The Silicon Ear
(with apologies to Linda Coughlin)
An occasional academic-computing newsletter for faculty and staff.

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With the Learning Systems Group
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This computer belongs to the state of Maryland!
George Waggoner asked us to remind all faculty and staff that "their" computers are actually property of the State of Maryland, and there are specific procedures The College has to follow by law to transfer or dispose of State property. George further notes that one should be very careful even of something as apparently innocent as a hard-drive upgrade: besides being State property, the drive being replaced is likely to be full of confidential information such as students' grades, letters of recommendation, and so on. The bottom line: do any upgrading (or horse trading) under the guidance of your technician. They know the rules, they know how to "wipe" a hard drive, and they can help the upgrade go smoothly.

Vista on the horizon
Microsoft's next-generation operating system (to replace Windows XP) is called "Vista," and it is now available at the Campus Store and comes with most new Windows computers. After consulting with other campuses that are part of our bulk-purchasing agreement for Microsoft products ("MEC" or Maryland Educational Consortium), CTSS recommends not upgrading faculty and staff machines to Vista until fall; there are some problems with stability, and a number of commonly used programs apparently don't yet run properly under the new system (we don't know which programs). The system will be available from CTSS (via MEC) to students some time in April ($30) and to faculty toward the end of the semester. To prevent unauthorized use of their operating system, Microsoft has apparently come up with a way to make their installation media "one-install," meaning that once a system is installed from a particular CD (or DVD or whatever), that CD can't be used again to install the system on another computer. Sounds a bit like "Mission Impossible" to us, but without the fireworks (we hope!). In any case, if you want to upgrade both an office computer and a home computer (this is authorized under MEC's "work at home" policy), you'll have to get two separate pieces of media.

Control your SPAM filter…soon
CTSS assures us that the campus will quite soon get instructions for fine-tuning the SPAM filtering that the system does for us. We were asked to help edit a set of instructions and were somewhat red-faced to learn that our beautifully edited instructions completely stumped a couple of very computer-aware students. Back to the drawing board…

Y2K7
This is computer-speak for the potential chaos created by Congress's decision to move daylight time ahead by several weeks in the spring and back by several weeks in the fall. We understand that everyone thinks there will be no problems, but we suggest you follow the recommendations in George's recent e-mails about being sure your Outlook calendar has all the right times in it, if you use Outlook. All the rest of the systems should be automatically taken care of by various routine upgrades that have come down from Apple, Microsoft, etc., in the last few months. If your software isn't up to the latest version, it might be a good idea to get it that way before 2:00 AM on Sunday 11 March. Here's an interesting website with more information about this than you probably need: <http://www.calconnect.org/dstlinks.html>.

Welcome, Doug Toti
We're delighted to welcome Doug Toti as the new Learning Systems Supervisor, and in honor of that we've stuck out our neck and done something new to our experience: we interviewed Doug and reproduced the interview here, warts and all (but we hope there aren't too many warts…)

Silicon Ear: What made you decide to move from your academic position in Educational Studies to the Learning Systems Supervisor position?

Doug Toti: It was a challenging decision to make. The challenge and the opportunity, after spending a lot of time in the classroom, to get into other people's classrooms, see what they do, and see what I can do through technology and collaboration to maybe improve teaching. Also I like the idea of taking a position for which there really is no structure yet, and trying to create something new and worthwhile out of it.

SE: So the idea is to collaborate with faculty, see what they want to do, and figure out where technology can help? Or even suggest some things to do that might not have occurred to the faculty?

DT: Absolutely. Of course if someone has something they want to do but don't know how to do it, I can help immediately, but then going farther and saying, "but perhaps we can also do this, have you ever considered…?" That, I think, would be especially rewarding.

SE: A lot of the problems I hear about are not really things that are appropriate for someone of your background and experience, but are fairly simple, like making sure the projector works, or updating a personal web page. As a "supervisor," you'll get someone to supervise, right?

DT: Exactly who I'll "supervise" is still in development, but I've been meeting with the Help Desk people and the technicians and George, and we'll get that set up soon. Knowing that the College does have limitations as far as hiring more techs right away, I would like to see us ratchet up the ability of students to help. The student workers' position could be made similar to Resident Assistants, a model that George and I and others have been bouncing around. We should be able to find students who are interested enough to come back to school early before next fall, and go through training programs to provide a basic level of service. Throughout the year there would be additional training. More experienced students could provide more sophisticated help, so as help-desk questions come in they can be classified and routed to the appropriate person: student, technician, learning-systems specialist, or whoever. For example, if the projector in a classroom doesn't work, send a student over to get it going. This training scheme should get the students more invested in the program, as well as just building their expertise. We're also looking at different ways the techs can be organized. Right now they're sort of "building" or at least "north-side/south-side" distributed, but if someone is out or already working on a problem I'd like to see something a little more fluid to cover that. We have four techs, so we might keep Bob Brown and Jeff Krissoff on their respective sides of campus and use the other two as floaters. After a while the "floaters" would become familiar with both sides of campus so if Jeff or Bob were out, they could fill in. They'd know the kind of things that Bill Williams does, or the kinds of things that Katharina von Kellenbach does…

SE: Tell us a little about your background.

DT: I was a biology major, and I didn't expect to go in this direction at all! I got my bachelor's in biology from James Madison University and a master's in biology from Western Carolina University, near the Smoky Mountains. I did a population survey of spiders in the Smoky Mountains for the masters. From there I was lucky enough to be accepted to the University of Pennsylvania and I was working with Dan Janzen [editor's note: a well-known tropical ecologist] and developing my research project there. I completed everything except my dissertation, but at that point I realized that I was enjoying the teaching much more than my research. It was one of these hard decisions, where I had to say, "OK, why am I here, and what are my ultimate goals?" I got in touch with Ken Tobin in the education program there, and within 45 minutes I had a placement for student teaching, he had all my courses set up for my certification, and he had funding for me. So I made the transition to Education and that was an additionally wonderful experience. I taught for a few years in Williamsburg and in Philadelphia. But I've always been a

technology "gadget" person, and I'd always thought I'd eventually go back to school. I started looking at programs near Williamsburg (my wife was teaching at William and Mary at that point), but they didn't have science education, and I knew I wanted to do that rather than just general education. So I went to UVA, where they had an excellent program, and I found that part of my fellowship would come from the center for technology and teacher education. Through the center I started developing on-line curricula and helping to develop simulations. We partnered with [name of company] on a lot of different projects involving simulations.

SE: Tell us something about these simulations.

DT: Well, they have one on Mendelian genetics that they call "Mouse House," where students can click and drag different pairs of mice together and see what their offspring would look like through as many generations as you want. There's another one that deals with atomic theory: how Rutherford by shooting high-energy protons at a piece of foil and watching how the protons were deflected, managed to figure out the structure of the atom. So we had different shapes hidden behind a square, and students shoot a "gun" at the hidden shape from different directions, and they could try to figure out the hidden shape. I also got involved with using digital images in the classroom, and time-lapse photography with plant movements. When I was an undergraduate I concentrated in entomology, and my professor—who had been taking students on collecting trips for 25 years—was beginning to worry about the effect his teaching might be having on the local populations of insects. So years later I'm doing images and thinking, "why not do a digital image collection?" So I did this project with an elementary school, where the students worked in groups with a digital camera, and they would go around the school property taking pictures of organisms and assembling these and trying to identify them. We were working toward having them develop a dichotomous key [a way of identifying organisms by making a series of dichotomous choices, e.g., "petals white" vs. "petals not white"—ed.] so they could bring in an unknown and figure out what it was. We just used PowerPoint with hyperlinks, so the first slide might have "simple leaf" vs. "compound leaf," and they'd click on the proper choice, which would bring them to another option. So they weren't just creating this collection, but a tool. And these were fourth-grade students!

SE: Fourth-grade students making their own dichotomous key: that's very impressive!

DT: Yes. Of course it was a very limited selection of plants, but it was a lot of fun. So, most of my formal education in technology came from working with the Center for Technology and Teacher Education. I also have experience as a supervisor of science-education students, for example here [at St. Mary's] we have a cohort now of seven students from every discipline, and next year it might go up to 26 of every

discipline; there [at UVA] I was dealing with 22 science educators. I began to hear people talking about a computer for every student, but really that's impractical and financially impossible for most school districts; what we need is a computer and a projector in every room. That, the teacher can control what the students are looking at, share information, do models, but still have the students come up and work on this themselves from time to time or have a classroom set [of computers] that they can pull in periodically. But it wasn't realistic to expect every student to have their own iBook. And that was where I got my foundation of; "you only use technology when you need to use it."

SE: OK, so, you finished up at UVA, and then you got the job [in Educational Studies] here…

DT: Well, I finished my degree last year, and it will be conferred in May. It was great to teach here in the Ed. Studies program, with its focus on instructional technology, and the e-portfolios, it was something that interested me right away, even to the point where I started expressing interest in the Learning Technologist position. One of my main concerns was that I would be pulled away from my interaction with [the Ed. Studies] students in particular. Because of the nature of the job and its responsibilities, I will still be close to them.

SE: Yes, it's interesting that Chris Mattia, too, came to the Learning Technologist position through Educational Studies, working with the grant that started that whole e-portfolio business.

DT: Yes, that and College 101 can be sort of testing grounds for concepts that later I can bring to the whole College.

SE: Let's talk about challenges for a minute. Tell me what you think the campus needs immediately, and what longer-term goals you have.

DT: My main goal with this position is to work for the faculty: it's not my position to come in and say, "well, this is what you should be doing," rather, "what is it that you are doing that you'd like to do better." I'm glad I'm starting part-time immediately, because I want to meet with the department chairs right away, and then from that get together with people who have particularly salient ideas or concerns. Of course, I'm already getting e-mails from faculty who have ideas. Over the summer, then, I can build the foundation for these plans: perhaps purchasing new technologies, planning workshops for faculty, developing my web site more as a resource for faculty with, for example, "how-to" guides. Workshops that I develop will be based on input from faculty: "this is what I don't know how to do…" And of course there's the whole area of e-portfolios. And as I said, I want to get the student-supported services going, with summer training and so on.

SE: Another function I look for in this position is the "eye on the horizon:" are there successors to Blackboard we should be looking at? Are there entirely new technologies we should bet thinking about? How do you do that?

DT: That's another reason I'm really happy to get this position, so I can focus on those things. I'm on a number of list-serves, and part of my day already is just going through those, just seeing what's out there, what other institutions are doing. I will certainly be going to technology conferences to see what they are presenting. For example, the Institute for Science and Technology Education has a strong educational-technology focus, but I'll be expanding my range to go to different types of conferences. Some of this technology can be expensive, of course, and I have some experience writing grants and also getting companies with new educational-technology products to become partners.

SE: Is there any in particular you'd like to ask of the faculty?

DT: As a faculty member, I have known people who have had both good and bad experiences with technology here. This is a new situation, with a new organization, so try to get beyond your previous experiences and contact me! Take me off the shelf and use me!