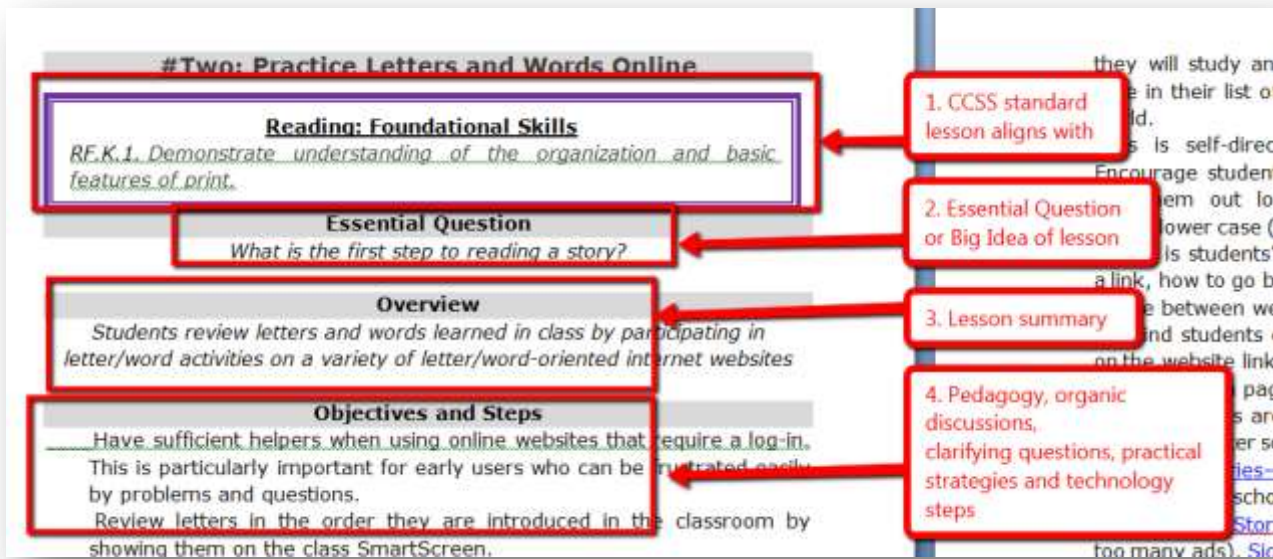**Pink**   **Speaking and Listening**

Blue   **Language**

Orange   **Anchor Standards**

Organization of each lesson is as follows:

Where for-fee software and products are used in lessons, an effort has been made to cross-reference free products that will accomplish the same goals where possible. There will be some adaptation required to make them work, but we've purposely selected those that are most compatible.

We've included blank lines in front of each concept so you can check it off when completed. We've heard from many users of our K-6 Curriculum and Toolkits that the nature of technology in the classroom often precludes completing an activity in one sitting. It's useful to track where you ended so you can pick up at that stopping point when you're ready to continue.

A note: When using installed software, projects are designed for a Windows-based PC. If you have a different operating system (say, Linux or Mac), you'll need to adapt the instructions.

Additional note: Embedded links are active only in the PDF/digital version of book. Contact the publisher to find out how to get a discounted PDF with your Proof of Purchase.

About the Authors

Structured Learning IT Team provides classroom teachers with practical knowledge, pedagogical articles and materials, how-to books, tips and tricks, and the tools required to fulfill the technology goals of the 21st century classroom. All textbooks, workbooks, and tools are classroom-tested, teacher-approved with easy-to-understand materials supported by online materials, websites, blogs, and wikis. Whether you are a new teacher wanting to do it right or a veteran educator looking for updated materials, Structured Learning and its team of technology teachers is there to assist you.

Ask a Tech Teacher is a well-regarded resource blog run by a group of technology teachers. It offers oodles of free lesson plans, advice, pedagogical conversation, website reviews and more. Its newsletters and website articles are read by thousands every day, including teachers, homeschoolers, and anyone serious about finding the best way to maneuver the minefields of technology in education.

Jacqui Murray is the editor of a technology curriculum for K-sixth grade, creator of two technology training books for middle school, and three ebooks on technology in education. She is the author of **Building a Midshipman**, the story of her daughter's journey from high school to United States Naval Academy. She is webmaster for six blogs, an Amazon Vine Voice book reviewer, a columnist for Examiner.com, Editorial Review Board member for Journal for Computing Teachers, Cisco guest blogger, IMS tech expert, and a weekly contributor to Write Anything. Her popular technology blog Ask a Tech Teacher is visited by more than 60,000 people every month and her technology articles have appeared in hundreds of online newspapers and magazines.

Table of Contents

FIRST GRADE

#One: Explore the World with Media

Reading: Informational Text--Craft and Structure
RI.1.6. Distinguish between information provided by pictures or illustrations and information provided by the words in a text.

Integration of Knowledge and Ideas
RI.1.9. Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).

Range of Reading and Level of Text Complexity
RI.1.10. With prompting and support, read informational texts appropriately complex for grade 1

Essential Question
What differences can I discover from different media?

Overview
Students explore world symbols (or similar) in a variety of media to discover how information varies depending upon the source.

Objectives and Steps

_____Pick a central idea relevant to current classroom discussion. Explain that students will explore this theme in a variety of media and discuss the differences in what was discovered through these methods.

_____As an example, we'll pick the topic 'world symbols'.

_____Have students select the media. Possible choices are books, videos, music, discussion, oral presentations, and Google Earth.

_____Explore the theme during library time and classroom center time, using books, magazines, music, or other media selected by students.

_____When it's computer lab time, guide students to a variety of age-appropriate and child-friendly online libraries. Here are seven child-appropriate search engines:

- Sweet Search
- Kigose
- KidRex
- KidSafe
- KidsClick
- QuinturaKids
- Ask Kids

_____Take this opportunity to discuss copyright protections and plagiarism with students at an introductory level. [Click for a list](#) of age-appropriate websites on safe surfing (scroll down to section on 'technology').

_____For images, try one of these two alternatives: 1) set up Google with the safe search functions set to 'strict', and 2) set up a file folder of 'world symbols' images that students use for this activity.

_____From this research, ask students to select five-ten 'world symbols' they would like to dig deeper into by viewing *in situ* via Google Earth.

_____Introduce Google Earth. Explain the screen layout. Explain how to zoom in/out, drag the globe to find locations, and use 3D buildings and street view (both highly popular with first graders).

_____Give students plenty of time to explore before getting down to work. Let them use the international tour that comes with the Google Earth.

_____When they're ready to begin, show students how to 'fly to' a destination and explore it using Google Earth's tools.

_____Students may work in pairs as they visit locations on the list they built. When completed, encourage students to be adventurous and explore locations of their own choosing.

_____When the research is completed, gather students for a conversation about the difference between information collected from images, written text (and other media they used) and first-hand experience (with Google Earth). What varies? What do they see in the Google Earth images they didn't pick up from the books and websites? What are similarities? How do these 'real' images scaffold comprehension of the bigger question? Which did they like better?
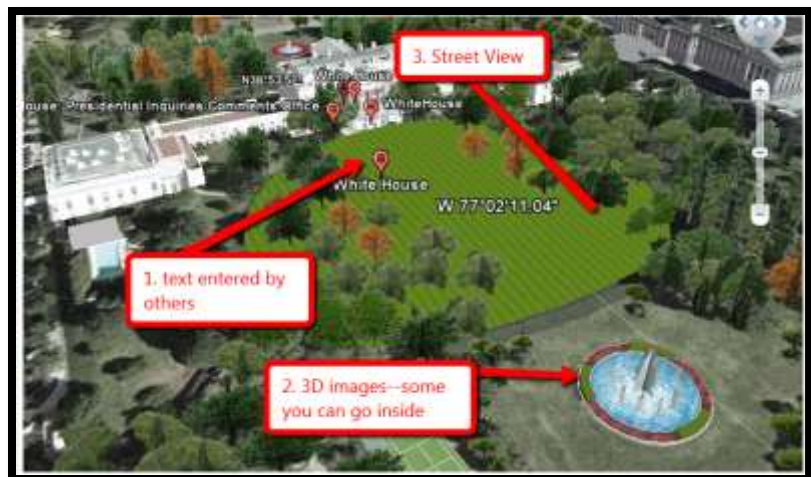
Appropriate for Grades 1-5 with adaptations

FOURTH GRADE

#One: Google Earth Literary Tour

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Writing: Text Types and Purposes
W.4.3. Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.

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Essential Question
How can the story's location make it more real?

Overview
Students create a Google Earth tour about a book being read in class.

Objectives and Step

___Review Google Earth with students (click image to visit download site). What do they remember about this program from prior projects? Have they used it outside of class? Share memories.

___Take several Google Earth tours created by students last year (or use the installed one that comes with the download) to remind learners how tours work.

___Notice 1) tour locations are all stored in one file folder, and, 2) tour goes in the sequence locations are placed in file folder.

___Ask students to share practical strategies for using use Google Earth based on prior experience (by fourth grade, many students have used this for several years). If there are questions, see if classmates can answer them before providing the answer. Make sure students know how to find a location, add it to 'Places', and activate 3D Buildings and Street View.

___Discuss the book being read in class. Review setting locations, how characters are affected by where they are geographically, how the author makes each location come alive with his technique and descriptive details.

___Students will use Google Earth to place themselves in situ with the characters—see what they see, walk the streets they walk with Street

View, study the buildings around them with the 3D layer--gain a rich understanding of the world they live in. For examples, click www.googlelittrips.com/GoogleLit/Downloads_etc.html

____Work in pairs for this project. Make a file folder under 'Places' with a unique group name. This is where all locations will be saved, in the order they are visited in the story.

____Fly to the location where the book starts. Explore the geography. Why is this the locus for the plot? Is it the people? The terrain? The blistering heat? Or the poverty? What about this location serves as incubator for the plot?

____Mark this starting point with a placemark with the book title. Use a customized placemark for all tour locations. Add a synopsis of the story in the dialogue box similar to the back flap on a book—a scintillating overview to pull the reader in.

____Add five-ten more placemarks, each at critical plot points and significant locations in the story. In each dialogue box, tell how this location enriches the story and moves it forward. Include descriptive details you discover by exploring the location with Google Earth. Additionally:

   o *In three placemarks, include images as well as dialogue to enhance the story message.*
   o *In three placemarks, include links to resource sites allowing readers to dig deeper into interesting ideas in the book*
   o *Add image overlays for the story's three main characters*

____Each class period, back-up the group 'My Tour' folder to both student network folders. This is critical because most school computers are used by multiple students.

____Extension: When tour is completed, record it using GE's 'Record a Tour' tool: Click on each location, wait for about three seconds, then click on next locations in sequence. You can add a voice-over if desired. Save recording to network folder.

____When done, run tour to be sure it works.

____Save all tours to a wiki page called 'Book Reviews'. Add a summary of the book and a link to the Google Earth Tour. This becomes a resource for other fourth graders interested in finding out about the story.

____Alternative: Create a tour based on history being studied, i.e., Worldwide Civil Wars.

Appropriate for grades 4-5.

#Five: Interactive Timeline

Essential Question

*How can I visually understand the order of activities in an event?*

Overview

Have students recount the history of an event using text, visual, audio to develop ideas and themes

Objectives and Step

_____Pre-sell this project by creating a class timeline on one of the units of inquiry--a book being read, a history chapter, or class events (like holidays, birthdays, field trips, project due dates—the inclusions are endless). Post it to the class wiki, website, blog, or on the wall of the classroom. Update it daily. It won't be long before students are checking to see what has been added, making their own suggestions, and eager to create their own.

_____Students work with a partner to create a timeline that recounts the history leading up to a particular event (tied into classroom discussion).

_____Research a topic and gather ten sequential dates of events with several sentences explaining the importance of each date. Include one image, audio, or video for each date. Keep a list of sources. Research sites
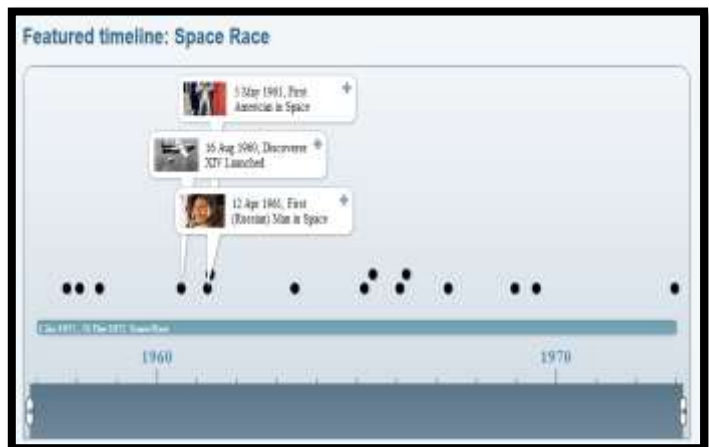
include encyclopedias, newspapers, internet websites, magazines, and more.

_____Timelines will be created using a free web-based tool like XTimelines or TimeToast. Both require a free online account, but make it easy to set up a project and add events. Text and images are included to scaffold comprehension of the central idea (XTimelines also allows videos and other embeds). Try both and select the one that works best with your group of students.

_____Share timelines created by prior fourth graders so current students get a better understanding of expectations.

_____Create a sample timeline so students can see how it works.

_____Have each group of students create a timeline with at least ten events and ten images/videos, using appropriate facts and relevant, descriptive details to support main ideas or themes. Drag each event to its correct temporal order.

_____Check grammar and spelling, and sentence fluency. Be sure the main ideas are clear and well developed. All facts should be accurate, relevant, and appropriate. Detail should be descriptive. Media should reinforce text, and both text and images should convey the same message. As a whole, all forms of media should enhance the development of the central ideas or themes

_____When the timeline is completed, use the embed code to publish it to the class wiki or website.

_____Have students present their timeline using the class SmartScreen. Drill down to videos and/or links to provide detail for dates and events. Speak clearly, at a pace that is easily understood, and a volume that can be heard throughout the room.

_____Have students watch each other's video to see if the message is clear. If feedback indicates changes are required, students can edit the video, add more pictures, audio or text to better convey their message.

_____Alternative: Have students collect all events in a history unit being studied. Post them to the SmartScreen as a list and have students create a timeline showing their temporal location.

Appropriate for Grades 4, 5

More Common Core help from Structured Learning and Ask a Tech Teacher:

- **The Key to Aligning Your K-5 Class with Common Core State Standards:** *30 Projects that integrate technology into Core lesson plans*
- **The Key to Aligning Your Kindergarten Class with Common Core State Standards:** *5 Projects that integrate technology into Core lesson plans*
- **The Key to Aligning Your 1st Grade Class with Common Core State Standards:** *5 Projects that integrate technology into Core lesson plans*
- **The Key to Aligning Your 2nd Grade Class with Common Core State Standards:** *5 Projects that integrate technology into Core lesson plans*
- **The Key to Aligning Your 3rd Grade Class with Common Core State Standards:** *5 Projects that integrate technology into Core lesson plans*
- **The Key to Aligning Your 4th Grade Class with Common Core State Standards:** *5 Projects that integrate technology into Core lesson plans*
- **The Key to Aligning Your 5th Grade Class with Common Core State Standards:** *5 Projects that integrate technology into Core lesson plans*
- **Common Core lesson plans by strand**

  - *Math*
  - *Language*
  - *Reading*
  - *Writing*
  - *Speaking and Listening*

- **Common Core webinars**