# Field Observation Report Submitted by Betsy Price May 31, 2002 

Patsey Peebles
University Lab School, Louisiana State University, Baton Rouge, LA
http://www.uhigh.lsu.edu
Number of observation days: 2
The school is situated on the campus of Louisiana State University (LSU). The local school district and the University established it as an experimental school for research in learning. The school includes an elementary, middle, and high school in three separate buildings. The connection with the University has changed over the years. The district owns the school, however LSU manages the school. It has progressed beyond the old lab school philosophy and operates more independently as part of the public school system.

Although the school tries to maintain a mix of students that represent the Baton Rogue population, the University now uses the school as a recruitment tool for new professors. Also many children of local politicians and businesspersons are admitted. One hundred percent of the parents are members of the PTA and many are active. Other schools have state ordered bussing and $30 \%$ of the population in schools is white.

There are three science teachers one each for chemistry, physical science, and biology. Patsey teaches all levels of biology. The high school is on block schedule with 90-minute classes.

The state is making a conscious effort to improve their public schools, including two and four year colleges, in order to attract more business and professionals to the state. On the college level, they are making LSU a research university to strengthen its national ratings. LSU has increased the grade point averages and SAT scores required for admission. The state has built a community college system for students who live in Baton Rouge but do not have the academic standing for admission to LSU. To keep Louisiana's best students in state, a private citizen funds a TOPS program. Students in the top $10 \%$ of their graduating class can attend Louisiana school tuition free. This is a popular program and keeps many of the students from the Lab School in Louisiana. Traditionally most of the students go out of state.

## Teacher

Patsey has taught in the school for 12 years. She has excellent support from the principal and has good relations with the other teachers. In the summer she teaches science methods classes for the LSU education department. It is a hands-on lab methods class for experienced teachers. Patsey has been on the board of the National Biology Teachers Association twice for a total of 11 years. She is active in leadership roles in many other professional organizations. She has field-tested so many science programs that she acquires a blanket permission slip from parents to test products and programs.

Patsey has a good repartee with the students. She keeps the students active and is use to noise and movement. While I was there, she had a student teacher from LSU. She is able to balance working with the student teacher and her high school students at the same time.

Patsey received degrees in biology and chemistry from LSU. She wanted to be a lab tech. She worked a short time before she married and had a family. When it was time to return to work, she went back to LSU for a Holmes degree in teaching. This is an alternative certification program for people who have a degree but not in education. They earn masters in education in a year and a half of intensive classes. She also has enough credits for a second masters in natural sciences but has not yet formalized the degree.

## Students

The students must apply for admittance and it is very competitive. The admissions people try to achieve a mix of students from various academic standings, ethnic groups, socioeconomic levels, and interests. The school charges tuition. The classes ran from 10 to $15 \%$ minority students, mostly Afro-American. About $98 \%$ of the students go on to college. All the students have computers at home.

The surrounding community is middle to upper middle class, however the students come from all parts of the county and city. Most of the students' parents are professionals, high skilled oil workers, and university professors and administrators. One unique industry is a gravity detector that is funded by National Science Foundation.

The students were use to visitors and amazingly unaffected by someone observing them. They were not curious why I was there. Few students talked to me directly or recognized me. However they were polite and friendly when I talked with them.

I observed two classes of regular biology and one International Baccalaureate that also served as the AP class.

## Computers

Patsey has been using computers for many years. She has acquired a managerie of models.

- Two teacher computers (iMac) wireless
- 10 wireless Blueberry iMacs for students
- 7 wireless PowerMac Performa 6220 CD

- 1 Dell

- Elmo overhead
- LCD projector
- Channel One TV
- TV monitor with computer hook-up

The Dell was the only computer hardwired to the school network and printer. This computer is used almost exclusively for administrative tasks. The school does not support Macs so this is the only computer they would connect to the system.

She also has a graveyard of out of date computers scattered about, enough to open a museum.
The day before, the students began the program using the Performas. They are not fast enough for Exploring Life. She did not think to use the CD. However she had enough iMacs for students to work in pairs. This is the same issue that that Kenny had with his PowerMacs.

Patsey started purchasing computers for the classroom when she received a grant to teach genetics. Each year she sets aside budget money to purchase new computers and other equipment. The school paid for wiring the rooms. They also purchased her new iMacs and the airport. With the help of LSU staff, Patsey actively seeks out various grant sources. Patsey has to have approval from LSU to write grants and the university requires an overhead on all grants.


This year she acquired a LCD projector and began experimenting with PowerPoint. The students are now doing PowerPoint presentations for class assignments. This summer she is going to experiment with multimedia.

## Textbooks

Patsey has a classroom set and a student set of the whale books. This way the students can keep their book at home and, if needed use the textbook at school. She has a large array of textbooks in shelves all around her room wherever there is not a computer.

## Facilities

The school building is over 50 years old, small and crowded but well kept. There is a separate building for each level, elementary, middle and high school. A shared lunchroom and patio
 connect them. It is situated in the center of the LSU campus.

Patsey's room is large. However every nook and cranny is stuffed with books, materials, computers, spare parts, and whatever.
There is an office and a storage area with a separate entrance to the hall that opens to the front of the room. There is a makeshift lockable room in the back that is a lab prep and storage area. She particioned another small area with computers and bookshelves that serves as a quiet area.

Patsey had desks arranged in the center of the large room. For this lesson, she had the desks in two rows so that the students could work in pairs. Most of the time the desks are arranged with four desks together so that the students can work in small groups. The chairs and desks are one unit, which limits the ways they can be arranged. There is no room for lab benches so the students have to stand when they use those computers or do lab work.

There is a row of computers in the back, with chairs, that are part of the wall for the quiet area. They are on a low table and the students can sit while using those. Patsey rotates the
 students so on computer days they all have an equal opportunity to stand. In the quiet area are three computers. The area is so small, only one computer can be used at a time. There are some dead and dying computes stuffed in corners in that area.

## Lesson

This is Patsey's second year using all three chapters of Exploring Life. Patsey had the students do chapter 36. First the students read an assigned portion of the chapter. Then they were given
 an assignment, 36.1 to do on the computers. When they completed that section, they went back to their desks to read more of the chapter, then returned to the computers for the other activities. At the end of the period, Patsey asked the students to hypothesize why the weather in Baton Rouge would be unseasonably dry and cool.

The classroom was noisy and the students animated; however they were on task a majority of the time. Because there was little room to travel between the desks, every time the students moved to the computers there was some magnificent movements across the desks. Students would crawl over the chairs to get to the computers. Patsey has excellent control and the students didn't get out of line even walking over the chairs to get to computers. Once they get to their computer, they quiet down immediately. The students were use to the routine, and seemed to know what types of movements and noise Patsey would tolerate.

One group of students found error in an answer on Chapter 36.
Q. Do you mind moving around like this?
A.No, we do it all the time.
Q.Do you like to work in groups?
A.Yes, we work in-groups all the time.
A. Do you like working on the computer?
A. It is easier to go back and forth on the computer for someone to find the answers.
Q. Does noise mean that you aren't working?

## A. No, noise doesn't mean anything but noise.

At the end of the lesson, Patsey had them look at circulation patterns to explain why local weather was like it was. This was difficult for the students and most of them made guesses. Most of the answers pertained to them being close to the equator.

The students use climatogams however they did no have time to do individual graphs with each climate region.
Each time the student went to use the computers the grouping changed.
Q. Why did you change to a different computer?
A. The teacher does this so everyone gets a chance to sit.
Q. Do you like this?
A. It's ok.

In the second class, most of the students were working alone so the noise and confusion level was less.
This class was much more focused than the first.

Patsey said that she liked chapter 36 the best. She believed that chapter 7 and 8 were way too advanced for regular biology students and would not use them.
Observer Comment: I would take this with some caution.


Patsey has focused negatively on these two chapters. It is clear to me that she modifies everything she uses and I do not understand why she feels that she would not modify these two chapters.

## Computer Challenges



When the students at two different iMacs put in their answers and clicked on the button to check, the button would disappear and they could not see the answer. The students who were using that computer said the computers were the older iMacs and that happened. Another student thought it was Flash. I didn't have time to check out the computer to determine what was wrong. My guess is that they
were using Netscape. The class that came in next them also had problems with the same computers. Patsey warned anyone sitting at those computers that they would have problems. The computers were in a favored part of the classroom, so the students stayed rather than move to a less cool location.

At first I thought that I was finally seeing a day without computer problems. I was wrong. As Patsey walked around the room, the students would show her problems and she would fix it. If she couldn't, the students would just quietly go to another computer. This is the benefit to having plenty of computers. The behavior of the students when a computer went down was a contrast to Kenny's students who were from a school that did not have enough computers in his classroom or were not as accustomed to using computers as a curriculum tool.

The students were very computer savvy. There was a mouse that was not working well. It was interesting to see the mouse travel around the classroom. One student would get to the computer. If the mouse didn't work, they would quickly exchange it with another computer. Patsey had it attached to the students' favorite computer (don't know why one iMac would be better than any of the others). When she found the mouse where it did not belong, she would take it back to that computer. It was kinda fun to watch.

Not one student I observed got off to any other web site, did instant messaging, or checked email. The students all have LSU email accounts. Patsey said they also had Yahoo or Hot Mail accounts. She often communicates to them by email.

I thought this was going to be the first classroom where I would not have to fix a computer. I was wrong. One of the iMacs' screen contrast was so light the students could not use it. I was able go get it darker. Also problems occurred with two computers that would not display the check your answers bar.
Q. Do the students have to take a district or statewide achievement exam?
A. Yes, they take a final exit test called the LEAP exam. All Louisiana students have to take this.
Q. Do you study extra for the test?
A. No, I'm not concerned by this test. The students pass it without a problem. Statewide, many students fail. Many IUD's fail.
Q. How do you support your computers?
A. I started with a grant to teach genetics. That is where I got my first computers. Every year we get a budget for supplies. I hold back a certain amount for computers every year. The other teachers do not. The administration of the school helps me purchase computers also. They finance the most.
Q. How do you like Exploring Life?
A. I think the first two chapters are not good. The Krebs cycle is overkill. I know that they need to put in lots of material, but it turns it into an encyclopedia. I would not use the Krebs cycle with my kids. They need to see the big picture. I would divide the chapters in half. The first half with the big picture ideas and the other with the Krebs cycle. I would not use it. Now I like Chapter 36. That is a good chapter.

Last year I let the computer do most of the teaching. I just let the kids use the computers with very little instruction. This year I have intervened more. You see I have the students read a little and then do a computer activity.
A. How many students do you have in a class?
Q. There is suppose to be only 20 per class. As you can see, I have 25 . This makes the noise level much higher than other years.

## Student Teacher

The first day I was there, was Patsey's student teacher's last day. Patsey though she was the best student teacher she had ever had.
Q. Do you like Exploring Life?
A. Yes, I especially like the labs. It would be nice for teachers who do not have a lot of money to use the labs on the computer instead. (Evidentially she believed that the activities could replace labs. I didn't have time to go into this with her. For the future it would be worth exploring if teachers begin referring to the activities as labs.)
Q. Do you think that the other student teachers you go to classes with would use a program like Exploring Life?
A. Oh, yes. I think the teachers coming out now would be much more likely to use a program like this than some of the older teachers.
Q. How much computer training did you have in your college classes?
A. I had very little computer training from LSU program.
Q. Did you have an educational technology class?

No, I didn't have a separate edtech course. In some of my education classes I learned
PowerPoint. Some classes used e journals. I did also learn how to use inspiration but I would use it for myself, not with students.
Q. What are your degrees?
A. I will have a secondary Biology Education degree when I am done.
Q. How many education courses did you take?
A. I took six, not counting my student teaching. In Louisiana you get an education degree, not a biology degree.
Q. Will you use computers in your classroom even though you haven't had much training?
A. Yes, my husband is a system administrator. He helps me with all my computer stuff.
Q. Do you think you could assign a student homework that would require them using the Internet?
A. Yes, in this school I would.

## Principal

Q. This is an old building. Is every teacher going to be able to have computers?
A. Yes, we are solving the problem by using the wireless computers on carts. This is how we are getting computers into the elementary school. In the future, we will probably use more carts everywhere.
Q. Who paid for all the computers Patsey has?
A. Patsey's new computers were paid for by the school. She uses them so much, we decided to put money aside to purchase them. The rest she gets from grants I think.
Q. Do the other teachers have as many as Patsey?
A. No, most don't know how to use them, however they are learning. We require that all teachers take 12 hours of technology classes. Patsey teaches some. The teachers learn PowerPoint and how to make web pages. (None of the training he mentioned was for using computers with students, most were tools for classroom management.) All the teachers have the Internet in their rooms. They have four ports. It cost $\$ 50,000$ to get that in the rooms. There are so many different types of hardware and software out there it is hard to decide what to buy. Right now we are just sorting out what is useful and what is not. We just now got all the teachers on Microsoft Word.

Most of the hardware we buy is Dell. But we buy depending on bids. Dell has always been the cheapest. We stopped accepting donated computers. They were too out of date. It began to cost us too much to accept them.
Q. How are you financing all the computer equipment?

We have a foundation for the school that provides us extra money. We used the foundation money for the laptops on the carts. We also upgraded many of the computers. Our tech staff has not grown in the last couple years.

Technology is important. We lose so many of our new teachers to Texas and to Florida. They are states that pay more and have better school systems. We have a hard time recruiting teachers to this school. The quality of life in Baton Rouge is not so good. We have all the major oil companies. The rate of cancer is higher here than almost anywhere else, 11 out of every 300 people have cancer. The air is bad. Crime is really bad in New Orleans. Fifty percent of the state's children are on free lunch.

What will you do as more textbooks come out with programs like Exploring Life? I don't know, all textbooks come with CD's now. Cost is a factor.

## Systems manager

Q. How are you getting computers in the classroom?
A. We have two wireless carts. They each cost $\$ 50,000$ each. The teachers can share them.
Q. How did you pay for them?
A. We got grants for them. The University helps us write grants.
Q. Does each room have a LCD projector?
A. No, Patsey is an exception. On average only two or three other teachers use the projectors. We installed Patsey's ourselves.
Q. Is it a problem for programs like Patsey is using that needs to get out to the web?
A. No The teachers can use web easily. No filters yet. They are coming. The plans to put in filters are coming from the administration, not the teachers. It may not be so easy after the filters are in.
Q. Do students have email accounts?
A. Yes, LSU gives each student an email account. They are run off their servers. Students sign agreement that they will be responsible users.
Q. Are you able to use LSU servers?
A. Yes We use their infrastructure and share connections with other state schools. They are all PC based so that limits the types of computers we can use. They only use PC's on their network.
Q. How do Patsey's Macs get connected?
A. The iMacs are airported. We bought an airport that works pretty well.
Q. How do you determine or prioritize who uses the carts when?
A. Director would have to make decision carts are shared. We don't get into that. The teachers need to talk to each other.
Q. If all the teachers used a program like Patsey is using would it be possible to get them the technology.
A. The school would be close to be able to do that. It would not be impossible.
B. How many people are there in your tech department?
A. One technician, that is me. I have an administrator here at the school who is not a tech person. She does all the administrative tasks. I also have a boss at the LSU IT department. He is a technician and an administrator. I have to answer to both. I take care of all the buildings at the school. I was a classroom teacher and took the job.
Q. Have you had any formal training or degrees in technology?
A. No, I was a classroom teacher. I've been here two years. It has all been on -the-job training.
Q. What happens when computers become obsolete?

We have many different operating systems (Win95, Win 98, NT) that we are using now. When we replace computers we go to the same operating system (Win2000). Retooling is not happening. The computers should be replaced every five years. We are now looking at leasing computers rather than buying them.
Q. If Patsey called and told you a computer was broken, how long would it take for you to have it fixed?
A. Couple days to fix. If the computer is not a critical computer it will have to wait.
Q. When you have a pile of work orders on your desk, how do you prioritize what gets fixed?
A. The administration computers are a priority. Then I would go to the computers that are used all the time in classes, the library, computer lab, and the Art room. The art teacher is not very good at computers. She has four in her that the students use all the time. Patsey does most of her computer stuff herself.
Q. Who makes the decisions what gets fixed when?
A. System person makes priority decision. The work order goes to director who works with system person.
Q. What teacher has the most computers in his or her classroom?

Patsey has the most computers. Chemistry has second. Science has the most of all disciplines.
The media classes. The art teacher has four. However she is not a computer person

