11/18/13

Hi Mary and Charlotte,

Only Work of the Week
In our final week, I would like you to go through our WIKI one more time at tinyurl.com/sconlineplunge and see if you can fill in several of the vocab words that have not yet been described.

Hope you can catch up with any of the work from the last lesson that you have not gotten to yet. Hope we have another phone/screenshare session this week!

Below you will find the **required reading** -- several useful sections of one of favorite chapters from the Summercore Primer. I am also attaching the entire chapter for your **optional reading**. I think you will like it and hope it will help keep you "moving forward with technology" for both your kids sake and for your own professional growth!

Be well Mary and Charlotte and hope you stay in touch. Teaching you and getting to know each of you has been a real joy. I wish you the best of success with your computer usage and your careers. Even though our 30 minute phone sessions/teaching sessions end this Friday 11/22, if I can help you at some point in the next 33 years by email or by a 5 minute phone call, I would be glad to! Be well, Mary and Charlotte!

Chapter 3

Educational Apps and Websites

Thinking About Academic Technology

Joseph Weizenbaum, former M.I.T. Computer Science professor, gave a speech entitled “Are Computers Good For Children?” He claimed that his speech would be short: The answer is no, he said. His main objections were:

• literacy vs. computer literacy: Basic reading and math skills must have preference over computer literacy and programming.

• too much money is being thrown at problems when computers are under used; teachers receive inadequately training, and so many other needs exist.

• too much truth coming from a CRT: children already spend too much time sitting in front of that other CRT, the television set.

• not real motivation for learning.

The Next Step:

Simulations In contrast to drill and practice software, simulations inevitably raise issues of higher vs lower order thinking skills. According to Bloom’s *Taxonomy of Educational Objectives,* higher order thinking skills include knowledge (define, repeat, record, relate), comprehension (translate, restate, discuss, describe, explain), application (interpret, employ, demonstrate, dramatize, illustrate), analysis (distinguish, appraise, calculate, experiment, solve, categorize), synthesis (compose, plan, design, formulate, create), and evaluation (judge, appraise, evaluate, revise, estimate, measure).

Problem Solving Websites/Apps

This type of technology addresses areas that traditionally are difficult to teach but can be reached with the power of the computer: spatial relations, critical thinking, estimation, recognizing patterns, discovering attributes and rules, scanning for clues, predicting results. The best web site for this type of problem-solving is the National Library of Virtual Manipulatives from Utah State University.

The Creative Computer Graphics, animation, movie editing, and music apps provide an alternative route to the computer to those children who see the machine as a math/science tool or who are more "right" brained in their approach to school work. Students can explore digital storytelling for all subject areas. Examples include Kid Pix, iPhoto, PhotoShop, Movie Maker, Comic Life, Garage Band, iMovie, Final Cut Pro, Microsoft Photo Story, aviary.com, animoto.com, doink.com, and Brushes, iStop Motion, Comic Life, ArtRage, procreate, Art Set, GarageBand, and Creative Book Builder for the iPad.

Digital Portfolios

The act of creating a digital portfolio is both one of the most useful assessment tools for a teacher and a creative though-provoking process for the students. Digital portfolios can be either teacher-centered (the teacher manages and curates the portfolio for assessment purposes and for parent communication) or student-centered (the student manages and curates the portfolio for self-assessment purposes.) There is no one right way, although frequently the decision is based on student age with teachers of K-5 in charge of the curation with older students curate their own portfolios.

Common Mistakes in Evaluating Educational Technology

Because the medium of educational software is so new to us, we are prone to many traps in evaluating software.

- Mistake #1: we spend insufficient time evaluating websites and apps, not reading/viewing the tutorials or exploring features. We should learn from our experiences with textbooks that the process of evaluation is time-consuming, and that first impressions can be misleading. We all want the quick fix and the snap judgment. Many YouTube, TeacherTube, and Vimeo tutorials exist for popular websites and apps; view some first before the final evaluation. To pass judgment quickly is like a student who evaluates *Jane Eyre* after browsing the first few pages. Many websites and apps improve upon closer inspection.

- Mistake #2: we can be too righteous in our evaluations. We forget the diversity of interests and appeals of various teachers and students. We forget to take a holistic approach. Because apps and websites can have that magical feel, people like to find a few faults and thereby write off technology: perhaps the menu choices are not clear, or the site is too gimmicky at first glance, or the choices are not always customizable. Yes, these are correct observations, but no different than what you might make in evaluating another teacher's class or evaluating a textbook. We rarely write off a colleague for a few faults, and we all use textbooks with some imperfections. Unfortunately, we hold technology up to a higher standard.

- Mistake #3: we too often evaluate without students. It is easy to pass judgment as adults and be dead wrong. Watching students communicate, interact and problem-solve can convince a teacher that the specific application or website has much more merit that originally conceived. Evaluating technology by watching students explore it leads to a richer appreciation of the learning process. What can seem to be an incomprehensible maze to teachers might be much less confusing to young learners used to clicking around menus and screens.

- Mistake #4: we cannot see useful strategies for incorporating the particular site or app into our curriculum. Even now, we still have few models of effective technology integration in the teaching process. Most teachers still have never taken part in the use of educational technology as a learning tool. Analyzing online data and constructing collaborative Google Apps projects, place marking Google Maps or incorporating YouTube videos are not the common experience set of most adults. We learn to teach partly by good and bad models we have had when we were students. Lacking these models, most of us need to be in experimental mode in trying to use technology. For a teacher who has taught for 20 years, using technology is risk-taking of the highest degree, resembling the first year of teaching. Not that many teachers are comfortable increasing their level of anxiety by breaking new ground; it is much safer to continue on with the traditional, proven approach that has worked for the past 19 years.

- Mistake #5: we are fearful that educational technology distracts from our educational goals. Instead, we need to embrace the big picture of the much-quoted 21st century skills. Technology can enhance the skills we value and have traditionally taught --writing effectively, problem solving, critical thinking-- while providing an easier method of teaching the skills that we valued but could

not teach so easily--collaborative learning, leaving a legacy, publishing, global empathy.

- Summary of Classroom Management Styles

Since most of our teaching styles have been deeply influenced by the role models we've observed during 12-16 years of sitting in classrooms as students, it is no wonder we are at a total loss when it comes to teaching with computers. We have had no such role models! No wonder it is common for teachers to think that teaching with computers means taking 18 students to a computer lab to work on 18 computers.