

# The Chromebook Classroom



TEC 994  
Steve Young  
Fresno Pacific University



## TEC 994 Companion Website Directory

I have included many online resources (in various formats including video, pdf and websites) to enhance and expand your understanding of the Chromebook classroom. Some of the links relate directly to course projects (i.e. the reading reflection assignment) while others provide background knowledge and expanded explanations of various topics. Below are the links which appear at the bottom of the course companion webpage. Some links will open on the main web page while other links will open a new browser tab.

### RESOURCES

- Course Workbook [PDF]
- Order Textbook [Amazon]
  
- Learning with Technology
- Teaching with Technology
- Technology in the Classroom
- 3 Reasons Chromebooks. . .
  
- Common Core Standards
- ISTE Standards
  
- Chromebook in Education
- Google Docs User Guide
- iCloud Apps User Guide
  
- File Uploader

### LINKS

- Chromebook Help
- Google App Learning Center
- Educational App Store
- App Reviews (3rd Party)
- App Top Picks (3rd Party)
- Tips and Tricks (3rd Party)
  
- IT Resources
- School WiFi Guide
- WiFi Speed Test
- Cloud Printing Setup
- Deployment Guide (PDF)

### VIDEOS

- What is a Chromebook
- Chromebooks in Education
- How Cloud Apps Work
- Google Chrome OS
- Introduction for Students
- Chromebook Management
- 30 Ways . . (Slide Show)
- How-to Videos
  
- Installing Apps
- Installing Extensions
- Working with Files
- Using Google Docs
- Using iCloud Apps
- Sharing an Assignment

### COURSEWORK

- Welcome Video
- Course Assignments
- Precourse Survey
- Reading Reflection
- Community Submission
- WiFi Survey
- App Reviews
- App Community
- Productivity Apps
- Lesson Plan Form
- Classroom Rules
- Community Submission
- Standards Correlation
- Postcourse Survey
- Course Evaluation

### SOCIALIZE

- Apps for Education
- TEC 994 Community

### CONTACT

- Instructor
- Fresno Pacific

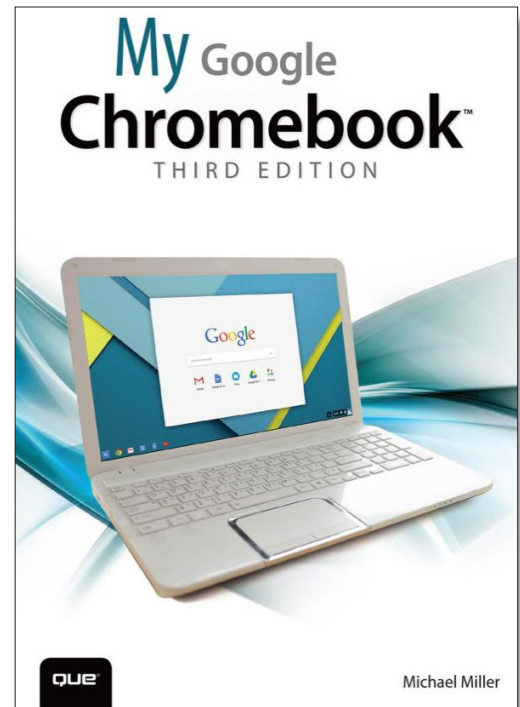


## About the Supplementary Text

The focus of this course is on using the Chromebook platform in an educational setting. To supplement the material covered in this workbook, I have chosen the text *My Google Chromebook (3rd Ed)*.

The book does an excellent job covering the ‘nuts and bolts’ of operation and use. I think you will find it a comprehensive resource in answering your Chromebook ‘how to’ questions.

The text is available from many sources, including Amazon.com for around \$25.<sup>00</sup> There is a link to the order page on the companion course website (look under Resources: Order Textbook [Amazon]).



Here is a listing of some the topics covered in the text:

- Step-by-step instructions to Google Chromebook photos that show you what to do
- Help when you run into Chromebook problems or limitations
- Tips and Notes to help you get the most from your Chromebook
- Full-color, step-by-step tasks walk you through doing what you want with Google Apps.
- Browse and search the Web with Google Chrome
- Manage content wherever it’s stored: Chromebook, an external drive, or The Cloud
- Find great new apps and extensions for business, education, and fun
- Strengthen privacy with Incognito Mode and Google’s privacy settings
- Watch TV, movies, and other video with Netflix, Hulu, or YouTube
- Listen to music you’ve downloaded or streamed from Spotify or Pandora
- Print with Google Cloud Print, even if your printer wasn’t designed for it
- Fix photos in The Cloud with Adobe Photoshop Express
- Send, receive, read, and manage email through Google Gmail
- Create, import, edit, and format documents with Google Docs
- Build and share powerful spreadsheets with Google Sheets
- Prepare and deliver live presentations with Google Slides
- Optimize Chromebook performance and battery life
- Troubleshoot and recover from problems

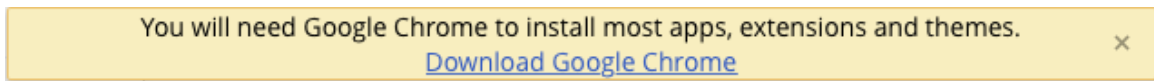


## Chrome Apps for Macintosh and Windows

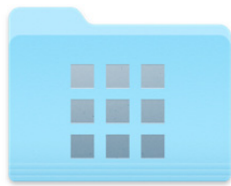
If you are taking this course using a Macintosh or Windows computer, you can still download, run and evaluate Chrome apps. Because apps for Chromebooks are based on Chrome browser technology, you need to download and install the Google Chrome browser on your Mac or PC first. The Chrome browser acts as a 'virtual Chromebook' for apps.

To install the Chrome browser on either a Mac or PC go to: [www.google.com/chrome](http://www.google.com/chrome)

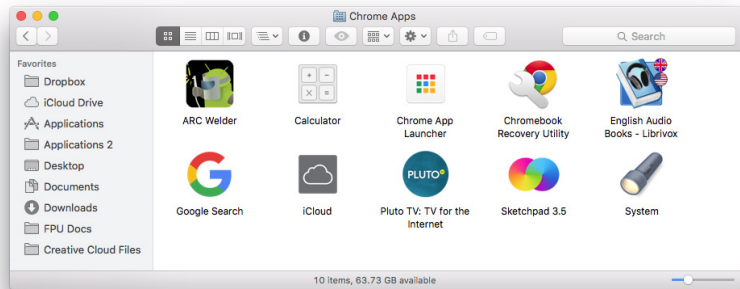
Once the Chrome browser is installed, open Chrome and go to the Chrome app store at: <https://chrome.google.com/webstore>



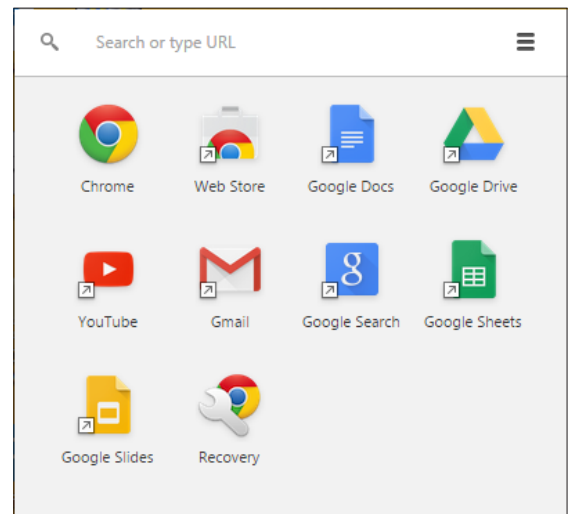
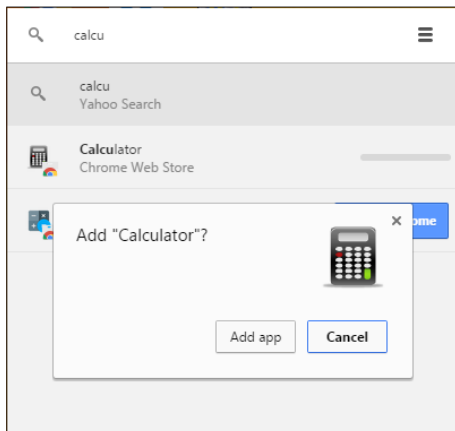
On a Mac, Chrome apps automatically organize themselves into a folder and create an icon on the Mac's dock.



Chrome Apps



On a Windows computer you can run apps through the Chrome browser, just like a Chromebook.





## Introduction

Welcome! After taking this course I would like for you to think of the Chromebook as a gateway. Through this device, you and your students will create, analyze, store and retrieve information. The Chromebook is a tool, allowing you to organize learning and facilitate access to meaningful online resources and learning tools.

The course should heighten your awareness of how using technology will effect students. Through the course, I would like you to become proficient at using the Chromebook to solve problems, to infuse technology into your curriculum, and to integrate it into the academic lives of your students.

Many teachers resist using computers in their classrooms because they either don't understand or are intimidated by the technology, or both. For this reason a major objective of this course is to take away the mystery that often surrounds these machines by emphasizing their use as educational tools.

Technology in education is not new. Growing up in the 60s my teachers used 16mm projectors to show educational films. When I began teaching several years later I ran a computer lab using 1<sup>st</sup> generation computers from Radio Shack. Jump forward 30+ years, and most student carry in their pockets more computing power than a major university had in the 80s. I recently read that an iPhone has something on the order of 20,000 times more computing power than the first Macintosh computer.

With the introduction of the Chromebook, the dynamic has shifted to low cost (often less than \$150) personal computing. iPads began the thrust to 1:1 computing (where every student has a computer at their desk) just a few years ago, but are more expensive than Chromebooks and use a touch interface as opposed to the more traditional keyboard / mouse interaction. The rise of Chromebooks offers the opportunity of 1:1 classrooms to more schools than ever before.

The goal of this course is to increase your comfort level using technology in general and the Chromebook in particular - to use it as a familiar, reliable tool to help you and your students reach curricular goals. In my view, the focus of every lesson in which a student engages should be the outcome. What knowledge or wisdom has the student gained? What social skills has the student reinforced? What personal goals has the student achieved?

As the teacher, it is your goal to present specific curriculum in a timely manner. I am hoping that this course will give you a higher comfort level in using Chromebooks and their associated apps to deliver that instruction.

**NOTE: Please take the time to review this workbook and the course companion website before beginning any work on the course. In doing so you may discover answers to questions which may arise when jumping right into the course projects. Hopefully your review will give you an insight in to the structure and flow of the course. Thanks!**



## What is a Chromebook?

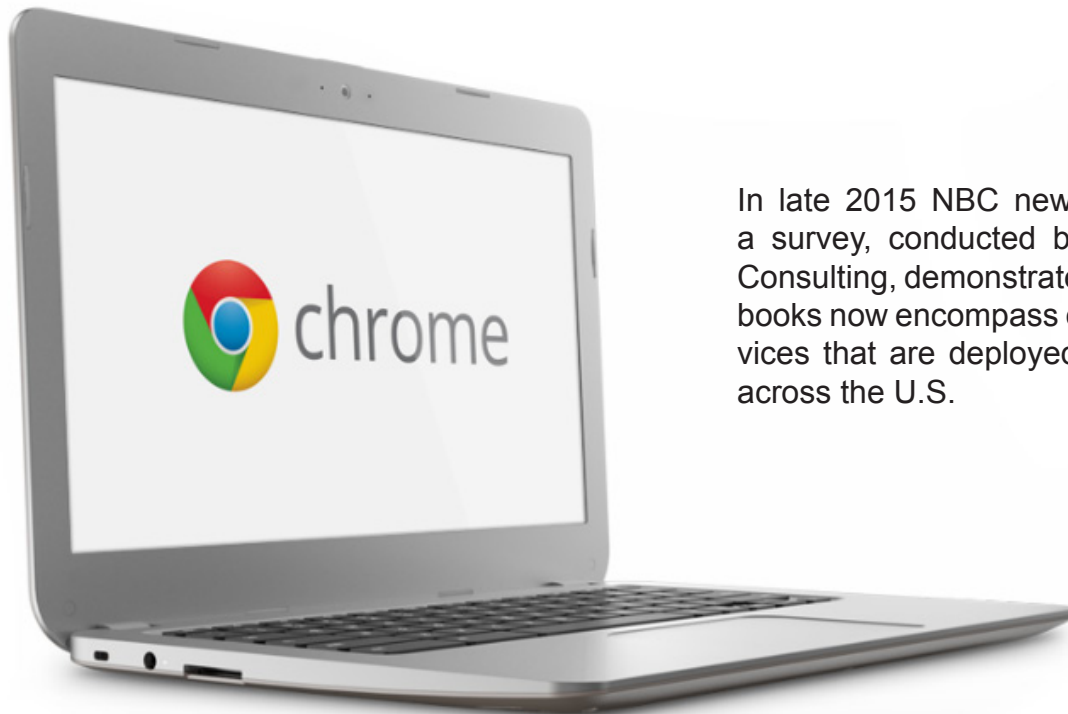
A Chromebook is a laptop computer running the Chrome OS as its operating system. The device is designed to be used primarily while connected to the Internet, with most applications (apps) and data residing in "the cloud".

If you are unfamiliar with Chromebooks, I would suggest you view the first four videos in the 'Videos' column on the companion website, as they provide a good introduction for both teachers and students.

Chromebooks were first introduced in 2011 as a platform to showcase the Google Chrome web browser and (albeit somewhat confusing) the Chrome Operating System.

There are several features that separate Chromebooks from other computers:

- Runs the Chrome Operating System and designed around the Chrome web browser
- Must have an active wireless internet connection to be fully functional
- Has limited storage capability (no Hard Drive)
- Only runs apps written for Chrome
- Is typically much less expensive than Windows or Macintosh laptops.



In late 2015 NBC news reported that a survey, conducted by Futuresource Consulting, demonstrated that Chromebooks now encompass over half the devices that are deployed in classrooms across the U.S.




## Cloud Computing

Cloud computing is a subscription based service where you can obtain networked storage space and computer resources. One way to think of Cloud computing is to consider your experience with e-mail. Your e-mail service provider takes care of housing all the hardware and software necessary to support your personal e-mail account. When you want to access your e-mail you open your web browser, go to the e-mail client, and log in. The most important part of the equation is having internet access. Your e-mail is not housed on your physical computer; you access it through an internet connection, and you can access it anywhere. If you are on a trip, at work, or down the street getting coffee, you can check your e-mail as long as you have access to the internet. Your e-mail is different than software installed on your computer, such as a word processing program.



When you create a document using word processing software, that document stays on the device you used to make it unless you physically move it. An e-mail client is similar to how Cloud computing works except instead of accessing just your e-mail, you can choose what information you have access to within the cloud.

The Cloud makes it possible for you to access your information from anywhere at any time. While a traditional computer setup requires you to be in the same location as your data storage device (typically the computer hard drive), the cloud takes away that step. The Cloud removes the need for you to be in the same physical location as the hardware that stores your data. Your Cloud provider can both own and house the hardware and software necessary to run your home or classroom applications.



### Unable to connect to the Internet

Google Chrome can't display the webpage because your computer isn't connected to the Internet.

ERR\_INTERNET\_DISCONNECTED

You need an internet connection in order to access the Cloud. This means that if you want to look at a specific document you have housed in the cloud you must first establish an internet connection, either through a wireless or wired internet or a mobile broadband connection. The benefit is that you can access that same document from wherever you are with any device that

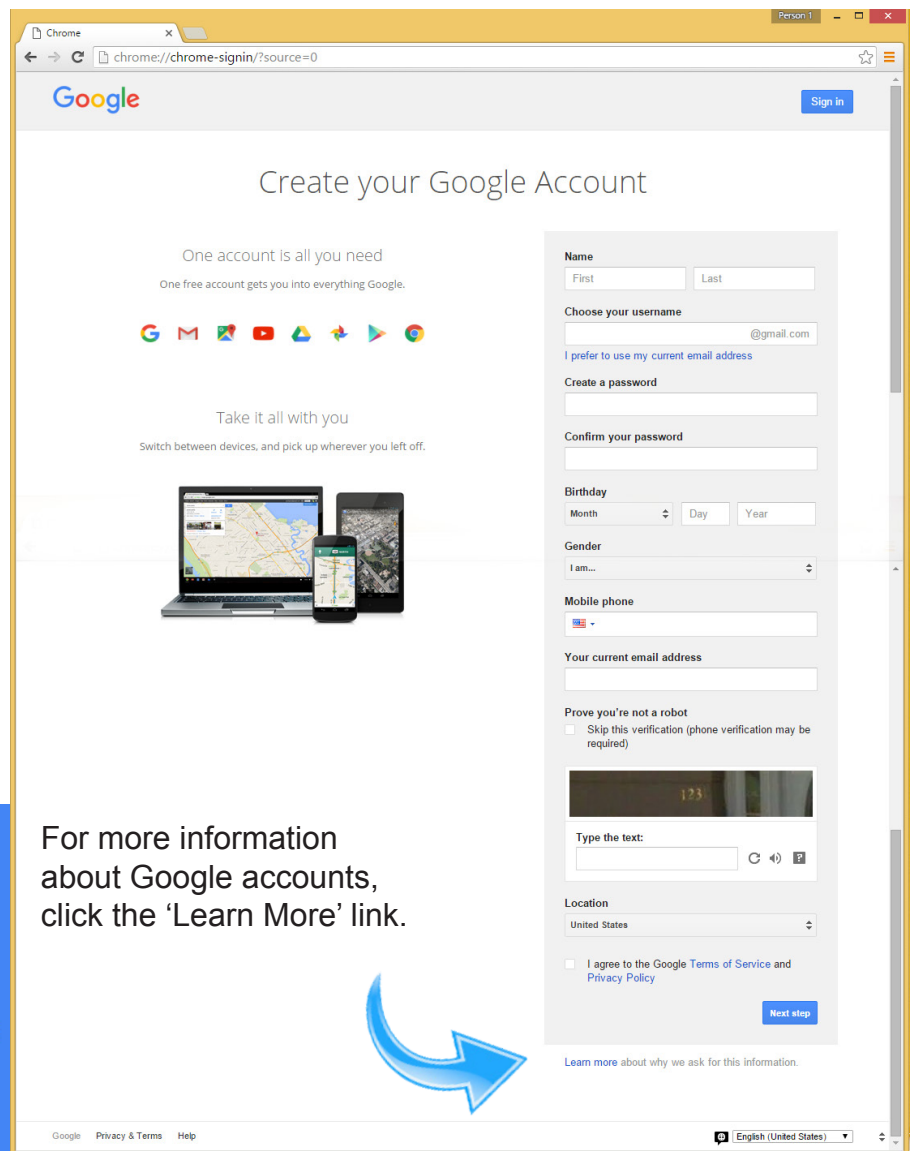
can access the internet. These devices could be a desktop, laptop, tablet, or phone. This can also help you to function more smoothly because anyone who can connect to the internet and your cloud can work on documents, access software, and store data.



## Setting up a Google Account

If you do not already have a Google account, you will need to create one for the course. Go to: <https://accounts.google.com/signup>

A Google Account gives you access to Google products like Gmail, Google+, YouTube with a single username and password. A Google Account comes with a Gmail address and a Google+ Profile. Once you create a Google Account you can use that same username and password to sign in to any Google product. **You can not access the full functionality of a Chromebook without signing in with a Google account.**



**Help**

- Create a Google Account**
- Creating a strong password
- Verify your Google Account
- Verify your account via SMS or Voice Call
- Checking if you have an account
- Browser requirements
- Control what others see about you across Google services
- About Google Accounts

For more information about Google accounts, click the 'Learn More' link.





# Google Account Settings

Once your account is established, a visit to the 'My Account' page is in order. To access the account settings, go to the *Google.com* web page on a browser and click on the circular icon in the upper right corner of the window. If you are not signed in, click the **Sign in** button.

'My Account' gives you access to settings for privacy and data security. There are options for changing your ID photo, e-mail addresses, passwords, and names.

It is possible to have a Google name which is independent of other information - for example, the name assigned to my Google account for steveyoungfpuniv is 'Steve Young'. It could easily be reset to 'Period 1 Freshman English' or 'ecomcon'. This Google name is used as the identifier when using Google Communities or sharing files.

**Welcome**

**Sign-in & security**

- Signing in to Google
- Device activity & notifications
- Connected apps & sites

**Personal info & privacy**

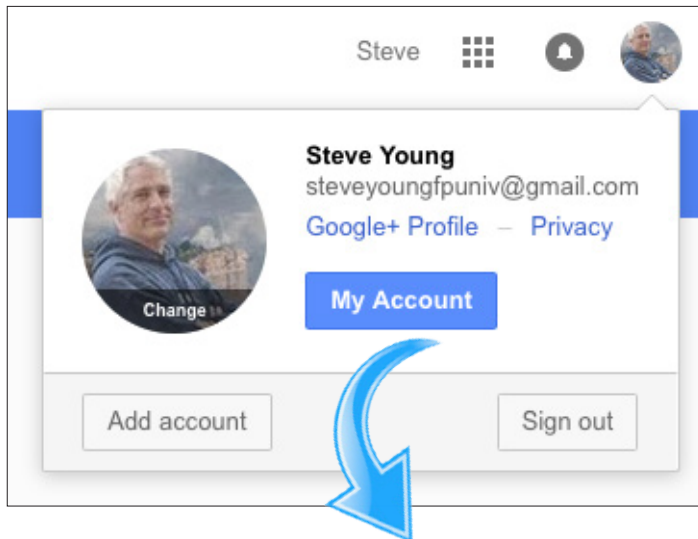
- Your personal info
- Activity controls
- Ads settings
- Account overview
- Control your content

**Account preferences**

- Language & Input Tools
- Accessibility
- Your Google Drive storage
- Delete your account or services

**About Google**

- Privacy Policy
- Help and Feedback



<p><b>Sign-in &amp; security</b> &gt;</p> <p>Control your password and account-access settings.</p> <p><a href="#">Signing in to Google</a></p>	<p><b>Personal info &amp; privacy</b> &gt;</p> <p>Manage your visibility settings and the data we use to personalize your experience.</p> <p><a href="#">Your personal info</a></p>	<p><b>Account preferences</b> &gt;</p> <p>Set language, accessibility, and other settings that help you use Google.</p> <p><a href="#">Language &amp; Input Tools</a></p>
---	---	---

**Name** Steve Young >

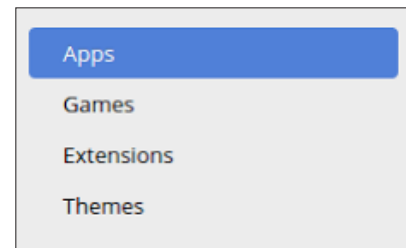


## About Chromebook Apps

A computer without apps (also called programs or applications) is nothing more than a digital picture frame. Apart from the operating system, which works on a purely functional level, a computer can not 'do' anything. It is the apps which instruct the computer how to display websites, perform music, teach spelling, send e-mails, and all the other things we expect computers to do. Chromebooks can process three kinds of apps: hosted, packaged and extensions. The differences may be subtle to a non-techie, but the distinctions are important.

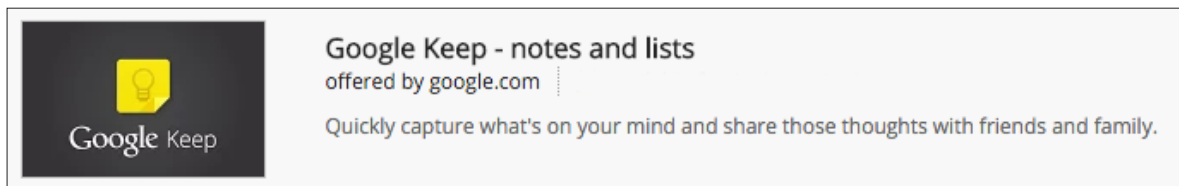
### Hosted Apps

A hosted app is a Chrome application which depends on an internet connection to work. The app is not stored on the Chromebook, it is temporarily accessed from the cloud. When the app is closed, the app is not saved; it must be reloaded from the Cloud again. Google Docs is an example of a hosted app.



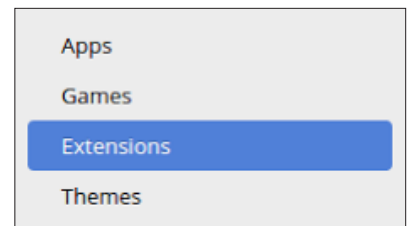
### Packaged Apps

A packaged app runs straight from your computer and does not necessarily need an internet connection to operate. An example is Google Keep, which allows you to write notes even when offline. The limiting factor of how many packaged apps you can have installed is the size of the Chromebook's memory drive.



### Chrome Extensions

Extensions add functionality to existing Chromebook apps.



For example, the Google Dictionary extension provides a pop-up definition when a word on a web page is clicked.

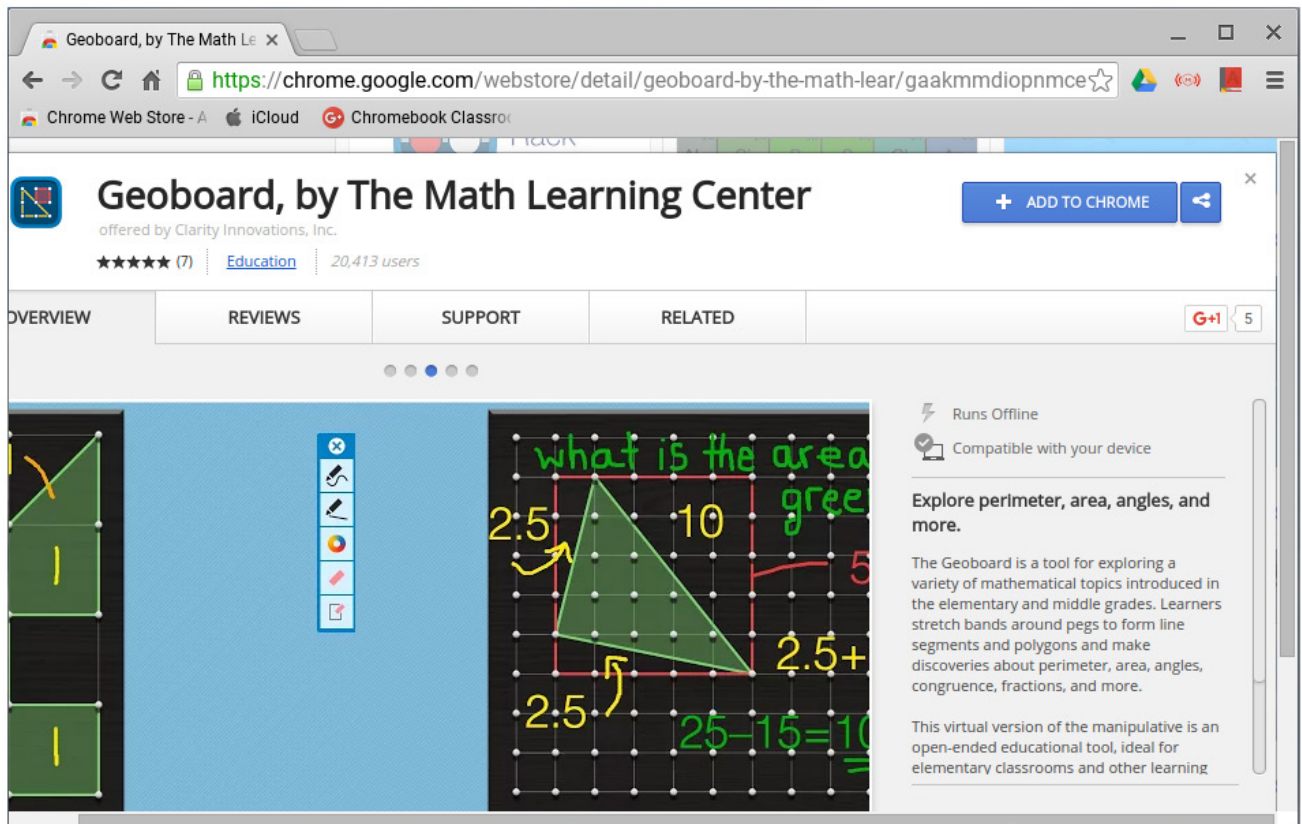
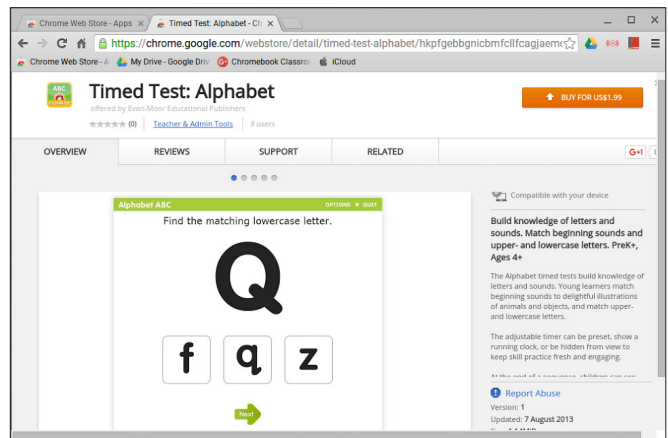


## Chromebook Apps

You may already have a collection of favorite, 'must have' apps that you use with your students on non-Chromebook devices - these may or may not be available for the Chromebook. A large percentage of educational software use the Windows or Macintosh operating system. If an entire curriculum is dependent on a particular piece of software, some thought should be put into the ramifications of using a different computing platform.

If the bulk of your and your students' computer use is online, then using a Chromebook should present no compromise in the resources available to you. One of the purposes of this course is to familiarize you with the range and quality of Chromebook apps.

If you are taking this course and do not have access to a Chromebook, not to worry - most apps run on Macintosh and Windows computers as well.





## Assignment 1: Pre-Course Survey

The first assignment you will complete is, appropriately enough, the Pre-Course Survey.

Here you will be asked some general questions concerning your thoughts on technology in the classroom and your personal experiences, if any, using Chromebooks.

The survey asks for your name, e-mail address, and Google name.

**It is important that I know your Google name (which may be different than your actual name) as I will be referencing your Google name for the three Google Community assignments.**

A copy of your survey (and all subsequent survey forms) will be e-mailed back to the e-mail address you supply within the form (which does not necessarily need to be a gmail address).

**These copies back to you will come in the form of an e-mail and will be originating from my e-mail address of: *steveyoungfpuniv@gmail.com* so make sure your e-mail account will accept e-mail from this address if you wish to receive a copy, in verification, that you completed the assignment(s).**

Please remember to fill out the narrative responses with thorough, thoughtful replies.

### Pre-Course Survey

\* Required

**Full Name (First Last) \***

**I am enrolled in TEC 9XX \***  
 Yes  
 No

**Email address \***  
A copy of your completed form will be emailed to you

**Google Name \***  
This may be different than your actual name, and is the identifier when posting to Google Communities.

**What grade level / subject do you teach?**

**What prior experience do you have using a Chromebook?**  
If no, explain what motivated you to learn about them.

**How are you or your fellow teachers currently using technology in the classroom?**

**Do you feel that technology is an effective method to deliver instruction? Why or why not?**

**Does your school / classroom have a WiFi network?**  
 Yes, it seems to work well.  
 Yes, but there are issues with getting connected.  
 Some classrooms have it, others do not.  
 I am not sure.  
 No.

**Do you know of a district, school or colleague currently using Chromebooks in the Classroom?**

**If so, what have you heard about their experiences?**

**What is the goal for you or your school / district regarding the use of Chromebooks?**

**What do you hope to get out of this course?**

Never submit passwords through Google Forms. 100% You made it.

Powered by Google Forms This content is neither created nor endorsed by Google.  
[Report Abuse](#) - [Terms of Service](#) - [Additional Terms](#)