Best Use of Teacher Time in a Connected World

by Alan November of November Learning | NovemberLearning.com @Globalearner

What is the best use of teacher and student time during class? The age-old debate sets up competing values. On one side, there is an argument that teachers should command student attention as they convey their knowledge. The opposing view promotes students trying to figure out how to solve problems while teachers assume the role of responsive and supportive coach.

With a growing library and toolset of learning resources via the Internet, I am seeing a trend toward teachers shifting more and more responsibility of managing learning to their students. One organization I have learned to admire for their focus on researching best practices is the Ministry of Education in Singapore. In 2005, The Ministry of Education launched the “Teach Less, Learn More” (TLLM) initiative.

“We will encourage our students to learn more actively and independently. We want to nurture a curiosity that goes beyond the formal curriculum, and a love for learning that stays with the student through life.”

In one of my recent webinars, 68% of the attendees felt that teachers were currently working harder than students. When asked about their preferred choice, 51% wanted students and teachers to work equally hard, and 44% said students should work harder. The real question is, What does “working harder” look like?

My book Who Owns the Learning discusses giving students jobs such as tutorial designers, documenting and sharing their learning, and researching curriculum. Easy to use tutorial design tools such as screencasting, has enabled teachers to create video tutorials and make them available on their home page. Educators such as sixth grade math teacher, Eric Marcos in Santa Monica, California, have convinced me that we
have underestimated the willingness and creativity of students to take on this responsibility. If you take a look at Eric’s website, you can see that the view counts of some student tutorials are as high as 90,000+. When I interviewed his students, it was clear to them that they had to learn more when they designed tutorials compared to doing homework or studying for a test.

How do you motivate students to do their very best? When I had the chance to meet with a 12-year-old tutorial designer in Eric’s class, she knew (from a tool that tracks global traffic) that that people from England, Australia, the United Arab Emirates, India, and The Netherlands had recently logged in to view the class library. As she explained, “When I found out the world needs me, I knew right away that I had to create more tutorials.” She was expressing a different motivation than receiving a grade. Her work was about purpose and responsibility. I’m a big fan of Dan Pink and his book Drive where he talks about purpose being one of the most important motivators of student work.

Another example of how changing students’ roles can help learning is based on counterintuitive research from Harvard called “The Curse of Knowledge.” Basically, it turns out that some Harvard professors and teachers know too much to communicate effectively with first-time learners. I’ve heard students say that their teachers are just so good at their subject that sometimes they miss when their students are just not getting it.

Dr. Eric Mazur, the dean of applied physics at Harvard, is a pioneer in supporting peer-to-peer learning. He has redesigned his classroom to encourage students to continuously help each other. First-time learners can sometimes explain things to another first-time learner more effectively than a Harvard professor. As I have traveled the country, I have seen the success of elementary – high school teachers who are also successfully supporting peer-to-peer learning.
New Roles for Teachers

As web-based tutorials continue to grow, a teacher’s role will shift more toward diagnostic skills via resources that make student thinking more visible. An example is PRISM, a free web-based tool from the University of Virginia where teachers can immediately see how the whole class is interpreting the meaning of text. Prism provides teachers with the option for setting up the key of three highlight colors. As students read the text, they follow their teacher’s instructions and use the established color key. Red may represent opinion and blue may represent facts. As students highlight, the entire text starts acting as a word cloud. The more a word is highlighted the larger the font size becomes. This is a very simple, way of representing how a whole class is thinking in a very clear pattern. Both teachers and students are immediately better informed. The impact can be very powerful.

Many students say they don’t participate in class because they don’t know what their classmates are thinking, so it’s not safe to take the risk of participating. But what if your students did know what the whole class is thinking? I have witnessed this in classrooms using PRISM; kids are much more engaged and much more willing to take risks.

There’s another handy aspect to this technology for those working with an LMS like itslearning (an LMS provider I’ve worked with). You can plug a link that generates PRISM activities right into the platform, so the tool’s right at your fingertips whenever you need it.

Teaching Critical Thinking on the Internet

Ask any student if they can use Google and they probably will say yes. But when you test their web literacy, things can break down pretty quickly. They're using the web as their dominant media every day, yet many do not understand the algorithm and they may not understand how to validate whether something is true or false.
For example, type “Are cats better than dogs?” in Google and take a look at your results. I’m going to guess wherever you are in the world, all the results on the first page will show that cats are unequivocally better than dogs. But if you type in “Are dogs better than cats?” then Google is going to tell you the opposite; that dogs are unequivocally better than cats! Both of these responses cannot be true at the same time!

Google leans toward interpreting your query to try to understand the answer you are seeking. It’s designed to figure out what you want. If you type in “Are cats better ...” it determines that you’re biased in favor of cats and that’s what it gives you. That means some of our students, depending on how they design searches, are getting biased information much of the time they use Google.

Additionally, Stanford’s college of education conducted a study of over 7,800 students in the country, from middle school through university level, including Stanford. The researchers were shocked at how poorly students did in distinguishing whether something was true or false.

If you are looking for more resources to teach web literacy you might take a look at our resources.

As we continue to shift learning environments to be web supported, I am convinced the role of the teacher will be more important than ever:

- Providing students with resources from around the world
- Empowering them to publish for a global audience
- Applying tools to make thinking more visible
- Teaching critical thinking and sophisticated search skills
- Creating challenges where students have to apply knowledge
- Building learning communities of students helping students