**Title of Session:** Targeting Librarians! Using Technology to Promote Gender Equity

Moderator: Lesley Farmer Title of File: 20030716tl Date: July 16, 2003

LesleyF joined the room. BiB cheers...she's here!

LloydA cheers

LesleyF: Greetings -- my ISP was acting up -- or down...

BiB sighs with relief

LloydA has been there (this morning, even)

LesleyF: I see you've been introducting yourselves. Great!

KathyBu: Hi, Lesley!

SharonMB: Hi Lesley, from Coffs Harbour, NSW, Australia

LesleyF: Today we're talking about equity and technology, Focusing on gender

LesleyF: There may be a couple more folks in a minute.

NancyHe joined the room.

JohnLi joined the room.

SarathS joined the room.

JohnLi: Good afternoon, all.

LesleyF: Just for some of you -- I teach school librarian in California State University Long Beach.

LloydA: Lloyd Allen, math, Baltimore County MD. Had originally planned to do gender equity for grad project in '99 (classroom assignment didn't allow large enough n to follow through, though)

LesleyF: So we have Australia -- I used to live in Pikesville, MD, Lloyd.

JohnLi: John Lindner - 3rd Grade Teacher/site technology mentor/once and future library science student. :)

LloydA: Ok...I'm in the other P'ville (Parkville)

KathyBu: Kathy Buxton, teacher in library, Sacramento, California K-6 school

JohnLi: <--- San Jose, CA

SharonMB: I work between year 6 and the Library at our school. Hoping to be in the Library full time next year.

LesleyF: Math and technology -- real options for equity investigation, Lloyd.

NancyHe: << Michigan, math/comp. sci/Spanish, secondary, online ed

LesleyF: I've been looking at this issue for almost twenty years...

LesleyF: I am surprised that it still needs addressing in the 21st century, but it does.

LesleyF: Anyone else agree?

NancyHe: I've read some things lately that indicate that young men are more often "behind" now then young women, overall (tho not nec. in math and computers)

KathyBu: Definitely, I think so.

LesleyF: that's right, Nancy, especially in reading and writing.

SarathS: equity is something that may need addressing well beyond 21st Century

LesleyF: So it's really finding the right match for everyone.

LesleyF: yes, it'll be a while before we hit perfection...

LesleyF: So let's look at some trends for usage, and then look at ways to use technology to optimize everyone's learning and enjoyment.

NancyHe: I think it's improving... last programming class I took was about 60-40 men, as opposed to 10 yrs ago where I was one of 3 women in the room, then the other 2 dropped;)

JohnLi: I wonder if it will be an ongoing matter of education, Lesley, part of the different perceptions parents (and others) have regarding boys and girls?

LesleyF: that's good -- I hear about more software developers and administrators who are women -- yet computer science major gender balance is about the same as it was 25 years ago, according to the American Assn. of University Women.

LesleyF: Good point, John. And it's also an issue of adult models in education and in industry.

LesleyF: That's a good place to start. OK?

SarathS: important issue is to keep Looking for the equilibrium, as much as achieving it LesleyF: There was an interesting study of computer use in libraries by the employees in 1999. Fascinating and sad findings

KathyBu: Do tell.

LesleyF: In that study, women did not feel in control, or feel they had power in decision-making relative to technology, in contrast to men.

LesleyF: Men thought that they directed technology, and women thought they managed it.

LesleyF: Men identified with technology, and women considered it like THEM/The Other.

NancyHe: I notice the rift between computer savvy and non-savvy taking hold about middle school... and at that age, particularly, boys are pretty "grabby" with the machines... and girls particularly "stand offish"

LesleyF: Another interesting study --- boys tend to use the mouse, and girls tend to be "left" using the keyboard.

SharonMB: The boys do seem to know what they are doing at our school

KathyBu: What school level is this? It's not what I see in elementary.

SarathS: what about the mental impression of a computer amongst study participents? SarathS: was it a part of the study

LesleyF: Girls are getting more assertive about machine use -- but there are some tricks to help even up the situation: sign-ups (girls TEND to be more organized/think ahead), and single-sex machines.

LesleyF: The mouse use was among middle schoolers, but adult library employees...

SharonMB: Coffs Harbour, Australia K-6

LesleyF: BTW, I will be talking about patterns, tendencies, but personal differences are more important/telling than gender ones. Just a caution in this discussion

NancyHe: My impression is that at elementary most of the kids are at about the same level. What do you elem teachers see?

LloydA: Sharon: I teach HS during the academic year, and would say that the students who use a computer at home, know what they are doing at school. The boys who don't have a computer at home are not only lost, but lost and embarrassed, and so act out. KathyBu: Yes, as long as they have access to a computer somewhere. I think boys would rather live on one than be in school except for recess.

NancyHe: \*nod\* Lloyd. I see the embarrassment too

LesleyF: That's usually true, Nancy. The differentiation usually starts in middle school when peer pressure is more important-- and social messages about grown-up behavior starts to kick in.

NancyHe: I wonder if teachers are unprepared to take them the next step beyond what they learned about computers in elem school...

LesleyF: Very good point, Lloyd. Males have just as "strict"/rigid expectations as do girls.

NancyHe: ... so those with machines at home and adults or older siblings at home to help them continue learning, are the ones who take off and continue to learn

LesleyF: That's part of it, Nancy. And sometimes not as many women are into computers in MS and HS in advanced classes.

NancyHe: ... and those who don't... begin to be left "behind" at the elem level (or only a little above that)

LesleyF: Another study -- boys are more likely to get a computer from their parents than girls -- this was found in the US and in Europe.

KathyBu: Part of it has been that access to a computer isn't a given, especially if you are poor.

LesleyF: Yes, the more one has to catch up, the harder it can be.

NancyHe: where I am, there are very few "advanced classes" at the middle school level. They're still "integrating technology"... but not much above the elem level (only exception being online research)

LesleyF: One nice thing about the library is that the software tends to be more openended, neutral, as opposed to game stuff.

NancyHe: the positive thing about the "game stuff" is that it's usually the most demanding of computer resources... requiring you to "learn" about your system to keep it upgraded to the "latest" minimum specs for the "cool" games:)

LesleyF: MS is also a good time to incorporate technology because students often do collaborative projects, which tends to be favored by girls.

JohnLi: I think the more open-endedness of the software is partly due to students have some of the basics in place by the time they reach many middle schools (i.e. \*basic\* keyboarding, familiarity with the hardware, etc.)

LesleyF: Several studies indicate that girls use technology as a means, while boys are fine with technology as an end in itself.

NancyHe: ok, but if the kids already know how to powerpoint, spreadsheet and word process as well as their teachers by about 6th grade, then can teachers take them the next step beyond?

KathyBu: No wonder they are falling behind!

NancyHe: I've also heard that, Lesley, that girls use it as a "means" while boys as an "end"

LesleyF: 2 points: Lloyd mentioned open-ended -- there are unit-specific software packages that are pretty "closed." The productivity tools are open -- as Nancy says. As for next steps, one can approach it by higher levels of thinking with a particular subject (researching insects) or by developing more sophisticated products such as web pages and photo/video editing.

LloydA: next step: Programming? I wish I had the quote in front of me but... first context: I teach programming in the language Python (www.python.org) at a summer camp called CMST (www.mathismylife.org). On the second Wednesday at lunch, a middle school eighth-grade female student told me that previous to the course she had felt that the computer was useful as a paperweight, but that once she knew how to make it do what she wanted (by writing her own programs), she was pretty cool with it.

LloydA: This year she took the course where they do assembly.

LesleyF: Here's another pattern -- girls tend to like to use computers to communicate while boys see computers as a source of power -- something they can command.

LesleyF: So programming can be powerful -- and expressive!

LesleyF: Now, then, here's the problem with communicating. There are actually more females using the Internet, especially for communicating, than guys. HOWEVER, many schools don't let students communicate online, both in email or chat...

NancyHe: historically, women make great programmers! (Ada Lovelace, Grace Hopper, to name the 2 most famous)... Again, maybe the "procedural" manner of thinking through things

LesleyF: Yes, Nancy, and being organized...

SarahSa: So they will start using the lame computing power of their cellphones to chat & text message

NancyHe nods Very important in programming! Much like writing a research paper :) LesleyF: well, that's true as PDAs combine organizers, Net and phone functions -- it'll be interesting to see how schools handle that -- particularly with wireless. Any thoughts? NancyHe: There is a tricky balance to allowing collaboration vs. social chat being out of hand

SarahSa: One school had to ban cellphones in exams - students were text-messaging answers

LesleyF: yes, it actually requires lots of supervision -- or really clear expectations and accountability that's backed up...

NancyHe: but, as you say, the chat functions are there and will keep permeating society and classrooms

LesleyF: I can imagine how SATs may be affected in the future, Sarah.

JohnLi: Nancy summed up what I was going to say. Monitoring on-task v. off-task messaging/chatting is difficult.

LesleyF: You can get software that allows you to see what each station is doing at any point, but that's a pain...

NancyHe: at some point maybe we'll just concern ourselves with whether the objectives get met in class... if they learn what they need to learn

LesleyF: A simple way to deal with it is to have students write the message and save it, and then send it to the teacher to "mail." This works for grade school, and some epal services use that process.

JohnLi: And beyond what some even have set up in their classrooms --- I think using that may be more common in labs or media centers.

NancyHe: and assess using more subjective means, as well as projects, etc

NancyHe: and fewer objective tests

JohnLi would be concerned about having to review that many e-mails, on top of everything else he has to do. :)

LesleyF: Good point, Nancy. If students have engaging tasks, and feel successful, they're less likely to do "inappropriate" things. They're too busy and happy learning.

LesleyF: Yes, John, it could be a pain -- wonder if a parent volunteer could help with the task -- or a college intern?

SarahSa: or maybe just a "sunshine" policy well-publicized - showing the messages, with attribution, on a giant screen in the lunchroom

NancyHe: some students don't know how to be "happy learning," I feel. Their #1 objective is to derail whatever objectives the teacher is trying to accomplish

JohnLi: Perhaps, but you'd have to find the right parent volunteer, one who understood how to maintain confidentiality, especially if/when something inappropriate came up.

KathyBu: Often access through district servers is a pain or non-existent at certain times.

LloydA: re: networking / collaborating in the classroom:

http://www.wired.com/wired/archive/9.07/mustread.html?pg=6

KathyBu: Sometimes I wish I had my DSL at school.

LesleyF: Shall we look at that site, folks!

LloydA: about the Texas Instruments hub system--there was another, longer article, but I'm not finding it right now

LesleyF: You can just click on the URL.

NancyHe: \$10k/classroom setup... ouch

LloydA: Yeah, but TI is good at grants.

SarahSa: but the q every 10 minutes - I like that!!

LesleyF: Yes, money is usually an issue...

SarahSa: I think such a system would tend to equalize participation on gender lines JohnLi: Interesting, but definitely out of the price range of many/most of us. And probably not the right tool for elementary students.

LesleyF: So what are some other ways to insure equity? I'll start you out. For the mouse/keyboard issue, have kids switch every 10 minutes by gender in terms of input device to use .

LesleyF: We're looking at ways to facilitate tech equity.

JohnLi: Or try to make sure labs have a 1:1 student:computer ratio, when possible.

NancyHe: switch "by gender"? or just have them "switch"

NancyHe: personally I prefer not to put the spotlight on gender differences in the classroom... b/c they're not universal

LesleyF: Half the boys use mice, half the girls, for ten minutes. Then the other half of the boys and the other half of the girls use the mouse the second ten minutes.

LesleyF: You really need to see if such an intervention is needed in the first place....

LesleyF: I'm actually amazed how often gender is used in education.

NancyHe: but if they're taking turns then why do they have to be named by gender instead of "partner 1" and "partner 2" or whatever

JohnLi: ...especially before having to implement something like that, which would be a monitoring/management pain, IMHO.

LesleyF: Perfect, Nancy!

LesleyF: Same with collaborative projects -- divvying up roles to insure that everyone gets a chance to write, draw, research, synthesize, layout, etc.

NancyHe: the one "not" using the mouse usually knows whose turn it is ;) from what I've seen

JohnLi: Very true.

LesleyF: yes, even very young ones understand "not fair...

NancyHe: so I don't know if it's much of a monitoring/mgt pain... just sometimes a battleground

LesleyF: Again, see if there's a need...

LesleyF: Other ideas?

SarahSa: snuff the mice altogether - REAL gurus don't let their fingers leave the keyboard

NancyHe: expose girls to technical topics... don't limit them to "applications"

NancyHe: Every student, IMHO, should learn to maintain his/her own computer at a basic level

NancyHe: (update drivers, install a new CD ROM, etc.)

NancyHe: and every student should be exposed to programming... so they can learn whether it's something they might like to study later in life

SarahSa: or, like weapons for soldiers in basic training, take it apart and put it back together

LesleyF: hmm -- or taking apart a piece of clothing?

LloydA: One thing that I just learned last year was to ensure that I give directions that use the standard menus and left-button. I'm a right-clicker, and my students who don't get the right-click thing just got lost.

NancyHe: yes, Sarah... how to plug the things in is a pretty basic skill

LesleyF: it's really easy to make assumptions...

NancyHe: it's hard, isn't it Lloyd, when there are 50 ways to do everything:)

NancyHe: right click, icon click, menu, shortcut keys, etc

JohnLi: I don't want to encourage them to take any parts of computers apart; as it is, I've spent too much time tracking down balls for mice and re-setting desktops to something less than psychedelic.

LesleyF: Which is another point -- some students do have more access to computers outside of school, so we need to provide extra training for those who don't have such an advantage -- the trick is not to single them out (poverty, the guy who doesn't know how to use computers as was mentioned earlier...)

LloydA: I now give handouts with three columns--left column "general idea of what you need to do", middle column "click this button, hit this key (with checkboxes), right column blank for their comments

LesleyF: I like that set-up, Lloyd.

NancyHe: I hear you, John, but I think they should learn those things

JohnLi: As long as they understand that they need to leave things as they found them, please.

NancyHe: and begin to learn what causes the "magic" between mouse and monitor (i.e. how the thing works, in some sense)

LesleyF: Again, it's often a matter of making sure students have opportunities to do those things. I think there should always be a rip-apart machine for the curious.

NancyHe: John, yes. That is important... these are not "their" machines and respect for property is an important thing to learn in a computer society

NancyHe: same ethics as hacking, really

LesleyF: Let me share a good web site on getting girls interested in computers. OK?

NancyHe: thanks, sure!

LesleyF: Oh, yes, ethics. Important too...

LesleyF: OK, here's the web site. You should be able to just click on it.

LesleyF: <a href="http://math.rice.edu/~lanius/club/girls.html">http://math.rice.edu/~lanius/club/girls.html</a>

KathyBu: At least initially, it helps dispel the fear some have to not deal with tech side till they find out how useful it is.

NancyHe: well, the "tech side" really needs to be taught more in schools, I think

LloydA: Great links!

LesleyF: There are more and more web sites for girls that model what young peers are doing. Want to see one?

KathyBu: Yes.

LesleyF: I've been seeing it over the years and it just gets "funner" as my son would say.

LesleyF: girltech.com

LesleyF: correction: www.girltech.com

LesleyF: blogs have gotten really popular with girls, too, although it's better to have subscription or password sites so girls won't fall prey...

LesleyF: So ready to see a "guy" site? We talked an hour ago about boys and reading -- Jon Scieska is very active in that area and created a web site for guys to encourage them to read and still be cool...

NancyHe: sounds good... I need it for my son;)

LesleyF: I know the feeling: it's www.guysread.com

LesleyF: Hi, Sandra, we're looking at a couple of web sites, one for girls and one for boys, to address tech gender equity.

NancyHe: www.guysread.org:)

NancyHe: no... not that either LloydA: Thanks, Lesley, BJ!

JohnLi: Neither one's working for me, Lesley.

NancyHe: http://www.penguinputnam.com/static/packages/us/yreaders/guysread/

NancyHe: from google

NancyHe: it had guysread.com listed too... but dead link I guess

JohnLi: Bad connection, I guess.

NancyHe: This is the Jon Scieszka link though... at penguinputnam

LesleyF: yes, the org one I don't think is right -- but the link is fuzzy -- yes, try through penguin.

NancyHe: yeah... I saw something start to come in at .org but it \*wasn't\* right... that was an oops on my part

KathyBu: That works!

LesleyF: Hope the shorter URL works soon so kids don't have to go through penguin, etc.

NancyHe: right

LesleyF: One thing that seems to intrigue both genders is role-playing games, particularly through the net. A recent article in Wired said that educators should create such products for school. Better than Age of Empire or Sims.

NancyHe: the "Guys Vote" link contains a bunch of books my son likes/liked:)

LesleyF: Think you could get students to create them??

LesleyF: Huzzah, Nancy!

LesleyF: Peer review/acceptance is key.

LloydA: Oh. I was going to say that it had a bunch of books that I /do/ like. (just got Ender's Game from my brother).

NancyHe: I never quite understood the appeal of Captain Underpants... but then, I'm not a young boy;)

LloydA: rather:/

LesleyF: different strokes...

NancyHe: my son never understood the appeal of Little House books either;)

KathyBu: So for two of you who have sons, what's your take on boys falling behind in reading and writing? Some of the articles make it sound like girls' progress should stop.

NancyHe: heavens no... don't stop the girls!

NancyHe: and don't stop the boys from learning tech either

LesleyF: just that more attention needs to be paid on ways that get guys better at reading and writing -- and technology can be a real help.

KathyBu: How do we get boys to see technology more as a means not an end?

LesleyF: It's also cultural expectations. Think of girls saying they can do math....

LloydA: It's all about practice. What kids practice, they get good at. How do we get them to balance what they're practicing? Well, that's the hard part.

LesleyF: right, Lloyd -- good answer to 2 questions.

NancyHe: my son happens to enjoy word games, despite the fact that I can't get him to read much

LesleyF: engagement; transfer of learning and skills...

LesleyF: doing stuff that's meaningful -- which applies to both genders...

LesleyF: guys often like reading magazines, for instance -- you can encourage ezines.

LesleyF: Another way to address tech equity is through tech aides -- both girls and boys.

Whether it's installations, troubleshooting, coaching, developing publications, etc.

KathyBu: I'm not sure what an ezine is.

NancyHe: an online magazine, Kathy

LeslevF: right

LloydA: I told a student in my Algebra class (who misread four different words in a paragraph, without realizing that any one was not the word on the page) that his personal assignment from me, each evening, was to read two or three pages of /anything/, preferably fiction, before he went to sleep.

KathyBu: One students create? LesleyF: did it work, Lloyd?

LesleyF: Kathy, kids create them and so do adults.

NancyHe: Kathy, could be... or here's a bunch: http://ezine-universe.com/

LesleyF: So students can act as consumers or producers. I'm biased towards the latter...

LesleyF: thanks, Nancy

NancyHe: well, sometimes it's good for them to read something "above" what they write themselves too

LesleyF: that's part of the process...

NancyHe: yes... so reading ezines can be helpful also, with different goals than writing one

LesleyF: so does everyone have some ideas to use?

LloydA: I think so--it also helped that two other teachers told his parents about the same thing at about the same time

LesleyF: yes, the more that the whole school can address this issue, the more effective the learning can be.

KathyBu: Thanks for the websites.

LesleyF: Any parting ideas?

NancyHe: Lloyd, I felt my son fell behind in math when he fell behind in reading too

NancyHe: we're working on it (still)

LesleyF: that can be a self-confidence issue -- that happened with my son too. Tumble-down grades...

LesleyF: sure you don't have my son, Nancy?

LloydA: Well, math teachers often don't make sense...if the textbook won't help either (a different, specialized, kind of reading skill required for that, anyway), the kids going to have a hard time. Peer tutors. Buy them pizza.

NancyHe: Lesley, that too... but part of it was an ability to focus/comprehend the words he read (or didn't) in the instructions

LesleyF: we're finishing up -- any thoughts on what you folks want to discuss next month?

LesleyF: yep, same, Nancy...

KathyBu: How about using technology to encourage reading comprehension?

LesleyF: that's a good topic, Kathy. I'm dealing with that issue in my Hawaii seminar in a couple of weeks!

LloydA: g'night

KathyBu: I'd like to learn more... LesleyF: Thanks all for participating.

NancyHe: great session, Lesley:)

SarahSa: Thanks Lesley

KathyBu: Have a great evening, all. Thanks, Lesley! LesleyF: you had some great ideas, Nancy -- thanks!

JohnLi: Thanks, Lesley.

LesleyF: even if my fingers slippppp

LesleyF: enjoy the festival, all you hotdogs

SarahSa: Hawaii seminar? I missed that reference

SarahSa: are you presenting there, or presenting something about Hawaii here?

LesleyF: I'm teaching a 3-week seminar in Hawaii end of the month. But I'll be here online August 20.

BiB: Thanks, Lesley!

LesleyF: It's a grad course on literacies in the digital age:

SarahSa: C U on the 20 Aug!

LesleyF: We'll study technology, info lit, reading, visual and media literacies.

BiB: thanks, Lesley

KathyBu: Thanks, BJ. Enjoy sleeping in tomorrow. Bye.

SarahSa: I just got interested in the link between reading comprehension and

math/science understanding a page or so back = nice link

LesleyF: cool

SarahSa: Thanks again - bye

LesleyF: Aloha!

KathyBu: Take care, Leslie. Bye.

LesleyF: see you in August, folks!