Common Core, Technology, & PBL – Recipe for Learning

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Do you see Common Core as “just refilling a bucket”?

1. Fill the bucket
2. Empty it.
3. Fill it again.
4. Empty it again.
5. Repeat steps 1 through 4.
I will do it because the state says I have to..
The Common Core: What Teachers Really Think

58% feel "somewhat" prepared for the new standards.

14% feel "very" prepared.

23% don't feel prepared at all.

ABOUT HALF are "very" or "somewhat" concerned about finding aligned resources for math, ELA, science and social studies.

ONLY 1 in 5 say their students' parents are aware of the Common Core.

TOP CONCERNS
- Understanding the standards
- Assessment
- Student engagement
- Lack of professional development

*Based on a July 2012 WeAreTeachers survey of 540 K–12 teachers.

www.weareteachers.com
Are technology applications part of Common Core??
"Inquiry-driven and project-based learning makes sense for today's learners because it gives them the opportunity to connect the work they do in school with the larger world around them. We must stop saying that school is "preparation for real life" and acknowledge that school is real life for the kids while they are in it. Project-based learning allows that to happen in powerful, meaningful ways."

Chris Lehman
The Common Core Standards
3rd Grade

RI.3.5 - Use text features and search tools (e.g. keywords, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.

W.3.8 - Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.
4th Grade

RI.4.7 - Interpret information presented visually, orally, or quantitatively (e.g. in charts, graphs, diagrams, timelines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.

W.4.6 - With some guidance and support from adults, **use technology, including the Internet, to produce and publish** writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single setting.

W.4.8 - Recall relevant information from experiences or **gather relevant information from print and digital sources**; summarize or paraphrase information in notes and finished work, and provide a list of sources.
5th Grade

RI.5.7 - **Draw on information from multiple print or digital sources**, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.

W.5.6 - Conduct short research projects to answer a question (including a self-generated question), **drawing on several sources** and generating additional related, focused questions that allow for multiple avenues of exploration.

W.5.8 - Gather relevant information from **multiple print and digital sources**, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
6th Grade

W.6.7- Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.

W.6.8- Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.

7th Grade

W.7.7- Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.

W.7.8- Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
8th Grade

W.8.7- Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.

W.8.8- Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
9th-10th Grade

(9-10) 7. Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; **synthesize multiple sources on the subject**, demonstrating understanding of the subject under investigation.

(9-10) 8. Gather relevant information from **multiple authoritative print and digital sources, using advanced searches effectively**; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.

11th-12th Grade

(11-12) 7. Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; **synthesize multiple sources on the subject**, demonstrating understanding of the subject under investigation.

(11-12) 8. Gather relevant information from **multiple authoritative print and digital sources, using advanced searches effectively**; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.
Mastery Connect App/Widget

Free Common Core App

Access the Standards Anytime, Anywhere. We've made it easy to access the standards from any mobile device and have synthesized the College and Career Readiness Standards for Language Arts and included the traditional and integrated pathways for Math. Download the app today by clicking on the store icons below, or simply search for “Common Core Standards” in the iTunes App Store, Android Market, or Windows Store.

Embed the Common Core Widget!

Get the widget on your website or blog. It's simple to get our much-talked-about Common Core app right on your own blog or website. Embed it into a page like you would embed a YouTube video or get the tab widget for your whole site! (like the tab on this page). Learn More...

Get the App for your iPhone or Droid; Embed the Widget on your web site.

www.masteryconnect.com

Example of embedded widget
Learn Zillion Web Site
Download for iPad, iPhone, iPod Touch
Download for Android Devices
TN Core Web Site

http://www.tncore.org/
Why Project Based Learning?
Combining CCSS, technology, and project based learning sounds like a lot of work. How will it help my students?

- Interdisciplinary Learning
- Collaboration
- Promote Inquiry
- Support Self-Directed Learning
- Motivate
- Target a Variety of Learning Styles
More Reasons for PBL

- PBL Helps Students Develop Skills for Living in a Knowledge-Based, Highly Technological Society
- PBL Asks a Question or Poses a Problem That Each Student Can Answer
- PBL Asks Students to Investigate Issues and Topics Addressing Real-World Problems While Integrating Subjects Across the Curriculum
Where do I start?

- Start with an Essential Question based on Common Core Standards
- Design a plan for the project. Include students in this planning process. Integrate as many academic disciplines as possible.
- Create a schedule with benchmarks.
- Monitor student progress along the way.
- Create rubric to assess learning outcomes.
- Evaluate the overall effectiveness of the project and make adjustments.
A few extra bits of help...

- Biggest mistake in PBL is designing a smorgasbord of activities across the curriculum and trying to fit in the standards.
- Launch with a bang
- Set the scene
- Importance of Visual Prompts
- Launch Field Research
- Invite Guest speakers
PBL Resources
Buck Institute

http://www.bie.org/
The Buck Institute has a searchable data base of more than 450 projects for learning.


Project Based Learning “freebies” from Buck Institute can be found at [http://www.bie.org/tools/freebies](http://www.bie.org/tools/freebies)

- Project Based Learning Online Planner: [http://www.bie.org/project_planner/create_new/](http://www.bie.org/project_planner/create_new/)

- West Virginia Center for Project Based Learning — [http://wveis.k12.wv.us/teach21/public/project/Mainmenu.cfm](http://wveis.k12.wv.us/teach21/public/project/Mainmenu.cfm)


- Other Resources:
  - **PBL Online** – Another PBL site that works as a cooperative effort of BIE, Boise State University, and Edutopia.
  - **4teachers** – Home of age-appropriate, customizable project checklists for written reports, multimedia projects, oral presentations, and science projects.
Intel – While Intel is a large company... this link points to a division that focuses on PBL. Intel is worth a visit for some great ideas and resources.

New Tech Network – New Tech is an outstanding group of high schools that are dedicated to PBL in the curriculum.

High Tech High School – High Tech is another high school network growing across the United States using PBL as a model for reform.

Global Schoolhouse - Whether you’re just starting out, or ready for advanced levels — this tutorial will help you to implement collaborative, project-based learning on the Internet.

Project Foundry – Any school investigating PBL must take a look. It is the last of my Land Of PBL only because it does carry a cost. Project Foundry is an online learning management and student portfolio system that allows innovative educators to scale authentic, integrated, individualized learning. It really works well in a connected online environment. You will find that this fee-based system includes integration with online tools such as Google Apps and Moodle.

Challenges of Assessing Project Based Learning from the District Administrator Magazine – Article
The Teaching Channel

https://www.teachingchannel.org/
Resources and Ideas for Integrating Technology
OMG! I JUST GOT BORN!
“Anyone following me on Twitter already knows what I did this past summer.”
“It’s called ‘reading’. It’s how people install new software into their brains”
When introducing new technology skills to students through PBL, it is a good idea to provide an online technology tutorial. (See example here)

Can collaborate with media specialists, technology teachers, older students to help with this.
1st Grade Community Project
1st Grade Community Project

Tools Used

- iPad Camera and Video
- Sonic Pics App
- Publish to You Tube
- Publish to School & District Web sites
- Used by Visitor’s Bureau
8th Grade Constitution Project

- **Essential Question** - Is the US Constitution a living, working document?

- **Project Description** - Students will assume the role of Constitutional scholars who have been hired to summarize the Constitution for new citizens who are preparing to take the American citizenship test and represent the American system of government in a meaningful manner. As part of this task, they will be assigned a group, and are expected to produce a product that encapsulates the ideals and principles of the American democracy with blogs and assignments about the Bill of Rights.
Tools for Constitution Project

- iPad Apps – My Constitution and Show Me
- Blog for discussion – Edublogs
- Thinglink ([Examples](http://example.com) of Thinglink)
6th Grade ELA/SS Project

- The intention of this PBL activity was to extend the students’ recent SS/LA project they created for the SS Fair. Students developed a project for SS, along with writing a Process Paper for LA, explaining their projects.
- Teacher introduced project with an avatar.
- Students used online tools to publish a storyboard of the project.
Tech Tools for ELA Project

- **Storyboard That**
  (Example from special needs student)

- **Voki**
  Example of a Voki
6th Grade Science Project

- **Essential Question** - What big ideas guide human understanding about the origins and structure of the universe, Earth’s place in the cosmos, and observable motions and patterns in the sky?

- **Guest lecture** from UT Physics/Astronomy Dept. to kick off “SPACE NIGHT” at the school. Will include families to view space with telescopes.
Tech Tools for Science Project

- Distance Learning – Virtual Field Trip to NASA
- Online Research including instruction on effective search practices
- IWB and Active Vote technology for formative assessment
- Video Conference with UT Physics/Astronomy Dept.
- Student Blogging
- Video for parents on completed projects
8th Grade Mouse Trap Project
8th Grade Mouse Trap Project
Tech Tools for Mousetrap

- Prose Point
- Read, Write, Think Printing Press
- Newspaper Clipping Generator
Technology Tools for PBL
Why Should Students Blog?

- Creating positive digital footprints
- Practice communicating with digital tools
- Transparency of curriculum for school/home connections
- Helps students learn about managing web tools
- Builds effective digital citizenship
- Pride in work – writing for a global audience
Ideas for Class Blogs

- Classroom newsletter
- Daily lessons
- Showcase projects (photos and videos)
- Book reviews written by students
- Collaborative writing assignments
- Create KWL activity
- Data collection
- Posting visual writing prompts
- Book club
- The New York Times Common Core Lessons
Blog Hosting Sites

- **Edublogs** – Free educational blog hosting for teachers and students
- **Blogger.com** – A great starting site to get a taste of blogging, very easy to use.
- **Kidblog** – Simple, safe blogging for students
- School web sites
- **Edmodo** – Safe, free, online social network
Digital Storytelling & Book Book Trailers

- Windows Movie Maker – creating digital movies
- iMovie - creating movies
- Animoto – creating videos
- Netvibes – blogs, videos, and photos
- Kerpoof – illustrate writing and videos
- Fluxtime – animated videos
- Stupeflix – creating videos
- Photopeach – creating videos
Interactive Posters/Presentations

- **Glogster** – interactive posters using video, music, and documents
- **Flickr** – image sharing
- **Google Docs** – spreadsheets, word processing, surveys, and presentations
- **Open Office** – spreadsheets, word processing, and presentations
- **Pinterest** – Online pinboard
- **Beesclip** – Digital Scrapbooks
- **Zoho** – spreadsheets, word processing, and presentations
- **VoiceThread** – images, documents, and videos ([Examples](#))
- **ccMixter** – music
- **Wordle** – vocabulary cloud
- **Easel.ly** – Infographics
- **Visual.ly** – Infographics
Audio/Video Podcasts

- **Audacity** – audio recorder and editor
- **iTunes** – music, videos, and podcasting
- **Garageband** – audio editing and recording
- **Free Music Archive** – music
- **Vocaroo** – voice recording
- **ButtonBeats** – create music online
- **Incompetech** – royalty free music
Collaborative Sharing

- **Wikispaces** – Class Wiki or Currate Information
- **Twitter** – All
- **Livebinders** – Sharing resources or summarizing learning
- **Skype** – Book Trailers and Presentations
- **Dropbox** – File Sharing
- **Class Blog** – All
- **VoiceThread** – Interactive Posters/Presentations
- **School Tube** – Videos
- **YouTube** – Videos
- **Vimeo** – Videos
Infographics

- **Easel.ly** create and share visual ideas online.
- **PiktoChart** create and share visual ideas online.
- **Tableau Public** more sophisticated - free download software
- **Many Eyes** more sophisticated - online use with registration.
- **Wordle** - “Word clouds” that give greater prominence to words that appear more often.
- **Hohli** - online cart builder
- **Creately** - online diagrams
- **StatWorld** - Interactive, downloadable maps on an amazing range of data
- Any Graphic design platform ex. PowerPoint, Publisher, or **Serif Draw Plus** (free download)
- Online Graphic Design tools such as **Sumopaint, Glogster**
- **Screen Capture** - if you can't download an image
Global Projects

- http://www.projectnoah.org/education
- http://www.earthdaybags.org/
- http://aroundtheworldwith80schools.net/
- http://thenorthschool.com/writersclub/
- http://www.projectsbyjen.com/
- http://karlfisch.wikispaces.com/AWNM11
- http://lightingtheway.pbworks.com/w/page/1846752/FrontPage
Math Projects

- **Reframe the term "Real Life" Math** - redefining the word "problem"

- **Pick or Make the Appropriate Time** – choose a unit that takes more than a week or two.

- **Pick a Standard with Easy Real-Life Application** – don’t design a project to fit a standard. Let the standard dictate the project.
Math Projects

- Google Sketch Up Teacher Guide
- Yummy Math
- Project Based Learning in Math
- Illuminations from NCTM
- Gizmos
- Numberphile
QUESTIONS?
Final Resources

- Common Core Tech Projects
- The Teacher’s Tech Lounge
- Common Core Page from Teacher’s Tech Lounge

![QR Code]