PROFESSIONAL LEARNING COMMUNITIES

This chapter will look at how teachers can use online resources to connect with other educators to expand their professional learning communities, acquire new curriculum content, learn about new pedagogical ideas, and collaborate with others. Being proactive about your own professional development will allow you to go beyond the often repeated ideas of your core peers and school district.

If you are going to learn to let your students pace themselves by their abilities, then you are going to be moving in a different direction from that of most of the teachers in your school who are accustomed to having all of their students in sync. This transition will be much easier if you begin to develop a network of colleagues beyond your school to help you explore questions and provide feedback. Learning networks are nothing new in schools. The names for these groups are varied; from Professional Learning Communities (PLCs) to Collaborative Learning Teams (CLTs) to Professional
PART I: The Teacher as Leader of the Digital Classroom

Learning Networks (PLNs). Since PLC is the most common term, that is the one that will be used throughout this book. PLC is defined here as a network of peers on whom a teacher can rely to explore new ideas and to offer feedback.

Your PLC does not have to be limited to the boundaries of your school or district. Teachers have long excelled at borrowing ideas from others to improve their teaching. The focus of this chapter will explain how to continue that practice via a network of people you may never meet but who can convey rich sources of methodology, feedback, and even virtual pats on the back when most needed.

Collaboration came to me by necessity. When I started teaching advanced placement (AP) classes, I was collaborating with a colleague who taught down the hall. When I later became an AP coordinator, my positive experience collaborating with my colleague led me to insist that teachers work in collaborative teams, even if it meant venturing outside of our school walls. Later when I was chosen a department chair, I asked teachers to download their lesson plan ideas to the school’s shared network drive. Eight years later we are using our several networked folders to mine ideas from long-departed teachers and are regularly adding more ideas for generations to come. Currently, we are putting many of these ideas and lesson plans in the cloud for easier access. Not only do new teachers in our department have a place to go for lesson plan ideas, but over the years these lessons have been improved, innovated, and changed so many times that it is not fair to call a lesson the work of any one teacher. No one is completely reinventing the wheel, but rather improving the spokes and making the wheel move more efficiently. New teachers can breathe more easily because they have access to a series of lessons created by others in the school, allowing the new teacher more time to focus on learning the new material, figuring out what motivates their students, and determining how to improve class discipline.

EXPANDING YOUR PLCs TO SOCIAL MEDIA

PLCs were the brainchild of Richard DuFour when he was the principal of Stevenson High School outside of Chicago. He realized that getting educators to collaborate would stimulate better teaching through shared ideas. At my school we take advantage of our school-based PLCs to
• discuss lesson plans for upcoming units;
• differentiate between how to teach special education, English Speakers of Other Languages (ESOL), and mainstreamed students; and
• write and revise formative assessments and summative tools.

While PLCs might not always be as innovative as a “drive-by discussion” in the hallway for stimulating new ideas, they can be incredibly helpful to all teachers from newbies to veterans. But there are limitations to these school-based groups. Colleagues at a school site become so familiar with one another that they often settle into a predictable rhythm. Individuals learn what can be said and what cannot be said so as not to offend anyone. New members make changes and add new ideas, but the process needs to be continually changed—and that is unlikely to happen when your PLC is limited to the walls of your school.

Enter social media. The first thing I hear teachers say when I suggest following people on Twitter or looking at a blog is that they do not have time. Between grading, attending several weekly PLC meetings at school, and developing lesson plans, teachers often feel as if they are working the hours of first-year lawyers. Teachers need time to spend with their spouses and children and to enjoy some precious minutes of leisure. All of these things take time. Most people look at social media as a way to follow other people’s lives and not as a way to improve their professional practice. But social media can be a very efficient way to gather new ideas and grow as an educator. Social media sites, such as Twitter, can add innovation and new ideas to school-based PLCs, as individual members learn online and then share new ideas at PLC content meetings.

**USING TWITTER TO BUILD YOUR PLC**

Not only is Twitter among the most used social media by your students, but it is an incredible resource for expanding a teacher’s PLC. Started in 2006, the idea originated from the fact that cell phones were able to send 140 characters of information (spaces, periods, exclamations all count as characters) for a quick message. Twitter’s popularity stems from its capacity to show posts to the whole world (unless you set the post on “Private”). Twitter now has a huge following among connected educators who use it to collaborate with others online, whom they may never meet in person. The service is so popular that approximately 243 million people use it each month (Smith, 2014). And Twitter is extremely easy to use! Teachers can use Twitter to
learn exciting new ideas and quickly bypass the less important ones,
• click on web pages that offer in-depth ideas,
• speak with one or many teachers in a live or delayed fashion, and
• find valuable educators with whom to connect.

I check my Twitter feed (@kenhalla) two to three times a week. In a
• typical week I will use Twitter to click on many different web pages that
• will give me ideas on everything from content to pedagogy to new lesson
• plans. For example, during a quick check today I found posts including the
• following links:

• a way to chat online with US Secretary of Education Arne Duncan
• next week
• the best way to move desks around to create the ideal learning envi-
• ronment
• three simple ways to use smartphones in the classroom
• how digital writing is making kids perform better in the classroom

This all took me less than a minute. How often does one get to speak to the
• US secretary of education or even listen to a conversation with him and
• other educators? Perhaps you are a school leader looking for ideas for
• younger teachers. In a quick check of Twitter, you find several ways to
• help them that go beyond your own experiences. If the overall goal is to
• seek out ways to further individualize instruction for your students, you
• will need help from others far and near.

Getting Started on Twitter
• To join Twitter, go to twitter.com
• Go to the sign-up section on the right side of the page.

- Fill in your name, e-mail, and password.
- You will be taken to a new page, asking you several questions.
- Answer the questions, push Submit, and you will now have your own account.
- You will have your own Twitter name designated with the @ symbol and then the name
  you have chosen, such as “@kenhalla.”
- On this site and any others discussed in this book, if you check the “Remember me” box (as long as you are using the same
  browser and computer), the site will log you in automatically.
**Tips on Composing Tweets**

- To compose a Tweet, go to the Home tab on the upper right side of the page where you see a picture of a quill pen.
- Type your message in 140 characters or less. Press return. If your Tweet is too long, the exceeding characters will turn red.
- Good Tweets have links to web pages. Twitter will automatically shorten the web page addresses, known as URLs, to ten or fewer characters.
- Good Tweets might also include hashtags (#NGSS #STEM #Science), which you will learn about later in this chapter.
- You can address a Tweet to a particular person by using his or her Twitter handle @JohnDoe, or you can give credit to a group of people by including several Twitter handles: “Kudos to the organizers of this year’s Science Fair @MrNelson, @MsGarcia.” Your Tweet can share a useful link to an article, express your opinion about a current news event, or pose a question to everyone in your Twitter world. You could ask your online PLC “Does anyone have good resources for a lesson on poisonous frogs? #NGSS #STEM #Science”

**Connecting With Other Educators**

The key to using Twitter to expand your professional learning community is amassing as many new ideas and rich sources of information from other educators as possible (“How to Use Twitter to Grow Your PLN,” 2012). Therefore, you will want to start following as many people as you can right away. To follow someone, tap on the “Follow” button at the top of his or her Twitter page. If you find that any one of the people you follow proves to be more of a nuisance than an asset, you can easily unfollow them. Once you start posting regularly, others may find your Tweets useful and start following you as well. There are several ways to find people to follow on Twitter.

- Use the search bar on the upper right side of the Twitter page to search terms that interest you. Any post that includes that word or phrase will pop up and you can begin following the people who Tweet about your topic of interest. Before you decide which people to follow, you can look at their Twitter descriptions and their recent posts to see if any of them would be a valuable asset to your PLC.

• Find educators you admire on Twitter, and look at the people they follow (or who follow them). Then decide if you would also like to follow those people.
• Another way to expand your network is by scanning your message feed to see who your friends are retweeting. If you choose to retweet, proper etiquette dictates that you keep the originator’s name in your message, somewhat in the same way you cite a source in a book.
• You can also find people by clicking on “#Discover” in the upper left for suggestions.

Search Google or other search engines for “educators to follow on Twitter” or be more specific and type “English teachers Twitter.” Once you start amassing a group of people to follow, Twitter will start recommending like-minded individuals to you. This function of Twitter is a great resource to find others to grow your PLC. You will find that once you start following people and start posting relevant content (with URLs and hashtags), others will be likely to start following you. It’s rather a reiterative process.

If you have time, go to a search engine and look for “Twitter4Teachers Wiki!” It is an amazing wiki listing of teachers at every level from elementary to high school, ESOL, special education, the arts and so much more. A wiki is a place where anyone can edit information, so you can go to the site and add Twitter names you find in your own research.

• Some people I follow who help all teachers, no matter the level or subject, are
  o Cool Cat Teacher = @letyijerina
  o We Are Teachers = @WeAreTeachers
  o Eric Sheninger = @E_Sheninger
  o Richard Byrne = @rmbyrne
  o Shelly Terrell = @ShellTerrell

If you want a friend or someone you are following to see your Tweet, simply add their Twitter handle (@Marisol) in the Tweet. After you learn
about hashtags, you can add them to your Tweets so that people following the hashtag can easily find your Tweets. For example, I could Tweet “@kenhalla #historyteacher #governmentteacher #economicsteacher #blogger.” To see if people are including your Twitter handle in their Tweets, go to the “Notifications” tab on the top left of Twitter to see where you have been mentioned by others.

**Using Storify to Save Tweets**

Tweets remain on Twitter forever so if you want to view previous Tweets (your own or someone else’s), you can simply scroll backwards through the Twitter feeds. But if you want to avoid scrolling through hundreds or even thousands of Tweets, you can use Storify to save the Tweets you find particularly helpful. As a matter of fact, you can save lots of digital sites on Storify. For example, you could save a video, a website, and a number of related Tweets from Twitter into one story to share with your students for a particular project. Since you can write long captions, you can use Storify to have your students write a report that seamlessly includes student writing, video clips that highlight the writing, Twitter comments, images, websites, and so on. Talk about a new way to put together information!

Go to Storify.com, create an account, and then on the top right go to “Create Story.”

- Along the right side are a number of categories such as Twitter. In that case, just type in the name of person whose Tweets you want to clip and click enter. When the person’s feed appears, simply drag the Tweet(s) to the left side.
- You can also tap on the URL symbol.

• You can even add YouTube videos into your story.
• When you are done, be sure to save your work. You can edit it later.

For an excellent Storify tutorial and student example of a multimedia story, go to YouTube and search for “Storify Tutorial House Divided.”

Using Hashtags to Have Conversations on Twitter

So far we have discussed static Tweets posted on Twitter. Sometimes, though, you might want to have a live conversation with other educators, your PLC, or even your students. Using hashtags is a useful way to keep all of the comments related to a particular conversation or topic in one place. To start a new conversation, create a unique hashtag, which consists of a string of characters preceded by the “#” symbol. Examples of some hashtags for your PLC might be #digitalclassroom101, #selfpacingstudents, #mathgames4u. You can also join conversations already in existence by finding hashtags created by others such as #STEM, #makerspace, #ushistoryclass. All you need to do is create a Tweet that includes the hashtag somewhere within the Tweet. If others are tweeting at the same time, you can have a multiperson discussion and watch the stream of comments appear just as you would with regular Tweets. It might sound crazy to have a conversation in 140 character bursts, but it is amazing how much can be discussed. Including URLs in your Tweets (along with the hashtag) is also a useful way to introduce outside sources of information to the conversation. Twitter conversations are a good way to encourage your more quiet students to participate in class discussion. Quiet students often find a voice on Twitter, which in turn inspires them with more confidence in the regular classroom. You can use hashtags to converse with teachers in your district, from around the country, or even from around the world.

To start a conversation using a hashtag:

- Go to the Twitter search engine and type in your devised string of letters starting with the number sign #. For example #howtofindteachers. If no results pop up, then you know that no one else is using your hashtag.
- If someone else is using the hashtag you can still use it, but just realize that nonrelated posts might be streaming in. For example, “#chemistry” could involve conversations about science, college students taking a course, or a song named “chemistry.”
• Then give the hashtag to your PLC members or your students with a time and date to start your discussion.

• If you do not want your many Twitter followers (yes, others will soon follow you on Twitter) to see this particular hashtag conversation, just precede your tweet with “@HideChat.” When you use @HideChat, your Tweet will not be sent out to your followers’ Twitter feeds. But your Tweet will be seen by anyone who searches for your hashtag.

• Below is part of a hashtag discussion between a colleague and me.

Utilize Twitter as Your Own Personal PLC by Searching for Popular Hashtags

- The website Edudemic is a site where both students and teachers can find hundreds of tips for integrating technology into the classroom. It has a list of 300+ Educational Hashtags and an explanation of what each is about. This means you can converse live with others who teach the same level of content as you and enhance your classroom. If you really enjoy someone’s ideas in a hashtag conversation, you can simply click on the name and start following that person, thus further building up your PLC.
- Finally, Cybraryman has hundreds of times and hashtags for teachers.
- If you cannot meet when the hashtag is having a live conversation, then you can simply search for the hashtag in the Twitter search box after the fact and scroll down the page looking for helpful comments and links.

The most popular hashtag for teachers is #edchat, which is used in weekly discussions. In fact, if you search the sites given above, you will find weekly discussions for any topic. Since the discussions are live, you will see comments from educators around the world popping up one after the other in short succession. To contribute to the conversation, just type in the hashtag somewhere in your Tweet and it, too, will appear. Here is just a small sampling of what you can find:

- #sschat Social Studies Teachers Mondays, 7 pm EST
- #musechat Music Educators Mondays, 8 pm EST
- #kinderchat Kindergarten Teachers Mondays, 9 pm EST
- #scichat Science Teachers Tuesdays, 9 pm EST
- #artsed Art Educators Thursdays, 7 pm EST
- #langchat Language Teachers Thursdays, 8 pm EST
- #elemchat Elementary Teachers Saturdays, 5 pm EST


The hashtag #individualizelearning pertains specifically to this book. While in Twitter, type #individualizelearning into the search field to see what fellow readers are saying about how they are applying the resources in this book to their teaching practice. I will be checking the hashtag on a regular basis and would love to receive your insights and learn the ways that you are using this book to change your classroom.
USING GOOGLE+ AS A PLC RESOURCE

Another online PLC that has grown more quickly than Twitter or Facebook is Google Plus (g+).

Google+

- allows you to add (as opposed to link) videos,
- has two streams of information so you can take in items more quickly,
- has no limit on the number of words in a message,
- allows you to communicate either publicly or just to a select number of people,
- allows you to set up communities that can be made up of students or other teachers, and
- allows you to have video conferences with up to nine other people (Google Hangouts).

If you are signed into Google, then go to the top right of your screen and look for the icon of nine tiny boxes arrayed in a square. Click on the icon and a new screen will appear. Click on “g+.” Alternatively just type in “plus.google.com” and then log in.

Many people, like me, use both Twitter and g+ to find information to further their professional development. You will find that there is some overlap, as some people post the same information in Twitter and g+. I suggest checking out both and then deciding which you prefer. If you have never used either of them, I would suggest starting with only one until you have mastered it before trying to manage both at once.

- g+ is fairly intuitive to use. Look at the left side of the page. If you run your mouse over the “Home” icon you can very easily select what types of things you would like to do such as see your circles of friends, look at your photos, speak via a video “Hangout” with your friends, and more.

### Google+ Communities

If you tap the “communities” tab, which is underneath the “Home” button, you can see all kinds of groups that Google thinks you might want to join. You can also start your own groups. g+ communities allow you to connect with like-minded people, but in a stream-like fashion as opposed to a live Twitter hashtag conversation. Explore g+ by using the search engine at the very top of the g+ page. To visit the pages, type in the terms below, much as you would do on Twitter when looking for new teaching ideas. Some sites you might want to follow are listed here.

- **Google for Education** is a site for teachers, maintained by Google.
- **Edudemic** is a great website filled with tips.
- **Education Week** is the definitive educational online resource for technology integration for teachers.
- **Ken Halla** is my Google+ feed.
- **Education Revolution** is where you can meet lots of other teachers.
- **Google Certified Teachers** is a site where teachers who have earned the highly selective “Google technology certified” endorsement put their posts, and you can join in as well.
- **Google Apps for Education** is another community for educators whose school systems have purchased the Google Drive suite for their teachers and students; it gives many insights into how to use the suite.
Following People on Google+

To add a person or group you want to follow, go to the search box at the top of the screen and enter in a name or a topic. When you find someone of interest, add him or her to your circles.

- To create a circle, look for the symbol with three circles on the left side of the screen and click on it.
- Then go to the tab that says “circles” and click on it.
- Next go to the “+” sign to create a new circle of people.
- Tap on the “add people” icon and type in their e-mail addresses (see picture below). You can then quickly add friends or create circles by clicking on names that are in g+.
- The advantage of the circles is that you can create feeds that only some people can see and send these people messages. So, for example, you could create a feed for your students, and they could set it so you could not see all of their other messages.

Google+ Hangouts

We all know that meeting someone in person has benefits that cannot be matched by virtual meetings, but is it really necessary to conduct every meeting in person? The very best part of Google+ is its Hangout functionality. With Google Hangouts (GHO), you can initiate or participate in a video conference with up to nine other people. During these conferences, the person speaking will be the largest image on your screen, and you will also be able to see smaller images of the other participants—their facial expressions, hand gestures, emotions, and so on. Another great feature of GHO is that participants are able to share the contents of their desktops with the conference members (if you choose). One of the most amazing features of GHO is being able to have nine people all editing one Google Drive document (which you will learn about in Chapter 3) at once in real time while hearing each other talk, whether the participants are in different cities, states, or other countries. In this way, you could collaborate with teachers from several different areas to create, for example, a proposal for a conference explaining the various ways you all use student self-pacing strategies in the classroom.

If your device (computer, laptop, tablet, phone) does not have a camera, then you can still be heard by the other participants and you can still share your screen and documents. Please note that all participants will have to have their own Google accounts.

**Scheduling a Meeting Time**

Before you can meet in a Google Hangout, you will need to decide on a mutually agreeable date and time for the meeting, just as you would with in-person meetings. If your meeting involves many people, rather than e-mailing back and forth several options and counteroptions, you might find it easier to use one of the many free Internet tools available to suggest and then settle on a meeting time.

Go to a search engine and look for a “simple meeting scheduler.” A number of sites will show up. One of the simplest ones is called NeedToMeet. When you go to the website, you will be prompted for the title of the meeting, meeting notes (which is where you can put the time zone for the meeting in case you have attendees in different zones), and the duration. You can join the site or choose to use it without having a login or password. Hit “Select Times,” and then select the days and times you want to set as options. Once you have selected the times, hit “Invite Attendees” and you will be given a URL, which you can send to the meeting participants (via e-mail, for example). Participants will then visit the site via the link, enter their names, and select the times they are able to meet within the given options. Once people submit their preferences, their choices can be seen by the other participants. This is usually a much more efficient way of selecting a mutually agreeable meeting time.

**Starting a Google Hangout**

- From Google.com, click on the nine-box icon > g+ > Home > Hangouts.
• Go the right side of the page and hit the “+” sign beside where it says “New Hangout” and then “Start a hangout.”
• If you have previously e-mailed people from your Gmail account, their addresses should automatically pop up when you type in their names. If that doesn’t happen, type in their Gmail addresses.
• Name the Hangout and then click on the video camera icon.
• To share your screen with people in the GHO, click on the green icon with the white arrow. When you place your cursor over the icon, you will see the words “screen share” appear.
• To share Google Drive documents, click on the Google Drive icon (the green, blue, and yellow triangle below).
• If other people share their desktops, just click on their video images at the bottom of the screen and whatever is being shared will dominate your screen. Otherwise, whoever is talking will be the image dominating your screen.

EXPAND YOUR PLC BY FOLLOWING BLOGGERS

Google+ and Twitter are ways you can get quick snapshots of information from other people. If you want to get more in-depth information, however, then you will want to look for some educational blogs to follow. Blog writers usually have a particular topic of focus that they want to share with others. Some of the most popular blogs include The Huffington Post; the celebrity gossip site TMZ; and 538.com, which uses statistics to look at many topics. Another way to think of blogs is as a series of short articles, known as posts, that the blogger puts online. You will find the bloggers’ most recent posts on top. Readers can add their own comments below each post. Just as with Google+ and Twitter, a reader can interact with the writer as well as other readers about the blog post. Finding the right blogs can be a great way to improve your teaching craft by reading the ideas of others, learning what’s going on in other classrooms, engaging with others in conversation, and contributing your own thoughts and questions to the conversation.

**Educator Blogs**

Educators will want to find blogs that suit their styles of teaching. Some basic requirements might include having a visual or video, instructive comments about why an idea is useful in the classroom, and instructions on how to implement the suggested lesson in class. To find some useful blogs, you can start with the lists in this book or simply perform a Google search of your own. For example, if you are a math teacher, you might search for “high school math blogs,” “high school math teacher blogs,” or “math blog.” There are several sites that house educator blogs, such as

- **Edublog**—a community of thousands of educational blogs broken into easy-to-find categories
- Edudemic’s site has two useful blog sites
  - [Edudemic’s 50 Must See Blogs](#)
  - [The Teacher’s Guides to Technology and Learning/](#)
- **Free Tech 4 Teachers**—one of the most popular sites on the Internet for teachers. It offers four or five posts a day covering topics useful to every category of teachers.
- **English Teachers Blogs**
- **Math Blogs**
- **Top 50 Science Teacher Blogs**

A blog can be found for almost any aspect of teaching. Find blogs that work for you and that give you the kind of information that you need most. Some blogs simply discuss content while others offer tips on how to use technology. The four blogs that I author (US Government Teachers’ Blog, US History Teachers’ Blog, World History Teachers’ Blog, and Economics Teachers Blog) offer both content and technology tips. Most blogs include a search engine, which is useful since older blogs can house thousands of posts. The search bar gives readers the option to quickly search for topics of interest, for example, “reading levels,” “differentiation,” “flipped classes.”

**BOOKMARKING IN THE CLOUD**

By utilizing the resources of your several online PLCs, you will collect many, many web pages that you will want to save and revisit over and over again. A convenient way to save these sites is to bookmark them. Bookmarks are a way to save the URL and annotate it for later reference.
Some people save bookmarks on their laptop memory drive, but the problem with that is that you will be able to find those bookmarks only when you have access to that particular device. A better way to save bookmarks is by using a cloud-based tool so that you will be able to find your Internet pages on any device that is connected online.

**Google Bookmarks**

Chrome, Firefox, and Safari all have cloud-based bookmarks. However, keep in mind that using Google bookmarks is different from bookmarking in Google’s browser, Chrome. If you set up your bookmarks in Chrome, you will be married to having Chrome on your Internet device, which might be a problem if you are using a device that does not have the Chrome browser.

To get started with Google bookmarks, type “Google bookmarks” into a search engine.

- Tap on the “Add bookmark” button on the left side of the page.
- You will be prompted to create a label. Related sites can be added to the label later. In the example below, “News Sites” is the label, “New York Times” is the name of the bookmark, and www.nytimes.com is the URL. Once you are done, hit “Add bookmark.”

You will eventually collect multiple labels for your various bookmarks. By hitting each of the titles on the left side of your page, you will be able to see just the websites under each label (for example, under the label News Sites, you might have bookmarks for The Economist, the Washington Post, and the Wall Street Journal). If you hit “Bookmarks,” then you will be able to see all of your bookmarks. If you decide that you want to rename or delete a label, then tap on “Manage labels.”

Saved.io Bookmarks

For alternatives to Google Bookmarks, conduct a search for “online bookmarks.” One of the simplest ones is Saved.io, which allows you to create bookmarks simply by writing “saved.io” prior to a URL. One drawback with Saved.io is that you cannot annotate your bookmarks.

- Go to the Saved.io site and sign up for an account. Once you are logged in, find a website you want to bookmark.
- Let’s say it is the New York Times. Simply type “saved.io/” before the Times’ URL as in “saved.io/nytimes.com,” and it will be saved.
- If you want to have a category for your news sites, say “newspapers,” you would simply add it before the URL as in “newspapers.saved.io/nytimes.com.”

In no time, you will have multiple categories, also known as “lists” and plenty of links. Best of all, your bookmarks will be accessible on tablets, smartphones, and any computer.
Bookmarks allow for a notes’ section where I often put login and password hints, such as “name of children’s elementary school.” It is not that I am worried that someone working for the bookmarking company will look at my personal sites. Rather it is a precaution in case the page was open on my computer and someone, unbeknownst to me, attempted to access one of my links. Instead of finding my actual login and password, they would see only the hint, which has significance to me alone. However, noting hints rather than actual passwords is not a foolproof security measure. Because the sites you visit will leave cookies on your computer, once you log in, you will be able to access the site without logging in again. Facebook is a good example of this. Once you log in, even after you turn off your computer and restart it, you will still be logged into Facebook. Banks and financial institutions are often an exception to this, insisting that you log in not only each time, but after only a few minutes of non-use. Thus, you should always use caution and never let a student or anyone you do not trust use your laptop.

**SOME CLOSING THOUGHTS ON ONLINE PLCs**

The key takeaway from this chapter is that you have endless options available to you when you utilize the web as a resource for expanding your professional development. The fact that information is available to you 24/7 whenever and wherever you have an Internet connection means that you can always be learning about new and innovative ways to help your students learn.

All of the sites mentioned in this chapter can be accessed on a laptop, smartphone, or tablet. For those of you who feel you do not have the extra time to look at Twitter feeds or to collaborate online, consider the time you spend waiting in line. While waiting in line or for public transportation, use your smartphone to briefly check Twitter for teaching ideas.

This chapter has taught you a number of ways you can access information quickly and how to save it for future use. It is my hope that this will help shake up your PLC meetings, if not help change your teaching in general. Once you have learned how to use the techniques in this chapter, you will revel in the discovery that you can acquire large gains in learning with minimal time investment.

Keep in mind that if you plan to move toward a more student-paced classroom, you will need lots of feedback from other educators who are traveling down the same road. You can start expanding that network by adding educators who use the hashtag #individualizelearning to your Twitter account. Expanding your network to those outside of your school...
will greatly enhance this effort. The sooner you set up your new professional learning network, the better. Following the educator challenges below might give you that jump start you’ve been looking for.

At the end of each chapter, you will see the QR box below, which you can use on your smartphone to get to the links mentioned in this chapter. Alternatively, you can go to http://bit.ly/digitalclassroomteacherguide if you prefer to use your laptop.

CLASSROOM EXAMPLES

Once you have experimented with having hashtag conversations on Twitter with the members of your PLC, try starting a hashtag conversation with your students. For example, you could start an online conversation with your students on a day when school has been canceled (perhaps because of snow). In order to prevent students from falling too far behind due to the missed day of school, get them to share their ideas on the causes of the Civil War or conduct a character analysis of Odysseus. Use the hashtag #snowdaydiscussion (or something similar) to send out questions and respond to students’ comments. Students are attached to their phones 24/7, so why not use this to your benefit? Once they get the hang of this, some students may even take the lead in conversations. Using this strategy, you could cover a normal lesson plan (such as the causes of global warming) over Twitter.

Housing all of your passwords in the cloud can save you in so many ways. For example, in the county where I teach, teachers need to remember many passwords. Several of my colleagues keep a paper notebook containing all of their passwords. But if the notebook is at school, and a teacher feels like calling in sick, he or she won’t have the password on hand needed to request a substitute. On the other hand, anytime I need a county code, I simply access my cloud-based bookmarks. Remembering that you have to be logged into Google, know that no one else can see your comments for each bookmark, so it is perfectly feasible to put your login/passwords there. This also means that when you are teaching and need to get to one of your bookmarked sites, you can easily find it and spend more time with your students.

Twitter has helped me too many times to count. I learned the intricacies of Google Drive from posts on Twitter, I discovered Fakebook (see Chapter 5), and I even learned how to improve my techniques on Twitter—all from checking Twitter two or three times a week. Several of my friends unfailingly participate in hashtag discussions each week with other educators in their content areas. Even if they miss the conversation in real time, they can later search the hashtag to see what others said and thereby pick up new ideas for their classrooms. Twitter is also a rich source of many of my lesson plans.
On a weekly basis, I participate in a Google Hangout (GHO) with a group of people who are working on developing an educational app. We have team members in Russia, India, Germany, California, Arizona, Michigan, and Virginia. Many of us have never met in person, but that hasn’t stopped us from collaborating and creating what we hope will be a game changer in education. On Google Hangouts, we can see and hear one another and can easily share both documents and our laptops and desktops. So, for example, I can show my fellow participants anything on my computer screen.
Other uses of GHOs might include

- meeting with your school PLC to discuss likely free response questions on the upcoming AP exam, collaborating with educators from a neighboring school district to improve test scores in your subject area; and
- working on a collaborative presentation with your colleagues.

EDUCATOR CHALLENGES

**Monday Morning Challenge:** Set up a Twitter account and find ten people to follow. Add five more each week to reach at least fifty people to follow during the next three months. During this period, commit to following the Tweets at least twice a week. Share (retweet) the interesting information you find with others.

**Tuesday Morning Challenge:** Post at least two Tweets per week on Twitter related to your field of expertise.

**Wednesday Morning Challenge:** Create a hashtag and use it to converse with other educators. Start small and try it out with a PLC in your school so you can sit in a room together and see how it works. Then branch out to other educators in a nearby school.

**Thursday Morning Challenge:** Start bookmarking the URLs in this chapter and in subsequent chapters using Google bookmarks. Then try to access the bookmarked items from another computer (in the library or on a friend’s computer).

**Friday Morning Challenge:** Have everyone in your school PLC create a Gmail account. Then schedule a time to have a Google Hangout with them.

**Twitter Hashtag Challenge:** Use #individualizelearning to share the ways in which you are changing both your teaching and interactions with other educators. For example, you could post a Tweet sharing the URLs of the new websites you have discovered and include the hashtag #individualizelearning. Or you could post a Tweet including #individualizelearning asking other educators to share the sites they follow.