TIPS&TACTICS

"Collaboration is an essential skill to success beyond high school."

Common Core Standards:
Transforming Teaching with Collaborative Technology

CATLIN TUCKER

The concept of group work—collaborative efforts by students—intrigued me from the earliest days of my teaching career.

I understood the myriad benefits of grouping students together to tackle challenges, explore topics, and work jointly to create a finished product. Unfortunately, the reality, in most cases, was very different from what I had hoped to achieve. There was no equity in student contributions during group tasks. One student usually dominated the work while the others chatted about random, unrelated topics. There was never enough time, and the finished product was almost always disappointing. It was not until I was able to embrace a blended learning model that combined online engagement with work in the classroom that I was successful in having students complete collaborative tasks.

Collaboration is an essential skill to success beyond high school. The Common Core Standards require students to "use technology, including the Internet, to produce and publish writing and to interact and collaborate with others."[1] In addition to collaborating online, students must "prepare for and participate effectively in a range of [real-time] conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively."

The process of working with others to produce or create something requires strong communication skills, a willingness to be open minded, and the understanding that the group's potential far exceeds any one individual's contributions. So how do we support students in cultivating the skills that are necessary for successful collaboration?

Luckily, educators today have access to a wide array of free technology geared toward fostering collaboration online. The relative ease of using these tools to group students, encourage communication, and drive creative problem solving make it possible to blend instructional mediums to engage students both inside and outside the classroom. Teachers are no longer limited to in-class group work to help students develop these competencies.

Collaboration requires that students be actively involved in the learning process. This is a new role for many students, who are used to sitting quietly in class passively consuming information. As a result, students need learn *how* to actively engage with their peers to tackle academic challenges and become confident producers of information if they are going to be competitive beyond secondary school.

As schools deal with massive budget cuts across the nation, many teachers do not have the necessary professional development to support them in transitioning to the Common Core Standards. Increasingly, librarians and media specialists are becoming leaders on school campuses to support teachers in exploring technology and effectively integrating it into their curriculum.

I want to highlight some of the tools available to educators that can help them support their students in developing their communication and collaboration skills. Many of these tools offer educators the opportunity to share their best practices and lessons with each other. It is becoming easier for educators who may live and work on opposite sides of the globe to collaborate and learn from one another. With the guidance of a librarian and media specialists, teachers can explore how technology can be used to replace and improve what they already do instead of adding to their workload. They can also learn how to access a growing wealth of teacher-generated resources available on the Internet.

COLLABORIZE CLASSROOM: ONLINE DISCUSSIONS

I use Collaborize Classroom, a free online discussion platform, to teach communication skills and facilitate group discussions, debates, writing assignments, and group work. Most learning management systems

Which alternative energy source is the most viable option for replacing fossil fuels?

Select the alternative energy source you believe makes the _most_ sense for replacing fossil fuels and defend your position. Use evidence and a clear explanation to support your position.

Once you have posted your response, read the responses posted by your peers and reply thoughtfully to _at least two_ other students. Ask questions, compliment strong points, make connections, and build on ideas shared!

Image Credit: Flikr - www.flickr.com/photos/10588069@N00/545664157

○ Solar
○ Wind
○ Hydroelectric
○ Nuclear
○ Hydrogen
○ Bio fuels

have threaded discussions or a discussion board; however, I selected Collaborize Classroom because it focuses entirely on dynamic discussions. There is a variety of question types to structure discussions, teachers can embed media, and there is a results page where the outcomes of a conversation can be published in a colorful chart.

Teachers in upper elementary through postsecondary are using this discussion site to create online learning communities to complement their in-class work. The Common Core Standards state that students as early as kindergarten, "with guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers." This writing standard, which stresses the use of online tools to publish and collaborate, make it necessary for teachers to explore safe spaces where they can begin to cultivate these skills.

RESULTS PAGE

Taking discussions online makes it possible for teachers to overcome many of the barriers that impede in-class conversations. Instead of a few students dominating the discussion, there is equity in the contributions. Students have the time and space to consider a question, articulate a response,

and read the responses posted by their peers. This asynchronous flexibility makes it possible for every student to have a voice, which is necessary if they are "to understand other perspectives and cultures." This realization that other students in a class have different points of view or are influenced by their cultural backgrounds and past experiences is a necessary component of being college and career ready.

Online discussions are also an effective tool to teach students how to communicate

in a respectful, supportive, and substantive way. These communication skills must be taught with intention. Too often teachers assume that students, as "digital natives," know how to navigate this space. They spend hours updating Facebook pages and firing off text messages, but they rarely see the impact their words have on others. They do not see the expression on the faces of the people receiving their messages. It is critical that they learn how to communicate orally and in writing, in person and online, to be successful in our rapidly evolving global economy.

I realized quickly that I needed to create a safe space online in the same way that I created a safe space in my classroom. I began by giving students a "Dos and Don'ts List for Online Communication" to ensure that students knew exactly what was appropriate in their online interactions. I engaged them in fun icebreaker activities to foster relationship building. Then we slowly built on that foundation, and I provided strategies for "Saying Something Substantial." I wanted to make sure students knew how to contribute to the conversation in a substantive way to ensure that the quality of conversations remained high.

This early work supporting students paid off as they quickly learned how to engage in academic conversations in a respectful and substantive manner. They also

Which alternative energy source is the most viable option for replacing fossil fuels?

Posted By Catlin Moderator to 2A Discussion Qs

Results
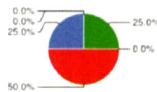
Here are the results of our debate.

■ Solar
■ Wind
■ Hydroelectric
■ Nuclear
■ Hydrogen
■ Bio fuels

UnPublish Result   View Topic Details

The Virtual Learning Commons

Knowledge Building Center

- Collaborative Learning Experiences
- Exemplary Learning Projects
- Salute to Learning
- High Level Thinking
- Creativity
- Informal Learning
- Constructivist Learning
- Participatory Learning

School Culture

- Living School Yearbook
- Sports
- Music
- Performances
- Winners
- Fun
- Candid Camera
- Best of the Best
- Spotlights
- Who's Who

The Information Center

- OPAC
- Databases
- Calendar
- Learning Commons Blog
- Events
- Resources
- News
- Get Involved
- Events
- Orientation Videos
- ITeam News
- Links Galore

The Literacy Center

Experimental Learning Center

The Inform...

- Reading
- Writing
- Speaking
- Listening
- Book Clubs
- Book Trailers
- Celebrate Writing

- Movie Reviews
- Best Student Videos
- Best Nonfiction Reads
- Reading Initiatives

- School Improvement Center
- Try, Test
- Succeed, Fail, Try Again
- iTeam

- Demonstrate
- School Initiatives
- Documentation
- Professional Development

At the Center of Teaching and Learning

learned how to drive dynamic discussions without my involvement. These skills were the groundwork for the successful collaboration that blossomed out of their ability to clearly express themselves, engage respectfully with their classmates, and understand that the other thirty students in our class were incredibly valuable resources.

Above is a screenshot from an online discussion that took place at the start of second semester. It demonstrates the substantive nature of the online discussions in my classes. More than anything I did with my students, online discussions were essential in cultivating communication skills and raising awareness about our collective intelligence, which is so critical to successful collaboration.

I was surprised when the communication skills they developed online translated so seamlessly to the classroom. Students entered my class talking about discussions from the previous night. They began using each other's names in class and referring to specific ideas shared in the online space. As a result, our in-class discussions and group work were transformed. Students were more confident in their abilities and more eager to participate.

Teacher librarians can model the use of online discussions by inviting teachers to participate in an online book club using a technology like Collaborize Classroom. Engaging with other staff members using a specific technology provides teachers with an opportunity to explore the technology in a comfortable and enjoyable context.

Introducing a technology and allowing teachers to "play" with it helps them overcome many of the fears that can create a barrier to use. If teachers see the value of their online conversations, they are more likely to use the technology with their own students. It is also helpful to provide teachers with resources to support their efforts integrating technology. For teacher librarians interested in exploring this idea, there are resources available to them and the teachers on their campus regardless of the online discussion platform they use. There is a Collaborize Classroom Book Club sheet that provides an overview and a Book Club Facilitator's Guide with best practices, tips, and examples.

The Collaborize Classroom Topic Library makes it possible for teachers using the discussion site to archive and share their discussion topics with a global audience of educators. Currently, the Topic Library—a free extension of Collaborize Classroom—has over three thousand teacher-designed topics for a variety of subject areas and grade levels.
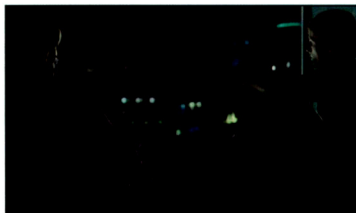
GOOGLE DOCS

Google offers an array of free tools aimed at making collaboration simple. Google Docs is a suite of applications that include documents, forms, spreadsheets, drawings, and presentations. These can be shared with a single student, a group of students, or an

Book Club - The Hunger Games: Did Peeta stay true to himself?

As Peeta prepares to enter the Games, he tells Katniss "I want to die as myself...I don't want them to change me in there. Turn me into some kind of monster that I'm not." Does Peeta stay true to himself during the Games? Why or why not?

After posting your response, read your classmates' opinions and respond to someone who shared a different point of view. Did their explanation change your mind? Do you agree with any of the points they made?

image Credit: http://everyboutany.blogspot.com/2012/02/roof-top-sensations.html

YES

NO

entire class to allow easy synchronous or asynchronous work on a shared document.

Google Docs offers a vehicle to teach students how to communicate and collaborate while simultaneously helping them develop strong content knowledge. For example, English teachers who want to teach students how to read actively to comprehend complex texts can use a Google document to engage students in group annotations and discussions.

Teachers can copy and paste texts into the left column of a document and allow students to annotate and discuss the text in the right column. This makes it possible for students to use tools like "Define" or "Research" within the document to "determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials."

In addition to identifying vocabulary that is unfamiliar, students are encouraged to "read closely to determine what the text says explicitly and to make logical inferences from it." This can be challenging task, so it is helpful if students are encouraged to discuss the text and ask questions using the "Comments" feature or the real-time chat feature within a document. This creates a support network of peers who can offer insights and answer questions. Instead of traditional pen and paper homework, which leaves many students floundering when they encounter a question they do not understand, this is more engaging and fosters relationship building. As students lean on one another for support, ask questions, share ideas, and learn from each other, they begin to recognize peers as valuable resources in the class.

History and social science teachers who want to empower students can use Google Docs to group students and allow them to research a topic, become experts, and present that information to the class. This approach to flipping a lecture by allowing students to research and present the content addresses multiple Common Core Standards in a single activity.

First, students must research their topic using a shared Google Doc and utilize the "Research" tool. In doing so, students address writing anchor standards by conducting "short as well as more sustained research projects" and "gather relevant information from multiple print and digital sources."

Using the research tool inside of the Google document makes it possible for students to explore digital resources as a group to evaluate those online resources, identify key pieces of information, and discuss the importance of the facts they've found in relation to their topic. This teaches students to look at information with a critical eye, then consider how to present that information in a way that will interest other students.

Google Docs also makes it possible for students to create dynamic multimedia presentations to share their ideas with the class. It is important that students become media literate and learn how to communicate using images and video in addition to text.

Students today are inundated with media, but many do not think critically about the impact or purpose of media. Providing students with opportunities to create presentations requires that they "integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally." They have to think about details like citation or how an image might add to or detract from the content in their presentation. There are times when a picture can say more than words, but there are moments when a picture will distract or confuse an audience. These nuances of working with media are important to discuss with students to en-

GRAPHIC NOVELS

DC'S NEW 52

Catwoman Vol. 1: The Game. 2012. $14.99 (9781401234645) Grades 10 and up
Wonder Woman Vol. 1: Blood. 2012. $22.99 (9781401235635) Grades 9 and up
Batwoman Vol. 1: Hydrology. 2012 $22.99 (9781401234652) Grades 9 and up
Batman Vol. 1: The Court of Owls. $24.99 (9781401235413) Grades 7 and up

In 2011, the publisher of nearly every contemporary comic featuring the iconic superheroes of the golden age scrapped its most familiar lines and restarted the continuity of its signature universe. This is hardly the first time a major publisher has pulled such a stunt, but DC's relaunch is a uniquely savvy spin on the tradition. With 52 books and new titles phased in as less successful ones are eliminated, DC seems to be thinking of the relaunch as a chance to maintain a market presence characterized by new ideas.

For libraries, the relaunch signifies a visible jumping-on point for the new continuities. All of the titles have been reset to volume one, so the start of the new continuity—with contextualized explanations for new readers—is easy to spot. There are some poor titles in the new lineup, but most have already been eliminated, so the ongoing series promise good reading.

Catwoman, which will be more risqué than most other titles on library shelves, adds a humanity to Batman's favorite villain, resulting in a character driven more by grief and self-realization than greed. *Wonder Woman*, probably the strongest title in the catalog, borrows from Diana's mythological roots to raise the stakes of the story considerably. *Batwoman*, illustrated by one of the most innovative creators at DC, is a moody experiment in color and layout that succeeds at every level. And *Batman*, too, shows a level of experimentation with form and setting that is routinely absent in stories about comics publishers' marquee characters.
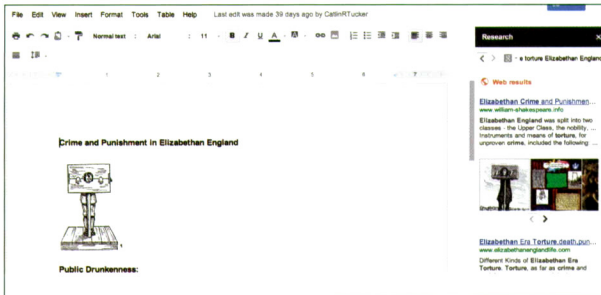
sure that they are able to "present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience."

The Common Core Standards for math emphasize several points that I think are important to discuss in this conversation about collaboration. When I was in high school, my math class consisted of reviewing a chapter in the math book then solving a collection of problems. Needless to say, the whole experience was not inspiring. I did not see the relevance of the formulas I was learning to life beyond the classroom

As I read through the Common Core math standards, I was excited to see a focus on real-world problem solving, higher-order thinking, and writing. Mathematically proficient students "construct viable arguments and critique the reasoning of others." They must be able to "justify their conclusions, communicate them to others, and respond to the arguments of others." This requires that students be able to articulate their process and think critically about the way their peers have approached a mathematical prA Google document can be used to present students with real-world scenarios that require problem solving and creative thinking. For example, in the document below I have inserted two images of two different types of hair gel. I have included hyperlinks to more product information. These two products essentially do the same thing, but this challenges students to look closely at the information about each gel. How many ounces does the bottle contain? How much is recommended for use? What types of ingredients are used? How much do they cost? Then they have
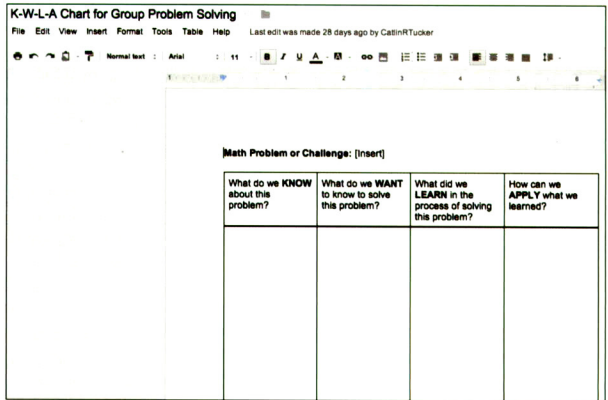
to articulate a position about which hair gel they think is the "best deal" and support that position with evidence and a clear explanation.

I selected hair gel because it is a product many of my high school students are clearly using a lot of, so I knew it was relevant. It's a simple assignment that deals with a real-life scenario—bargain shopping—but also involves several variables and does not have a clear "right" answer. The task engages students in conversation and debate requiring that they clearly state their reasoning and evaluate the reasoning of their peers.

I could have used any number of items to create this document. Teachers who want to engage their students in designing problems for their peers to solve can empower students to create the product comparisons then share them with the class.

Teachers can also use technology to transform traditional exercises, like the K-W-L chart. Adding online engagement makes the process more collaborative and interesting. I adapted the K-W-L chart below and added an "A" to the end to build in an "Apply" section for students. Any teacher presenting students with a challenge can engage them in groups using Google Docs to brainstorm what they know about the problem, what they want to know, what they learned, and how they can apply their knowledge. The beauty is that their interactions and ideas are cap-

tured online and remain there for future reference and reflection.

Teacher librarians who want to share Google Docs with teachers on their campus should encourage teachers to begin by signing up for Gmail, which automatically provides them access to the full suite of Google apps. The template gallery available through Google Docs is a great resource for teachers using Google to create templates to collaborate and share their best practices.
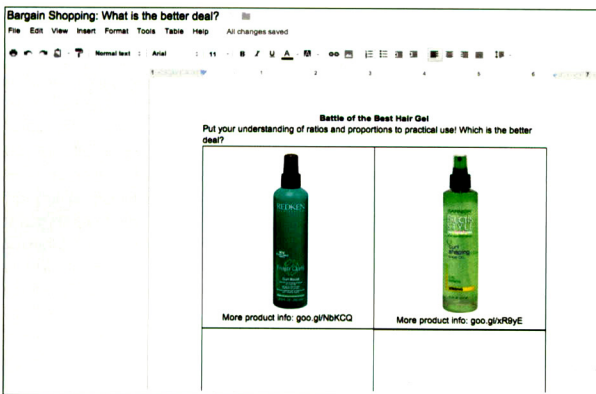
Librarians model the use of Google tools by sharing documents with teachers who have a Gmail address so they can explore the potential for collaboration available via Google Docs. Modeling at every age level is effective for teaching. The more teachers have experience using a tool, the more

likely they are to incorporate that into their teaching practice.

Most teachers are so overworked and overwhelmed by the current state of education that it is daunting to imagine shifting to a new set of national standards. Add to that the task of learning to integrate technology into their curriculum, and it becomes a staggering undertaking. If teachers understood that they could effectively teach a wide range of standards simultaneously with a single online assignment, this shift might not feel so overwhelming. The trick is to show teachers how to leverage the online space and their students' connectivity to actively engage students in collaborative tasks both inside and outside the classroom to prepare them for success beyond high school.

Common Core State Standards Initiative. (2011). "National Governors Association and State Education Chiefs launch common state academic standards." Retrieved from www.corestandards.org.

Catlin Tucker is a Google Certified Teacher and CUE Lead Learner who has taught English language arts in Sonoma County since 2001. She authored *Blended Learning for Grades 4-12: Leveraging the Power of Technology to Create Student-Centered Classrooms.* She writes an education technology blog at www.catlintucker.com and is active on Twitter @CTuckerEnglish.

C O N T

FEATURES