

Position Paper Issue #3 Computer Lab or Classroom Computers?

I have been asked by Dr. Watson to prepare a position paper on whether the new microcomputers should be put in a computer lab or divided up and placed in the classrooms at Simply Elementary School. I am very excited about our first 20 computers coming to our school and feel it is very important to place all computers into a computer lab.

Having a computer lab will benefit our students by: allowing all students and staff equal access to technology to develop beginning digital literacy skills, allowing flexible scheduling throughout the day and will be the most cost effective means for the district as we begin to build our technology base.

The computer lab will be a joint venture between our teachers and Mrs. Baskerville, our media specialist, so that all teachers no matter what skill level can have their students become proficient at some beginning level skills. These beginning skills are essential before students can use the computer as a tool. Although a classroom computer will allow for discovery, independent study and would allow students to construct their own knowledge, they cannot do that effectively or efficiently without a set of basic computer skills. Literature review supports that labs in the elementary school produce higher competency skills than with classroom computers. In a study entitled *Comparing Technology Skill Development in Computer Lab versus Classroom Setting of Two Sixth Grade Classes* (Rule, Barrera, Dockstader and Derr, 2002), technology skills were compared in a lab versus in a classroom setting; two sixth grade classes were taught the same skills but under the two different conditions (classroom with four computers and in a lab with each student having their own computer). The result was students using the lab “had higher overall scores in computer skills (defined as efficient and enhanced academic-engaged time) but no difference in attitude” (Rule, et al., 2002). In this same article, the above stated skills were improved “because of the longer and sustained academic-engaged time for learning” (Rule, et al., 2002). Students spent two hours/week in the lab versus 48 minutes on the classroom computers. Other factors that supported a lab as more preferable were: small group around classroom computers often got monopolized by the more proficient students, the time lapse from being taught the computer skill and practicing it in the classroom decreased skill attainment and students in the classroom

had to contend with the distractions from the non-computer users. All of these factors led to the favorable results for using a lab over classroom computers (Rule, et al., 2002). In P. Thoroux's article, *The computer lab versus the classroom* (2004), he adds that the bonus to using the lab is the opportunity for peer teaching to occur where the more advanced students will try to assist a lower level student so that both teachers and students benefit from this process.

A lab will also allow Mrs. Baskerville to provide professional development to our teachers so that all teachers can grow their technology skills. Teaching staff in a large group setting versus each classroom is time effective. The lab would be available after school to teachers for discovery and for planning purposes. Having all the computers in one location will allow students to have 1:1 access during instruction. Which means all students will be engaged with the computers, not just watching the teacher's computer and therefore will retain the skills that they are learning. A computer lab will also allow students to use other hardware like scanners and printers at this central location. Since our available classroom is centrally located near the media center, it will be easy to access for all classes and close enough for Mrs. Baskerville to co-teach with our teachers. Having all teachers comfortable with technology will be the key in moving Simply Elementary to the forefront of teaching with 21st century tools and having our students equipped to use computers for discovery and independent learning at the middle and high school level.

We are fortunate at the elementary level that our schedules can be very flexible. If we want to use the computers for social studies we are not locked into a specific time everyday thus, allowing us to get maximum use out of our computer lab. This would not be as feasible in secondary education where a teacher may be teaching the same class for four or five periods a day thus being locked into a rigid schedule daily. Scheduling and other policies will be developed by our teachers and Media Specialist so that all teachers and students will have equal access.

A computer lab makes the most sense for our district economically at this time. We can take the one empty classroom and wire it for network and Internet service rather than all the classrooms which would be more costly. We will need to add some additional outlets and move some tables into the lab which may also be the case for individual classrooms so that should not deter us from going ahead with a lab. Security is always a concern for the district as theft and damage can be very expensive, having a central location would allow us to keep

our lab locked when not in use and not having to worry about locking each room when a teacher leaves for short periods of time. A lab would allow our technicians to work out any kinks that our school may have prior to going school wide with new technology. It will also be easier to upload software in one place, have a secure location to keep hardware and CD's, and will allow our technician and Media Specialist to problem solve in one location as they teach our staff how to become good technology problem solvers. Again making staff comfortable using the software, hardware and problem solving will be the key to a successful technology program.

Once our lab is up and running well, we can look to the next step of moving computers into the classroom. Having the computers in the classroom where multimedia can motivate and engage our students at anytime during the school day only makes sense once our students and staff possess beginning computer skills. Today, as we look forward to this first round of computers going into a lab, we can feel confident that all students and staff can access computers, that we can use our scheduling flexibility to our advantage and that a lab is the most cost effective measure for our district to take at this time. A common thread which may be the most important reason for the lab is that it would allow staff a place for Mrs. Baskerville and other teachers who are technologically advanced to professionally educate all staff. That allows us to integrate technology at Simply Elementary to improve student achievement and prepare our students with 21st century skills.

References:

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