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Short Article

Beware the "Computer Lab" Solution School administrators and parents pressure teachers to "integrate technology," and teachers have resigned themselves to the pervasiveness of this demand. But, it is folly to expect that the school district will provide the necessary computer and peripheral equipment to make this integration feasible.

One scheme that teacher will be presented with to accomplish this technology integration goal is the employment of a computer lab. What is a Computer Lab? A computer lab is a room with a lot of computers, preferably one computer for each student, or one computer for each two students. The computers are connected to the Internet, and to the school district's network.

That's it. Now, schedule your students, integrate technology and increase test scores!

But, what happens is that there are too few labs provided for the campus, maybe one per campus, one per grade level, one per department…never enough.

Here are the problems: Some teacher hog the lab

The time between scheduled access is too long

The amount of time in the lab is too short

Unless each student has an individual account and a home directory, ensuring that each student uses the same computer that they used the last time is a hassle

Students may not be allowed to plug in USB drives (virus concern), save to the local hard drive (space concern), insert a floppy disk (virus concern, new computer systems don't even come with floppy drives), etc. What is the Computer Lab Used For?

Because of scheduling limitations, the operation of these computer labs devolve to three general functions…

Word Processing

Internet Research

Creation of Computer Presentations There are a lot of other learning options that would be possible if… The students had more time

The right software was installed

The students could store files from anywhere in the district (even from home), and access them from the lab

The students had individual portfolios on the network

The teacher didn't have to be in the lab to supervise students

All students didn't have to receive the same briefing about the assignment or project before the students could start on the project Labs, an Obsolete Strategy? We probably shouldn't want to build and support labs as an instructional alternative, anyway.

Long-standing research demonstrates that students made better gains in classrooms where teachers had several computers (four or five). Of course, the key was that teachers with computers in the classrooms needed to change their teaching style and instructional delivery.

Of course, one lab is a "cheaper" alternative to four or five computers in every classroom.

But, the lab problem contains problems that have "teacher components," that can't be blamed on the effect of a stingy IT budget. Teacher Issues The inherent flaw of using computer labs is the philosophy behind deploying them.

These labs are the result of Industrial Age, i.e., "factory-floor" thinking. Thinking that is out of place in modern education.

The problem is that the computer labs lend themselves to the industrial age strategies such as... Every student working on the same assignment, at the same time

Uniform assignments (so that grading is fair)

Project scheduling (and thinking about the project) maybe once a week during the lab time

Teacher does not have time to answer all students' questions at once

Project steps are slowed down to the lowest common denominator of student computer skill, where if the teacher is lucky, the computer interface can be demonstrated using a projection device

Individual student conferences (even mini conferences) are difficult to fit into the lab schedule

All project work stops when the class must exit the lab

The project work breaks the lesson cycle

Peer tutoring decreases because the "go-to, peer trainers are not available since they have to complete their own projects We have a Lab Climate: What's a Teacher to Do? Understanding is the best strategy for "flying under the radar."

Avoid drawing any negative attention to yourself. Maintain the proper appearance to avoid "snooping" by Campus management. (In campus management, appearances often count more than substance.)

Knowing the limitations of computer labs allows you to look like you are using them to the maximum, allows you to look like you are supporting the campus computer initiative and allows you to look like you are making good use of the money that the campus (or district) wasted in installing the lab.

A few suggestions are to: Schedule your class(es) as much as possible

Prepare you class(es) for the lab visit just like you would prepare them for a field trip (that's what this lab visit is)
Use the lab time as a portion of a collaborative group project rather than as an individual typing assignment
Prepare rubrics, and prepare your class(es) before arriving at the lab
Provide all instructions about the assignment before arriving at the lab
Develop an online presence of your own, and allows students to access the project resources from home
Test the lab and work through the processes first, alone
Plan on reusing the same rules, rubrics, strategy, or project method for every lab visit for the year
Make the original assignment generic
Build the assignment or project in a modular fashion
Train students at every step of the project
Check each student to ensure that they know what to do before you arrive at the lab
Assign helpers, partners, buddies for each student. These are the first line helpers that students will turn to before seeking their teacher's help. Plan on a strategy where every student is doing something different while your class is using the lab.
If you plan ahead, you will be able to make the best out of a bad situation, such as school district administrators and parents expecting that you will be able to "integrate technology" by means of a computer lab.
Know the obstacles. By thinking ahead, you just might pull it off.

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