Transitioning from “Learning about Apps” to “Learning with Apps"

Jim Vanides

It’s an exciting time for technology using educators, with an abundance of choices and apps. But before we get app-a-plexic (or app-athetic), let’s take a deep breath and remember that it all starts with “learning”.

While the technologies continue to change, my general framework for thinking strategically about teaching, learning, and technology still applies.

Step 1) start with what’s not working

We’re surrounded by “education standards” and learning objectives; we’re also surrounded by data – albeit sometimes not in the right form or at the right time to be entirely useful. What is sometimes missed is the students. We don’t have to wait for standardized tests in the spring to know that for some students, “schooling” as they’re currently experiencing it doesn’t work for them.

The first question is not, “What apps are good for 5th grade?” Rather, the first question should be, “Are all my 5th graders ap-t (sic) to succeed?” Using all the data at our disposal, from formal assessments, to student-produced work that demonstrates mastery, to attendance rates, discipline rates, and simple qualitative indicators, we can and must articulate what’s not working and for whom. These are the challenges worthy of our laser-focused efforts.

Step 2) verbs before nouns

I first blogged about this back in 2005, then repeated in 2009 with “Successful EdTEch: First the Verbs, then the Nouns”. This framework is based on a memorable conversation with my friend and education colleague Dan Gilbert, who worked with Stanford faculty who were attempting to use the Stanford Wallenberg Hall high tech experimental classrooms. The most common first reaction was something akin to “deer in the headlights” – frozen when confronted by a vast array of technology.

Dan began to explain, “Think about the VERBS first” – the actions and activities of students and teacher/facilitators. Once they articulated what the desired experience would be, then he could set about helping to identify what the NOUNS (technology) needed to be to create and support these experiences.

Great teaching has always been about “powerful experiences” best described by verbs, so it’s no wonder that Common Core and the Next Generation Science Standards are emphasizing “higher order thinking” and other active learning verbs.

A few of my favorite verbs

Whenever I get asked, “What are some of your favorite technologies for learning?” I find myself talking about experiences. Core to these experience of some of my favorite verbs:

***Accessing* Caring People** – Sure, access to information is good, but access to great people is even better. Students, especially those who are struggling, benefit tremendously from caring mentors, tutors, coaches, experts, and peers – from all around the world. For students with a personal learning network like this, there is no stopping them from exploring their interests and catapulting their careers in exciting and meaningful directions.

***Collaborating* in (international) Teams** – Most, if not all, of the great challenges facing society will require collaboration to solve. We also know that the most memorable, high-impact learning experiences

are challenge-based, problem-based activities that involve students in addressing real issues in their community and around the world – and in this flat, global economy, problem-based-learning in a context that requires international collaboration is even more rewarding (see "4 Reasons Why Global Fluency Matters – an open letter to 6th graders everywhere"). Let's prepare our students for the REAL 21st century where global fluency is the next resume differentiator.

***Creating* (not consuming)** – I first heard this mantra from Larry Rosenstock, founder of High Tech High in San Diego, California. When I asked, "What role does technology play at your schools?", he replied, "Students should be creators, not consumers…" It's not sufficient to memorize answers to questions in the back of the chapter. The world (and the world of work) needs graduates who can think and can create solutions to real challenges; who can not only write to pass the test, but can publish to change minds and shape society; who can not only recognize works of art, but can exercise extraordinary creativity to create art that helps us remember our humanity.

Inquiring* and *Investigating – Science is greatly misunderstood. Let's let our students in on a little secret: Doing science is not about following a recipe that gets us to "the right answer" before the bell rings. Real science starts with wondering – and in many ways, begins with NOT knowing. Allowing our students to explore and wonder unlocks their curiosity; technology allows them to more deeply inquire and investigate, unlocking real scientific experiences.

STEP 3) IDENTIFY THE NOUNS (technologies)

The goal in the end is to create powerful learning experiences that solve the challenges described in STEP 1. More often than not, these experiences are ones that would not have been possible without the combination of great teaching (verbs) and the right technology (nouns).

As an advocate for the transformation of STEM(+) learning and teaching, I've been a big supporter of pen-based computing. It started with grants to educators a decade ago when when "tablet pcs" were convertible laptops with high-resolution digitizing pens and screens. For STEM(+) subjects, drawing diagrams and graphs is a natural – and sometimes the only way to have a meaningful math/science/engineering design discussion. When it comes to STEM(+) learning and teaching, even simple software becomes immensely important (see "5 Easy Tablet PC Tips" circa 2007-2009).

But the nouns have continued to evolve – so I will follow up this article with **Part 2: My Favorite EdTech Nouns (and why).** If you'd like me to include some of YOUR favorite EdTech nouns, tweet me @jgvanides and tell me what and WHY...

About the Author

Jim Vanides is a member of the HP Office of Global Social Innovation, responsible for worldwide education philanthropy strategy and programs. This includes the 2010 HP Catalyst Initiative (www.hp.com/go/hpcatalyst) and the 2009 HP Innovations in Education initiative, a $20M investment reaching schools, colleges, and universities in 26 countries. In addition to authoring the blog, "Teaching, Learning, and Technology in Higher Education" (www.hp.com/go/hied-blog) he is a contributing author on the K12 education blog, Guide to Digital Learning Environments (www.guide2digitallearning.com/blog). Jim's past work at HP has included engineering design, engineering management, and program management in R&D, Manufacturing, and Business Development. He holds a BS in Engineering and a MA in Education, both from Stanford University.