By David Warlick

Grow Your Personal Learning Network

New Technologies Can Keep You Connected and Help You Manage Information Overload

Personal learning networks (PLNs) are not new. We have long relied on our families, friends, colleagues, and acquaintances to supplement our knowledge about the world. Our professional learning also comes from reference books, the textbooks we carried home from college, the television and radio stations we tune in to, and the professional and personal-interest periodicals to which we subscribe. And we have been connecting with people and information through the digital realm for decades.

But the times are still changing. Information and communication technologies (ICT), including an ever-growing repertoire of open source applications, have freed content from the printed page, giving voice to the ideas of people we have never had access to before and enabling us to reshape our information experiences to suit our learning needs. Harnessing these new technologies to create and grow our own PLNs is imperative for educators who want to stay connected to the changing world we are charged with introducing to our students.

Pick Your PLNs

As I wrote this article in a local coffee shop, I posted the following message on Twitter: "Writing article about PLN. What's your favorite PLN tool—besides Twitter... :-)" Over the next two hours, 33 Twitter-using educators from across the United States suggested such tools as Skype, Google Reader, Second Life, Mailing Lists, Diigo, Ning, Delicious, Google Talk, wikis, and blogs.

And that's only one way that educators can tap into connected and cultivated communities of interest to find information sources, suggestions for lesson plans, potential collaborators, current events and trends, new opportunities, resources, and a wide variety of other answers and solutions. PLNs open up doors to sources of information that were not even available a few years ago, and continually evolving technologies are making it easier to capture and tame the resulting information overload.

Technology has inspired a shift from a hunting-and-gathering information economy to the domestication of the information landscape.

There are three main types of PLNs, each with its own avenues of cultivation:

Personally maintained synchronous connections. This is the traditional network that includes the people and places you consult to answer questions, solve problems, and accomplish goals. Today, however, you can enhance this PLN with new tools such as chat, instant and text messaging, teleconferencing (using iChat, Skype, uStream), Twitter, and virtual worlds such as Second Life. It's like attending a meeting at work, only better, because the traditional barriers of geography, background, language, and culture become transparent.

Personally and socially maintained semisynchronous connections. The Internet has given rise to a new time reference. Bournemouth University professor and New Media Environments Chair Stephen Heppell called it the "nearly now" in a March 18, 2008, *Guardian* article titled "Back and Forth." "It is not synchronous, but it nearly is," he explains. "It is our texting, our Facebook profiles, it's Twitter and Syndicaster. It is children with a string of chat windows open on screen as they do their homework, adding the occasional comment to the chat."

For networked learners, these are conversations that are not exactly conversations. They may be questions directed toward a single friend or associate, but more likely they are sent out to a community of people who, because of their interests, expertise, or perspectives, are in a position to help you do your job.

Semisynchronous refers to the idea that collaboration doesn't have to happen in real time. Not only can the col-

Personal learning networks may open up new worlds, but the technologies that extend our personal and professional learning beyond our immediate proximity can be difficult to understand and control. Here are 10 tips for creating, cultivating, and pruning your PLN.

1. Start small and limit the number of blogs you subscribe to.

2. Organize your subscriptions by topic or job function.

3. Organize folders in your aggregator based on how frequently you need to read them. Call one folder "Everyday" and place in it blogs and other RSS feeds that you need to see every day. Call another one "Once a Week" and another one "Once a Month."

4. Give yourself permission to switch your PLN off every once in a while. While your computer is off, take a break and go for a walk or a bicycle ride, visit a neighbor, or tend your garden for a few minutes. It is also OK to ignore parts of your PLN when you need to.

5. Scan! You may need to read only one in 10 of the blogs that come through, but that one will make you a better educator.

6. Your aggregator can grow temporary limbs. If you are teaching a new unit, find sources that will help you prepare for it and subscribe to them. When you've learned what you need, sever the lines.

7. Realize that your network is much larger than it seems. You are not just reading my blog, you are reading all of the blogs that I read and all of the blogs that those bloggers are reading.

8. Invest some time, but don't fret that it will take up all your time. According to David Jakes, it takes only 15 minutes a day to learn something new.

9. You do not need to subscribe to dozens of educators' blogs to learn how they are using VoiceThread. Instead, conduct a Google Blog Search for *voicethread* and subscribe to that search's RSS feed.

10. Some bloggers are very good connectors and filters. They read lots of information and then blog the gems. Excellent examples are SEGA Tech from Georgia's Southeast Regional Educational Service Agency and Stephen Downes' OLDaily.

laborators be geographically distant, but they can also participate in a discussion when it works best for their schedules, regardless of time zones or office hours. The tools you can use to build and grow this type of network include mailing lists, wikis, Google Docs, Twitter, group discussion boards and comment walls in Facebook, and commenting on blogs, among others.

Dynamically maintained asynchronous connections. The first two types of PLN connect us with each other, but this type more often connects us with content sources that we have identified as valuable.

The central tool for dynamically maintained asynchronous connections is the RSS aggregator. Aggregators such as Google Reader, Netvibes, and Pageflakes are now at the core of many educators' PLNs because they bring us information that helps us do our jobs. In a sense, this technology has inspired a shift from a hunting-and-gathering information economy to the domestication of the information landscape. When you subscribe to tagged Flickr photos, new videos

from YouTube or TeacherTube, Google News searches, or podcasts, you are training all this information to organize and deliver itself to you. (See Keep It Simple on this page.)

For example, after finding an education blog through a blog search on Technorati, you can subscribe to its RSS feed with your aggregator. Then you can sit back and relax, waiting for the software to periodically check for new posts, retrieve them as they appear, and make them available for reading at your leisure. You can also subscribe to ongoing blog searches that will scan the entire blogosphere and automatically send to you new posts on your chosen topic. (For more on how to use RSS, see Mining for Gold on page 18.)

Some of the most useful PLN tools are social bookmarking services such as Delicious. As people add new Web sites to their online bookmarks and categorize or tag them, that information becomes available to the entire community.
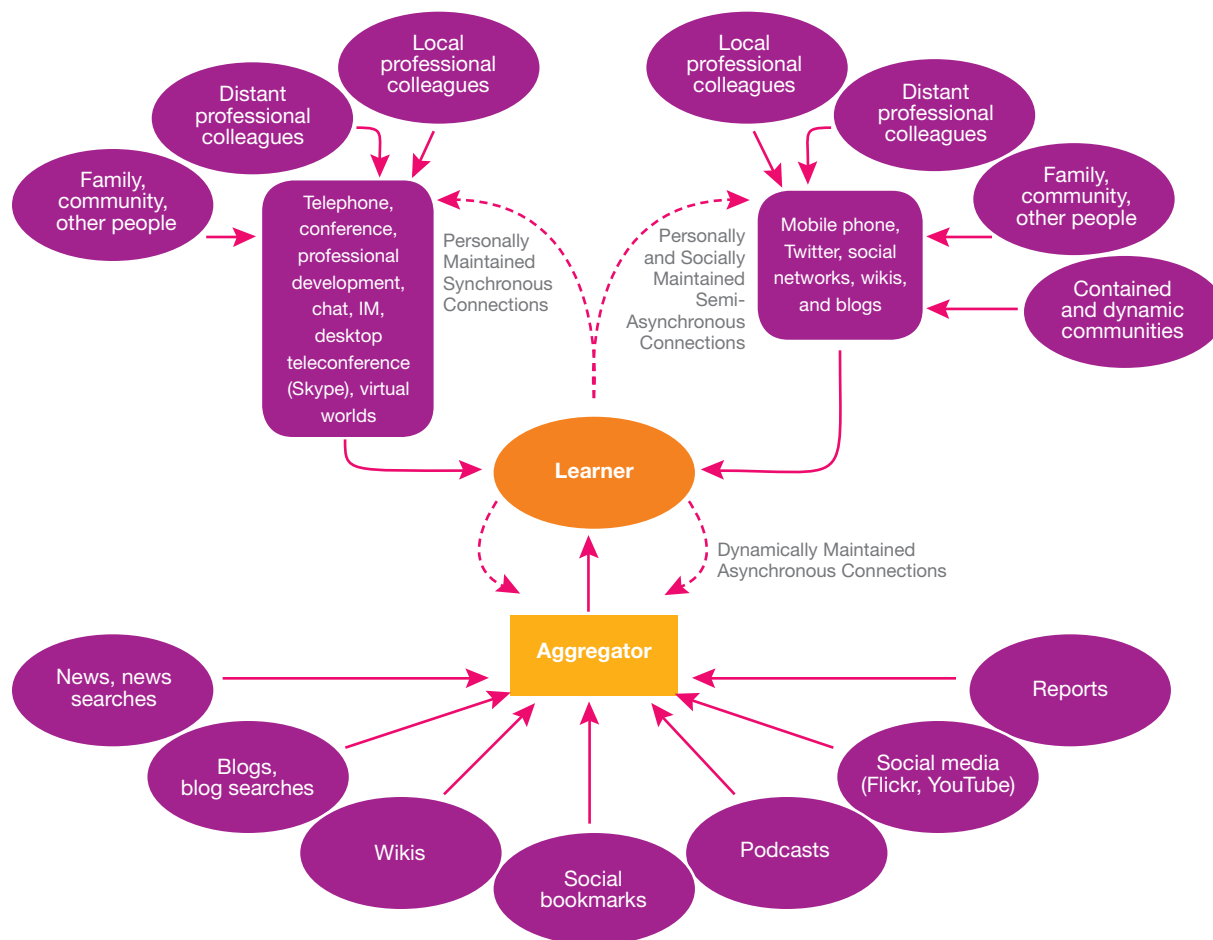
How does this help you? If you are looking for articles about robotics, for example, a Google search will return a list of approximately 25 million Web

IN ONE PLACE
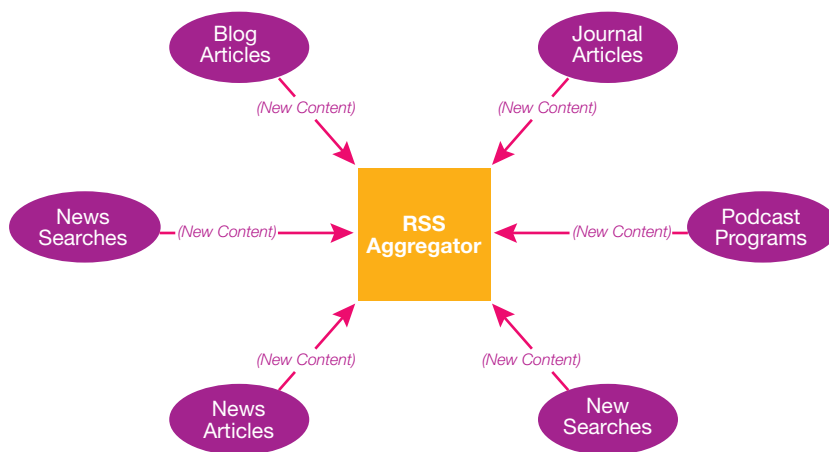
RSS aggregators train relevant content to come to you so you don't have to go looking for it.

The networked learner receives information from various sources and in turn becomes a source for others' PLNs.

pages. Searching Delicious returns a more manageable list of Web sites that are likely of better quality, as someone valued them enough to bookmark them for later use. Even better, you can subscribe to the RSS feed for the search so that all subsequently bookmarked Web sites tagged with *robotics* will come to you, as well. This is a useful PLN tool because you are connecting yourself to resources that are supported by a recommendation system.

Cultivate Your Network

Many of the terms used to describe the 21st-century educator—*facilitator, guide, coach, curator*—imply an effort to connect learners to the world they

Learners become amplifiers as they engage in knowledge-building activities, connect what they learn, add value to existing knowledge and ideas, and re-issue them back into the network to be captured by others through their PLNs.

are learning about. Of course, that part of our job description requires us to be learners ourselves. That's why we need convenient and unfettered access to new and emerging communication technologies and applications, as well as opportunities to gain and develop skills not only to operate these tools, but also to shape and even invent networks of learning.

The diagram "Many PLN Paths" above shows a variety of tools that can serve as strands of a single PLN. Some might be considered traditional tools, such as phones, e-mail, mailing lists, and chat. Other tools are new, such as IM, wikis, blogs, and RSS aggregators. Still others such as Twitter and new visualization tools are just emerging and establishing their connection points.

Regardless, at the heart of every PLN is its members. The networked learner at the center of the PLN is not

merely a destination for information. Learners become amplifiers as they engage in reflective and knowledge-building activities, connect and reconnect what they learn, add value to existing knowledge and ideas, and then re-issue them back into the network to be captured by others through their PLNs. Working your PLN involves a great deal of responsibility because you are almost certainly part of someone else's network.

It is also critical that we acknowledge a potential weakness of PLNs: Although they help us roam beyond our normal geographic reach, they can easily become limited in their range of perspective. It is human nature to incline toward sources that agree with our own worldviews, so we must try to cultivate networks that challenge our thinking and frames of reference. That is how we all learn.

Preparing children for an unpredictable future means helping them learn to teach themselves. That is why lifelong learning is such a crucial part of the education conversation and why modeling a learning lifestyle is one of the best things that teachers can do today. So fire up your PLN and become the networked learner you expect your students to be.

Resources

Bloglines: www.bloglines.com
Blogpulse: www.blogpulse.com
Delicious: http://delicious.com
Diigo: www.diigo.com
Facebook: www.facebook.com
Google Blog Search: http://blogsearch.google.com
Google News Search: http://news.google.com
Google Reader: www.google.com/reader
Google Talk: www.google.com/talk
iChat: www.apple.com/ichat
iGoogle: www.google.com/ig
Netvibes: www.netvibes.com
Ning: www.ning.com
Pageflakes: www.pageflakes.com
Second Life: http://secondlife.com
SEGA Tech: http://segatech.us
Skype: www.skype.com
Stephen Downes' OLDaily: www.downes.ca/news/OLDaily.htm
Syndicaster: www.syndicaster.tv
TeacherTube: www.teachertube.com
Technorati: www.technorati.com
Twitter: http://twitter.com
uStream: www.ustream.tv
VoiceThread: http://voicethread.com
YouTube: www.youtube.com

David Warlick is a former classroom teacher, author, programmer, and public speaker. Since 1985, he has worked as a consultant, helping educators from around the world to better understand today's changing information landscape.