Google Classroom: New Entry for Google Apps for Education

by Dave Wilkins. Google Classroom is a free app for teachers and educators where they can distribute homework assignments and projects to their students. Students in return can submit their assignments and projects without the use of a single sheet of paper. With the advancement of technology and the use of the internet, this app has been very positive for both educators and students.

“Classroom weaves together Google Docs, Drive and Gmail to help teachers create and organize assignments quickly, provide feedback efficiently, and communicate with their classes with ease. And it lets students organize their work, complete and turn it in, and communicate directly with their teachers and peers.” Classroom was designed hand-in-hand with teachers to help them save time, keep classes organized, and improve communication with students.

Some comments made by teachers while using Google Classroom have been very positive:

• “If a teacher is collecting and handing out paper, they’re not maximizing the amount of time they’re actually teaching.”
• “As a first year teacher, it was rough in the beginning, the amount of paper was overwhelming!”
• “I love it, the kids love it, we are using it constantly, and we’ve gone 100% paper-free in under a week!” - Phil Halbig 6th Grade English and Social Studies teacher, EA Hall Middle School, Watsonville, CA

Administrators have said “…our educators are rejuvenated, that teaching becomes new again.” I feel as a former High School student, having assignments distributed and turned in this way is a great way to prepare for college. It’s also a great way to learn how to better use technology at a younger age.

Students have had a positive reaction to this change as well, here are some of their comments:

• “Everything that we need for the class is in one place.”
• “I submit (my assignment) and it’s done, I don’t have to worry about losing it or forgetting to hand it in.”

Benefits for classes

• Easy to set up: Teachers can add students directly or share a code with their class to join. It takes just minutes to set up.
• Saves time: The simple, paperless assignment workflow allows teachers to create, review, and grade assignments quickly, all in one place.
• Improves organization: Students can see all of their assignments on an assignments page, and all class materials are automatically filed into folders in Google Drive.
• Enhances communication: Classroom allows teachers to send announcements and questions instantly. Since students can post to the stream, they can help out their classmates.
• Affordable and secure: Like the rest of our Google Apps for Education services, Classroom contains no ads, never uses your content or student data for advertising purposes, and is free for schools.

Teachers and professors can apply for a preview of Classroom. www.classroom.google.com/signup

By September, Classroom will be available to any school using Google Apps for Education. If your school doesn’t yet have Google Apps for Education, your IT administrator can sign up here: www.google.com/edu/apps/

Google wants to make sure Classroom plays well with others. If you’re a developer or partner, you can sign up to learn more about integrating with Classroom.

Sources: http://www.pcmag.com/article2/0,2817,2457692,00.asp
http://www.google.com/edu/classroom/
NASA Space Place - Comet Quest App
The Rosetta spacecraft approaches Comet 67P/Churyumov-Gerasimenko. Using its thrusters, Rosetta goes into orbit around the comet nucleus. Now you, the player, get to take over the spacecraft in its mission to learn about the mysterious comet. First, you must drop a lander on the nucleus. To land it in an optimum location, your timing must be excellent!

Then, you begin to observe and record interesting events as they occur: craters or cracks opening up in the comet’s surface, water or gas jets erupting, solid chunks of rock and ice flying off, the coma and tail growing brighter. It’s a very busy and exciting place! As solid chunks fly off, you must also avoid them by speeding up or slowing down the spacecraft. At certain times Earth comes into radio view and, when at the proper location in orbit, you must transmit the spacecraft’s data to Earth. Also, the lander transmits its data, which you must also capture and relay to Earth with your next transmission.

All these accomplishments earn you points. Accumulate as many points as possible before your health runs out. Earn bonus points by taking a short, optional comet quiz at the end of a game. Beat your best score or compete with your friends!

Links: iOS App

NASA Space Place - Satellite Insight App
A sea of critical real-time weather data floods into the satellite’s memory grid. A storm full of tornadoes is brewing! The sun is about to blast out a huge solar flare that could destroy satellites! To save lives and protect expensive instruments, the GOES-R weather satellite must not lose any of the data it is collecting. You can help! Bundle like data types together and store them safely before the data grid overflows.

In Satellite Insight, colored blocks falling into columns on a grid represent small pieces of data. When three or more same-colored blocks are touching, tap to select, then tap on the GOES-R satellite to store. Data blocks fall slowly at first, but speed up quickly. Each speed-up also brings a power-up tool you can use at any time to help clear the grid. But if the data piles up past the top of the grid, the game ends. Rack up as many points as you can while you try to beat your friends in the Apple Game Center!

NASA’s Space Place is an NASA educational website about space, technology, and Earth sciences. It targets upper-elementary-aged children.

Links: iOS App

Updates for Space Place Apps for Mobile Devices
Not only is NASA’s Space Place constantly developing brand-new content, they also strive to make sure that their existing products are as up-to-date and as exciting as possible.

They are pleased to announce new updates to Comet Quest and Satellite Insight, which include access to Apple’s Game Center. See how well you stack up against players from around the world! If you prefer to play on your home computer, you can still do that too, both games are available at NASA’s Space Place.

Space Place Prime, which includes a selection of the latest NASA Earth and space images and videos, as well as a rotating selection of Space Place articles and activities, is now available on Android devices.
Free Digital Citizenship Tools - InCTRL
Link: http://www.teachinctrl.org/

Digital citizenship is becoming a critical skill as our world becomes more connected. Students need to be taught how to be safe online, how to find and access reliable sources, and adhere to the ethics of using those resources. They need to know how to communicate with others civilly, and how to protect their privacy online.

InCTRL offers a palette of tools that help students to learn these skills. From the website: “Cable Impacts brings you InCtrl, a series of free standards-based lessons, originally developed by Cable in the Classroom, that teach key digital citizenship concepts. These lessons, for students in grades 4-8, are designed to engage students through inquiry-based activities, and collaborative and creative opportunities.”

Lessons include areas of Communication & Collaboration, Digital Citizenship, Privacy, Media Literacy, Cyberbullying, Ethics/Copyright, and Information Literacy. You can also focus on subject-specific ideas, integrating digital citizenship topics into your class subjects: English/Language Arts, Science, Math, Social Studies, and Library/Media Center.

Free Education Webinar Series from NASA Educator Professional Development

NASA Educator Professional Development is presenting a series of free webinars open to all educators. Join NASA education specialists to learn about activities, lesson plans, educator guides and resources to bring NASA into your classroom.

The Adventures of ECHO the Bat: A Project-based Lesson
Audience: Pre-service and In-service, Home School and Informal Educators of Grades 5-8 - Event Date: May 8, 2014, at 6:30 p.m. EDT

During this 60-minute webinar, participants will learn how remote sensing and false-color satellite images are used to allow their students to follow Echo, a bat, on his adventure to his winter hibernation location.

Robotics on a Budget: Engineering Design With Moving Parts
Audience: Pre-service and In-service, Home School and Informal Educators of Grades 5-8 - Event Date: May 12, 2014, at 5:30 p.m. EDT

Learn how to use inexpensive robotics in the classroom to enhance students’ understanding of science, technology, engineering and mathematics.

Things That Go Boom in the Air
Audience: Pre-service and In-service, Home School and Informal Educators of Grades 3-8 - Event Date: May 13, 2014, at 6:30 p.m. EDT

Learn how to “see” sound by building a simple waveform monitor, construct very easy “Bernoulli tents” and learn a Bernoulli activity that will puzzle students and allow them to understand how wings lift aircraft.

Amusement Park Physics With a NASA Twist
Audience: Pre-service and In-service, Home School and Informal Educators of Grades 5-12 - Event Date: May 14, 2014, at 5:30 p.m. EDT

Learn how to implement hands-on classroom activities found in NASA’s Amusement Park Physics Educator Guide. Connections to the Next Generation Science Standards will be included.

Seeing the World Without a Passport: Mission Geography
Audience: Pre-service and In-service, Home School and Informal Educators of Grades K-12 - Event Date: May 15, 2014, at 5:30 p.m. EDT

Learn how to use NASA’s photographs and images of Earth to teach key grade-level-appropriate earth science, mathematics, science, language arts and geography skills.

For more information about these webinars and to register online, visit https://paragon-tec.adobeconnect.com/admin/show-event-catalog.
**Live Video Chat for Students: Dawn Stanley: The Space Launch System - NASA’s Heavy Lifter**

NASA Explorer Schools is hosting a 45-minute live video chat for students in grades 6-12 on **May 13, 2014, at 12:30 p.m. EDT**. During the video chat, systems engineer Dawn Stanley, member of the Space Launch Systems team, will answer students’ questions about NASA’s next heavy-lift vehicle. Stanley provides day-to-day support and mission assurance giving her a unique insight into the development of the new vehicle. Stanley will also discuss her journey to becoming a systems engineer with NASA.

For more information and to participate in the video chat, visit [http://www.nasa.gov/offices/education/programs/national/nes2/home/chat-index.html](http://www.nasa.gov/offices/education/programs/national/nes2/home/chat-index.html).

To learn more about the NASA Explorer Schools project, visit [http://explorerschools.nasa.gov](http://explorerschools.nasa.gov).

Email any questions about this opportunity to NASA-Explorer-Schools@nasa.gov.

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**NES Web Seminar - Chemistry of Water: Mars Exploration - Is There Water on Mars?**

As part of a series of electronic professional development experiences for educators, the NASA Explorer Schools project and the National Science Teachers Association are hosting a 90-minute Web seminar on **May 13, 2014 at 6:30 p.m. EDT**.

Participants will receive an overview of a NASA inquiry-based lesson, “Is There Water on Mars?”. Participating educators will have the opportunity to refresh their knowledge of concepts such as how atmospheric pressure and vapor pressure affect the boiling point of water, and how scientists use that information to deduce if there could be, or ever has been, liquid water on Mars. The featured activity provides many opportunities for incorporating national science, technology, and mathematics learning standards into curricula as well as addressing high school Next Generation Science Standards.

This is the last time this seminar will be offered during the current school year.


To learn more about the NASA Explorer Schools project, visit [http://explorerschools.nasa.gov](http://explorerschools.nasa.gov).

Email any questions about this opportunity to NASA-Explorer-Schools@nasa.gov.

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**Exploration of the Moon and Asteroids by Secondary Students High School Research Program**

The Center for Lunar Science and Exploration at the Lunar and Planetary Institute and NASA’s Johnson Space Center are looking for 10 teams of motivated high school students to participate in a national standards-based lunar/asteroid research program for the 2014-2015 academic year.

Supported by their teacher and a scientist mentor, students undertake open-inquiry research projects that engage them in the process of science and support the science goals of the NASA Solar System Exploration Research Virtual Institute. At the end of the year, four teams compete for a chance to present their research at the Exploration Science Forum held at NASA’s Ames Research Center in July 2015.

Participation in the Exploration of the Moon and Asteroids by Secondary Students, or ExMASS, program is free. Interested teachers must submit an application. Applications must be completed by a teacher and are due May 23, 2014.

For more information and to apply for the ExMASS program, visit [http://www.lpi.usra.edu/exploration/education/hsResearch/](http://www.lpi.usra.edu/exploration/education/hsResearch/).

Questions about the ExMASS program should be directed to Andy Shaner at shaner@lpi.usra.edu.
Student Spaceflight Experiments Program - Mission 7 to the International Space Station

The National Center for Earth and Space Science Education and the Arthur C. Clarke Institute for Space Education, in partnership with NanoRacks LLC, announce an authentic science, technology, engineering and mathematics, or STEM, opportunity for school districts across the U.S. and space station partner nations. The newest flight opportunity, Mission 7 to the International Space Station, or ISS, gives students across a community the ability to design and propose real experiments to fly in low Earth orbit on the International Space Station. This opportunity is part of the Student Spaceflight Experiments Program, or SSEP.

Each participating community will receive a real microgravity research mini-laboratory capable of supporting a single microgravity experiment, and all launch services to fly the mini-lab to the space station in spring 2015 and return it to Earth. An experiment design competition in each community — engaging typically 300+ students — allows student teams to design and propose real experiments vying for their community’s reserved mini-lab. Content resources for teachers and students support foundational instruction on science in microgravity and experimental design. Additional SSEP programming leverages the experiment design competition to engage the community, embracing a learning community model for science, technology, engineering and mathematics, or STEM, education.

This competition is open to students in grades 5-12 and college. Informal education groups and organizations are also encouraged to participate. Interested communities must inquire about the program no later than May 30, 2014. The National Center for Earth and Space Science Education is available to help interested communities in the U.S. secure the needed funding.


SSEP is enabled through a strategic partnership with NanoRacks LLC working with NASA under a Space Act Agreement as part of the utilization of the International Space Station as a national laboratory. The Center for the Advancement of Science in Space (http://www.iss-casis.org/) is a national partner on SSEP. To view a list of all SSEP national partners, visit http://ssep.ncesse.org/national-partners/.

If you have any questions about this opportunity, please email SSEP National Program Director Jeff Goldstein at jeffgoldstein@ncesse.org.

Bring X-ray Astronomy Into Your Classroom With Chandra Education Resources

The Chandra X-ray Observatory is NASA’s flagship mission for X-ray astronomy. Launched in 1999, the Chandra telescope is specially designed to detect X-ray emissions from very hot regions of the universe, such as exploded stars, clusters of galaxies and matter around black holes.

The Chandra mission has a wealth of education materials to help you bring the excitement of X-ray astronomy into your classroom. Classroom-ready activities, interactive games, podcasts, printable materials and more are available on the Chandra education website. Examples include:

STOP for Science:
This program for K-6 educators can be used in a classroom or as an afterschool activity. Basic science concepts such as speed, light and rotation are presented on a set of five posters along with accompanying questions designed to pique student interest.

Decoding Starlight:
Middle school and high school students perform hands-on exercises to understand how data received from the Chandra X-ray Observatory is assembled into images. Concepts taught include mathematics, terminology and the roles of computers and scientific analysis.

Modeling the Electromagnetic Spectrum:
This activity set for grades 5-12 consists of a demonstration that illustrates the power of models, a preassessment activity on student understanding of exponents, an activity for students to construct and compare a different model of the spectrum than the model commonly used in textbooks and on posters and an assessment task for students to construct their own models of the electromagnetic spectrum. To find these materials and much more, visit http://chandra.si.edu/edu/.

Free iOS App: Leafsnap
Leafsnap is the first in a series of electronic field guides being developed by researchers from Columbia University, the University of Maryland, and the Smithsonian Institution. This free mobile app uses visual recognition software to help identify tree species from photographs of their leaves.

Leafsnap contains beautiful high-resolution images of leaves, flowers, fruit, petiole, seeds, and bark. Leafsnap currently includes the trees of the Northeast and will soon grow to include the trees of the entire continental United States.

Note that the recognition feature will only be available for iPads equipped with cameras.

Free iOS App: McGraw Hill Word Wonderland (Primary - Full Version)
Sort out the right path to guide this friendly frog through the pond.
Hop, eat, and shake your way to word sorting mastery. Who knew word sorting could be so much fun?
Lead the friendly frog through an adventure as you practice many types of word sorts.
The content in this App is designed to be developmentally appropriate for students in Grades K-2.

We Give Books - Put Books in Their Hands by Reading Books.
http://www.wegivebooks.org
From the website: “We Give Books is a new digital initiative that enables anyone with access to the Internet to put books in the hands of children who don’t have them, simply by reading online.

We Give Books combines the joy of reading with the power of helping others, providing a platform for caregivers and educators to inspire children to become lifelong readers and lifelong givers.

We Give Books also helps some of the world’s best, most inspiring, literacy organizations by spreading the word about their great work and by providing books to the young people these organizations support.

Who Is Behind It?
We Give Books was created by the Penguin Group and the Pearson Foundation. Together, we support literacy through programs that engage entire communities through literacy and awareness programs like Booktime and Jumpstart’s Read for the Record. We hope that We Give Books proves to be a way that young children, together with their parents or caregivers, can come to understand the power of reading-and of giving-as much as we do.

Pearson Foundation is the philanthropic arm of Pearson plc. A 501(c) (3) nonprofit operating foundation, the Pearson Foundation extends Pearson’s commitment to education by partnering with leading nonprofit, civic, and business organizations to provide financial, organizational, and publishing assistance across the globe.
**Merriam-Webster’s Visual Dictionary Online**

Link: http://visual.merriam-webster.com/

The Visual Dictionary Online is an interactive dictionary with an innovative approach. From the image to the word and its definition, the Visual Dictionary Online is an all-in-one reference. Search the themes to quickly locate words, or find the meaning of a word by viewing the image it represents. What’s more, the Visual Dictionary Online helps you learn English in a visual and accessible way. The Visual Dictionary Online is ideal for teachers, parents, translators and students of all skill levels. Explore the Visual Dictionary Online and enrich your mind. Perfect for home, school or work. Discover a visual world of information!

A quick glance at the index is all it takes to connect words with images.

Explore the 15 major themes to access more than 6,000 images and see words like never before.

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**The Ultimate Excel Cheatsheet**


From the website: “Working with Excel 2007 [or later] is now more frustrating than ever when it comes to finding the right commands. Sometimes it seems like part magic and part luck. That’s why I’ve put together the cream of the crop of Excel shortcuts in easy to use cheatsheets you can print up and keep handy.

Highlighting the most commonly used and commonly looked for Excel commands, this list puts it all at your fingertips. (see example at right)

Keyboard Shortcuts - Learn how to get around Excel using only the keyboard. These cheatsheets have the keyboard shortcuts for mainpulating files, editing content, changing formatting and navigating around workbooks.”

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**Working With Excel and The Function Key**

**Working in Worksheets Using Function keys**

- **F2** Edits the active cell and positions the insertion point at the end of the cell contents
- **F4** Repeats the last command or action, if possible
- **F9** Calculates all worksheets in all open workbooks.
- **F11** Creates a chart of the data in the current range.

**Displaying Dialogue Boxes with Function keys**

- **F1** Displays the Microsoft Office Excel Help task pane.
- **F3** Displays the Paste Name dialog box.
- **F5** Displays the Go To dialog box.
- **F7** Displays the Spelling dialog box to check spelling in the active worksheet or selection.
- **F12** Displays the Save As dialog box.

**Accessing General Excel Elements With Functions Keys**

- **F6** Switches between the worksheet, Ribbon, task pane, and Zoom controls
- **F8** Turns extend mode on or off. In extend mode, Extended Selection appears in the status line, and the arrow keys extend the selection.
- **F10** Turns key tips on or off.
What is the Adele & Dale Young Education Technology Center?

The Adele & Dale Young Education Technology Center (or YETC for short) serves as the technology and resource center for the Emma Eccles Jones College of Education and Human Services at Utah State University.

It contains student open-access computer facilities, a K-12 curriculum materials library, and serves as the NASA Educator Resource Center for Utah. As well as collections of educational materials and resources, the YETC also provides technology training, consulting and help.

Overall, the YETC’s mission is to provide resources and training to help our students effectively utilize technology resources in their profession when they graduate.

Over the years we have expanded our efforts into sharing technology and education information through newsletters, blogs, websites, and by providing professional development opportunities for educators.

The YETC is located in room 170 of the Emma Eccles Jones Education Building on Utah State University’s campus.

The TeacherLINK TechBytes Editor

Nathan Smith is the Director of the YETC, and has managed the center for twenty-two years now. Nathan has a bachelors degree in Elementary Education with a minor in Art. He taught elementary school in Santa Clara, Utah for twelve years. He earned his masters degree in Instructional Technology and Learning Sciences at Utah State University.

Nathan has many passions in life - most importantly his wife and family. They reside in Smithfield, Utah. Nathan enjoys technology, education, teaching, science fiction, photography, art, nature, hiking, visiting new places, reading, and much more. He teaches Advanced Photoshop and Graphic Design for the Department of Instructional Technology and Learning Sciences in the college. (http://nmsmithphotoshop.weebly.com) You can view his art and photography in his gallery at http://nmsmith.deviantart.com

Nathan created newsletters for UCET between 2005-2012 that were quite popular. This newsletter is the first issue of TeacherLINK TechBytes, which will be distributed monthly. Besides actively blogging, he felt there is still a need for monthly resource newsletters for educators, and so begins a renewed effort to share the many great technology related resources available to teachers! Enjoy! The wonderful student staff at the YETC assists him with the newsletter. Nathan shares information in many venues. Take time to view some of his other resources! And please feel free to share back to him - his contact information is on the front page.

TeacherLINK - a wonderful collection of educational resources, including NASA educational materials. (http://teacherlink.ed.usu.edu)

TeacherLINK Blog - a wealth of daily posts relating to free educational resources, apps, grants and opportunities, NASA educational materials, and more. (http://teacherlinkyetc.blogspot.com)

Open Education Resources - A website that focuses on Open Education Resources (OER) and related free educational resources. (http://oerrresources.weebly.com)

Phenomenal Websites - A website that pulls together some of the best website resources available. (http://pwebsites.weebly.com)

Gifted & Talented Resources - (http://giftedtalentedusu.weebly.com)

UCET Blog (The Utah Coalition for Educational Technology) - a wonderful collection of educational resources, including NASA educational materials. (http://ucetnews.blogspot.com)