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Helpful Hints For Using The Computer Lab

By Kathleen Andrews



“Technology has the potential to be an extremely powerful scaffolding tool; nonetheless, the teacher is the single most important and ultimate scaffolding coordinator. “ Tips For Teachers

Computers and the Classroom

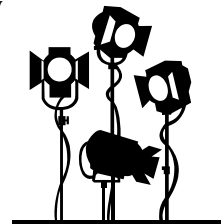
The role of computers in the classroom has vastly changed over the years. Many of us remember the first time computers were used in the educational setting. Teachers took their students to the lab, and sat them at computers. Students sat passively looking at a computer screen, while teachers simply walked around watching students or often graded papers. Over the years, the way teachers view computers has evolved from using computers as entertainment, to using computers as a tool to enhance their classroom instruction. Computers have become “an integral part of the learning process”. (Morrison) Studies indicate that technology integration, through project based lessons and research have the greatest benefits on student achievement. This type of technology use gives students a more active role in their learning. The teacher’s role in technology integration is that of a facilitator. The use of technology in education encourages cooperative learning, promotes higher levels of thinking, engagement and learning outcomes. In the 21st century, no longer is it satisfactory for students to simply locate facts and regurgitate them. Students must learn to think and be problem solvers. Integrating technology into your lessons can assist you in guiding students to becoming productive citizens in the 21st century.



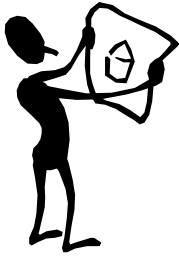
Setting The Stage

As with any good lesson, a lesson conducted in the computer lab requires thoughtful preparation. Here are some tips on preparing for a lesson in the computer lab:

1. Assign students to a specific computer before going to the lab. Have students use the same computer all year.
2. Make sure you have set the stage for the lesson:
 - a. Modeled the lesson for the students on your television/computer, in the classroom.
 - b. Explained to students what is expected of them, i.e. students know what they are to do and how the finished project will look.
 - c. Have an example of the finished project posted in the lab, so students can refer to it as they work.
3. Have all the necessary supplies ready for use.
4. While in the lab, use the whiteboard to write down web sites students are to visit and any other pertinent information.
5. When giving instruction on computer use in the lab, model the instruction on the computer that is connected to the projector, so students can see what you are wanting them to do.
5. Extend your classroom behavior expectations to the computer lab. Students should know that the lab is an extension of the classroom, and that they are expected to behave in the same manner as they do in the classroom.
6. Pair students with buddies. Encourage them to ask their buddy for help with the questions they may have about the assignment or computer use. (You can't be everywhere at once.)



“Technology has a wide range of advantages to promote understanding, provide feedback, reflection, revision, introduce important problems and foster learning communities (Williams et al, 1998); but this will almost always be underachieved without the guidance of a good teacher. “



Planning The Lesson

http://www.kent.k12.wa.us/curriculum/tech/proj_plan.html

When planning a technology activity for your lab visit, ask the following questions:

1. “Does this activity integrate technology into the curriculum and into the TEKS?”
2. Are the students engaged in an activity that enhances what is being taught in the classroom, or are they simply interacting with the machine” (computer)?
3. Will the students be meaningfully and actively engaged?
4. What is the goal of the lesson? (What do you expect your students to learn from their time in the lab?)

Technology Integration is a lesson that uses technology, while at the same time focuses on curriculum and learning.

The first step to preparing a successful lesson for the computer lab is “to stop thinking of it as a computer lab, and begin thinking of it as a classroom, because when it comes right down to it, that’s what they are. You are instructing and the students are learning. The computer is simply an instructional tool just like a textbook or the overhead. You can use the computer to enhance and enrich instruction. But you are still an integral part of the process.” (Morrison)

While allowing student to access CDs, such as “Just Grandma & Me” and websites with interactive games, such as AAA Math, helps to reinforce what students are learning in the classroom, we should not limit our lab visits to these activities. If we are truly integrating technology into our lessons, “you, as the teacher are involved in the lesson”. Also, I encourage each of you to have **High Expectations** for your students when planning technology activities. Students rise to your expectations. If you expect little, your students will achieve little. If you have high expectations, your students efforts will reflect those expectations.

Planning The Lesson Technology Integration Ideas



Planning an activity that will integrate technology into your lessons is easy when you think of technology as just another tool for you to use. First, look at the online curriculum guide, and the TEKS.

When a lesson recommends:

1. Comparing and contrasting items or creating a list, you can plan for your students to use Kidspiration or Inspiration. It is wonderful for creating graphic organizers, that compare, and list.
2. Making a poster, mural, or a book, you can plan to use MS Publisher. This software has excellent templates for creating books, posters and the clip art can be used to create collages. Instead of cutting pictures from a book, try using Publisher to create a collage.
3. That students perform an experiment. Students will be collecting data. That data and Excel, Cruncher or Tabletop can be used to create graphs and charts reflecting the data.
4. When the lesson calls for the students to draw a picture, your students could use Kid Pix to complete the activity.
5. In addition, please remember that EdClass is an excellent source of lessons that have already be created for us and have templates that are ready to use. Using EdClass requires little effort and planning. You simply have to go to the web site, locate a lesson, and become familiar with it.
6. Finally, remember that my job is to assist you in planning activities that integrate technology into your lessons and classroom. I encourage you to ask me to meet with you to discuss and plan activities. Also, I can provide web sites for your students to use in their research projects.



Conducting A Successful Lesson In The Lab

Conducting a successful lesson in the computer lab requires preparation. Just as you would not dream of presenting a lesson in your classroom without prior planning, please do not try to conduct a lesson in the computer lab without planning. Plan a project that will correlate to your current curriculum. Have a specific purpose for going to the lab. The computer lab should not be used to “keep students busy”, while the teachers catches up on other work. The computer lab should be an extension of your classroom. The class should have a specific purpose for using the lab and students should be producing a product or doing research. Follow these steps for a successful lesson:

1. Students will have an assigned computer that they use all year.
2. As you are giving directions to the students, model those directions on the laptop that is connected to the projector.
3. Use the whiteboard to write down directions and other information.
4. Display an example of the finished product, so that students can see what is expected of them.
5. As students are working, walk around and monitor them. You would not pass out math manipulatives, or textbooks, and then sit down at your desk, leaving students to their own devices. Do not sit students at a computer and walk away. A teacher’s job in the lab is to facilitate the lesson. “If you are truly integrating, you as the teacher are involved in the lesson. You are teaching, guiding, directing, and demonstrating, and are a visible, audible presence in the room.” (Morrison)
6. Pair students with buddies. Teach the students to ask their buddy when they have a question.
7. Pace your lesson. Save time for students to save unfinished work.
8. Do not panic if students do not finish the lesson. Some lessons require repeated visits to the lab.
9. Finally, if you are unsure how to conduct a lesson in the lab, please contact me. I will be happy to model a lesson, team teach a lesson, assist with a lesson, or simply be there to offer support.

Components of a Good Lesson

1. Students are actively engaged.
2. Students are working on a project that integrates into what is being taught in the classroom.
3. The lesson in the computer lab is project based. (Students are creating a project using computer software or engaging in research.)
4. Teachers are actively involved in the lesson, and monitoring student progress.
 - A. Teachers are walking about the room, working with students who have questions about the project.
 - B. Teachers are teaching and directing students in the lab.
5. Teachers are not:
 - A. Grading papers.
 - B. Testing students
 - C. Checking e-mail.
 - D. Just as a teacher would not give the students a textbook, sit down at their desk, and expect them to teach themselves, teachers conducting a lesson in the lab will not sit students at a computer, walk away and do something else. The teacher is actively involved in the lesson: modeling, teaching, monitoring, and assisting.



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Sources

Pics4learning.com:
[Http://www.pics4learning.com](http://www.pics4learning.com)

TIPS For Teachers:
<http://www.edb.utexas.edu/pbl/tips/interactive.html>

Technology Enhancement vs. Technology Integration:
http://www.arches.uga.edu/~hstapp/Definition_Page.html

“Technology Tidbits” Gina Morrision:
<http://www.gpsid.org/%7Ebowie/techwebpage/index.htm>

