

Topic B:

Should all teachers be required to demonstrate basic technology competence?

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In a historical context, the answer to the query whether teachers should be required to demonstrate basic technology competence is a resounding yes. The last half of the twentieth century consistently pushed educational strategies towards the use of increasingly complex tools in order to assist learning. From the replacement of the slide rule by the calculator then spread sheet, to the substitution of the movie projector with the VCR then DVD player, to the exchange of the pencil for the typewriter then word processor; educators have consistently incorporated emerging technologies into the classroom. In addition to supplementing education, these tools also model the skills that competent people have been expected to master for employment during the age in which they lived. The next logical advance in education appears to be the fully integrated use of varied computer programs and the internet as instructional tools.

I understand the hesitancy that experienced teachers might feel towards mastery of new technologies such as computers. It is very difficult for an individual who is supposed to be the one who knows the most in a classroom to admit to his pupils that he may be less masterful than they when it comes to technology. These insecure individuals may feel that teaching has been presented effectively for millennia without electronic equipment, and so they question why computers and the internet should be so important for the education of the modern day student. Although a true statement, it is more important for these instructors to note that with a modicum of effort beyond understanding how a mouse and operating system work, an instructor can learn to be competent in basic computing, and subsequently open up their teaching to reach students with which they have never before had success.

Basic computer competency for all instructors in California Public Schools may essentially be summarized as mastery of: a word processing program, grading program, internet search skills, and email account mastery. Some forward looking instructors are incorporating presentation programs and websites; however, they are currently still in the minority. These four basic computer technology skills have revolutionized communication in education, and a term has even been attributed to their collective use in the classroom: “transparent teaching”.

Word processed printing allows students to hold a permanent document in their hands and follow a teacher’s concretely written organization rather than simply listening to ethereal words. Word processed documents also make it easier for students to follow instructions, since they may read them at their own pace allowing for differentiated instruction. Typewritten work has become the industry standard in higher education. An instructor who passes out printed

copies of all syllabi, lecture notes, and assignment instructions, will be modeling for her students the importance of forethought, neatness, and efficiency.

Dispensing printed instructions is important; however, true “transparent teaching” will also include student access to their marks. A computer grading program makes the storage, backup, and weekly printing of updated grades, much easier than keeping track of a single paper-based grade book. Posting student scores models organization, and makes students responsible for monitoring their grades. Uploading these grades to a website creates the ultimate “transparent teaching”, as it allows guardians to access their student’s grades as often as they like.

The internet holds a staggeringly dense amount of information. Everything one could ever want to know is there for the discovery...if one knows how to access it. An instructor not only enriches a course with current articles, but also models for students the importance of lifelong learning. The titles of the articles demonstrate for students how to do “intelligent searches” for topically relevant information. As this skill is honed, students learn to supplement their school education.

Finally, maintaining an active email account allows regular contact between the teacher and students’ guardians, beyond office hours. As most classes are considerably less than one hour per day, some extra contact outside the class may be imperative for student progress. Additionally, students may interact with the teacher in both academic and personal ways that they may not feel comfortable when competing with 30 other students for the instructor’s attention. Modeling openness and good inter-personal communication skills are keys to transparency, and important in any future school or workplace.

Mastering these computer technology skills creates an opportunity to reach learners who do not perform well in the traditional model of the teacher verbally giving course instructions and lectures, while students struggle to write everything down. Despite these great advances that all modern teachers need to master for the development of their students; it should eventually be the goal of every teacher to have a fully functioning website. Each instructor needs to have their course information accessible 24 hours per day for those students who need extra instruction, but cannot get it in a classroom environment. At the end of the day, a teacher who truly believes in the importance of education, can only rest soundly if she knows she has done everything within her power to make the information available to as many students as possible in a multitude of different learning modalities. In the new millennium, it is only through the mastery of computer technology that an educator may attain this peace of mind.