Data Collection and Its Importance in the Classroom
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Numbers. This used to be a daunting word for me. I'm not a numbers person—perhaps that's part of why I'm a language teacher, but my view on numbers has changed as of late. Why? Data. Data driven instruction in the classroom has become a key piece of student success. It has become a key element in my instruction.

To begin with, the data we as educators collect is as important as what we teach because it puts “proof in the pudding.” We ask ourselves on a daily basis how we know our students are learning. Test scores? Completed assignments? After these are put into the grade book most often the results are forgotten. Until now. With data collection in education, teachers are now able to see how well students are doing on specific standards and objectives in their subject matter, which is the core of curriculum.

Aside from this, and quite possibly the most key factor in data collection, is the analysis piece. So you've collected data on how your students fared on a common assessment. Now what? Now is where the “proof” drives future instruction. If several students scored low on assessments that require analysis of a piece of text, for example, as an educator I know that I must focus more and perhaps use a different approach on that particular standard for better student comprehension and performance. Conversely, if numerous students are scoring well on certain standards this tells me that my current method of instruction in that area is working; my students are understanding and successfully performing.

As aforementioned, analysis of our data is the key element to our students' success. We can collect all the data in the world but it would be utterly useless if we did not use the results to drive our instruction. After analyzing the data educators should be able to modify, if need be, their instruction to become more effective instructors for their students.

Whether or not we are good with numbers, the data never lies. As educators, we need to see this and use it to our advantage so that we are better equipped to be effective instructors for our students. Data driven instruction is a way that we can make sure we are creating lessons that produce higher comprehension, retention, and success in our students.
**DID YOU KNOW?**

- All young people experience learning losses when they do not engage in educational activities during the summer. Research spanning 100 years shows that students typically score lower on standardized tests at the end of summer vacation than they do on the same tests at the beginning of the summer (White, 1906; Heyns, 1978; Entwisle & Alexander 1992; Cooper, 1996; Downey et al, 2004).

- Most students lose about two months of grade level equivalency in mathematical computation skills over the summer months. Most students also lose more than two months in reading achievement. (Cooper, 1996).

**SUMMER LEARNING IS VITAL**

To succeed in school and life, children and young adults need ongoing opportunities to learn and practice essential skills. This is especially true during the summer months.

Many Americans have a wonderful image of summer as a carefree, happy time when “kids can be kids,” and take for granted the prospect of enriching experiences such as summer camps, time with family, and trips to museums, parks, and libraries.

**Before becoming a 1:1 school, I had always thought of how incredible (incredibly impossible) it would be if students could all have a computer. I couldn’t imagine how amazing it would be if the students could visit the exact same website at the same time.**

In November of 2012, the CEO of Big Universe, Anil Hemrajani, visited numerous classrooms. Mrs. McKibben from Rome City graciously volunteered to demonstrate how she integrates his product into a literacy lesson.

As the students were all holding their iPads, looking at the digital text from Big Universe, it dawned on me how far we have come. Not only were the students doing exactly what I had envisioned prior to becoming a technology focused school district, but they do so much more than I could have imagined.

Students are creating books (Scribble Press), posters (Doodle Buddy), and videos at an alarming rate. The efficiency at which they can produce such products is far faster than ever before.

Integrating technology into a lesson in the past took lots of time and preparation. Now, we have first graders using an app (Videolicious) to make a one-minute presentation about information they learned about Thanksgiving. Second graders doing similar projects to create presentations on the basics of fractions. (Both examples can be found here.)

The possibilities are endless for students to take pictures and create one minute presentations of their knowledge.

It has become even more apparent that training students to use the devices as tools instead of toys is essential. It is up to us, as educators, to change the digital culture. Our students are bombarded with electronic devices, but they use them for entertainment purposes. It is difficult for them to envision how they can use it as a learning resource.

In order to accomplish the task of changing the digital culture, we need to start by thinking about how we integrate technology. According to Jeff Herb, “…when introducing a new technology to the classroom, never limit its worth to simply the task at hand. Explore with students the other ways in which the tool is relevant in society and culture and how learning the various uses of the tool will help to improve their functionality in the future on related tasks” (Herb, 2012).

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And knowledge of content. We need to use applications/websites to encourage upper level thinking. These types of tools would be qualified under the SAMR model as redefinition, which means “the computer allows for the creation of new tasks that would otherwise be inconceivable without the technology” (Puentedura, 2012). Students with devices have great power at their fingertips. If they are not harnessing the potential within it, they will take it for granted. “If students are given engaging, open-ended problems to solve, they won’t want or need to play games on their iPads during class time” (Johnson, 2012). Let us change the culture by how you integrate.

**Resources:**


When I first volunteered to pen this article I was under the impression it would be easy. I had planned to recall and share some of my personal experiences as a student, but you know what? I haven’t been a public school student since the 70s and 80s. After doing the math, that was over my 20 year time limit. Man! That went fast!

I will share one unique experience from my time as an elementary student. I had a school with virtually no walls. All of the classrooms, with the exception of the music and gym rooms, were segregated by book shelves and portable bulletin boards. This type of building design was known as open concept. I loved it!

The Close of the 20th Century

In 1991, the first SMART interactive white board was introduced. (www.eds-resources.com) The board was introduced by the Canadian-based company, Smart Technologies. This was over 20 years ago, and it wasn’t until about 1995 that U.S. classrooms began replacing blackboards with interactive whiteboards. These boards allow teachers to physically interact with an electronic resource without being behind a computer.

In 1992, the first charter high school opened in St. Paul, Minnesota. “Today, there are approximately 5,600 public charter schools enrolling what is estimated to be more than two million students nationwide. (www.publiccharters.org)

In 1993, constructivism was a viewpoint that learning best occurs through active construction of knowledge rather than its passive reception. (www.eds-resources.com) In layman’s terms, it means kids learn best by doing, not sitting and listening. 1993 also brought the first completely online university. Talk about sitting and listening...

Popular commercial web browsers hit the scene: Netscape’s Mozilla introduced in 1994 and Google in 1998. (www.eds-resources.com) Web browsers changed the face of gathering information. Classroom and library encyclopedias were gathering dust.

The Turn of the Century

The turn of the century brought President Bush’s education reform No Child Left Behind Act (NCLB). This act mandated high-stakes student testing, held schools accountable for student achievement levels, and implemented penalties for schools that did not make adequate yearly progress (AYP) toward meeting the goals of NCLB. (www.eds-resources.com)

In 2002, school vouchers (school choice) are constitutional, and in 2003, K-12 online learning becomes available as one of those choices.

A new approach, in 2004, to teaching students with learning disabilities, RtI (Response to Intervention) provides a three-tiered model for screening, monitoring, and providing increasing degrees of intervention using “research-based instruction” with the overall goal of reducing the need for special education services. (www.eds-resources.com)

The Opening of the 21st Century

Just four years ago, in 2009, the Common Core State Standards (aka The Core) Initiative was launched. This was “a state-led effort coordinated by the National Governors Association Center for Best Practices (NGA Center) and the Council of Chief State School Officers.” Today, forty-five states including Indiana, the District of Columbia, four territories, and the Department of Defense Education Activity have adopted the Common Core State Standards. (www.corestandards.org)

This bit of information is intriguing…2009 - Quest to Learn (Q2L), the first school to teach primarily through game-based learning, opens in September in New York City with a class of sixth graders. Go ahead…Google it: q2l.org.

And woven among these two decades is an increase in school violence, escalating poverty, demoralization of public school teachers, union rhetoric, and teachers and parents taking a stand against the intensity of standardized tests.

So, why be a teacher in the midst of all this chaos? Why not? Despite all the changes, the common denominator through the last 20 years has been our job to support and nurture the love of learning for our students.
A period of warm weather in which traditional classes are not held, yet students are still learning. Don’t forget to read daily, explore new things, and investigate the world around you.

Upcoming Important Dates

- June 4, 2013—Last Student Day
- June 10-28, 2012—Elementary Summer School (for some 3rd and 2nd graders)
- July 8, 2013—Online Registration Begins
- August 7, 2013—Lions Medical Screening form Kindergarteners at 5:00 PM
- August 8, 2013—7th and 9th Grade Orientations
- August 14, 2013—First Student Day

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