

Information Literacy and IT Fluency

The following excerpt is based on a roundtable conversation/interview conducted by Gerry Bayne, EDUCAUSE multimedia producer, at the EDUCAUSE Learning Initiative (ELI) 2009 Annual Conference, Orlando, Florida, January 24, 2009. To listen to the full podcast, go to <<http://www.educause.edu/NewTechPodcast>>.

Gerry Bayne: Countless articles and student surveys have underscored the need for information fluency training in our colleges and universities. Although there seems to be agreement that such training is necessary, much debate remains on how to approach this training. How do we teach students to find and critically evaluate information?

Sandy Schaeffer: I'm not faculty, but I have an immediate reaction to that question: I get uncomfortable whenever there's a discussion about mandating and creating a defined information technology fluency or literacy, with rubrics and assessments. My institution has been down that path multiple times. We've had many discussions about it. We've had several efforts to create a standardized information technology literacy model. But by the time you get enough people organized, and then define what in the world it is that you want to assess, and then create a learning environment and some method of teaching folks, a year has already gone by. So, it's not that the conversation doesn't come up on our campus; it's that the subject tends to be more around faculty than students. There tends to be the thought: "Our faculty need to know more about this stuff." And my group—the Advanced Learning Center—is expected to do that. I resisted, not

because I don't think it's a good idea, but because I'm not sure how you get your hands around something like that.

Michael Fry: You certainly can't make your goal in terms of any specific skills. Needed skills are going to change so fast. Students can't take something in their first year that's going to still be useful or relevant when they graduate. But it may be possible to define your goals in a way that transcends the current state, that's independent of the current state.

Schaeffer: I'm interested in ideas for that.

Fry: For example, a goal could be that a student who graduates shouldn't be inhibited by a technological challenge. Students should be able to rise to a technological challenge and not be afraid of it. That would be a goal that's independent of where we currently stand.

Barbara Draude: I think we may do better to look at *information* literacy rather than *information technology* literacy. Any student getting a degree needs to have information literacy. Students need to have the ability to find information, manipulate that information, and disseminate that information. And the mechanisms that they'll use to do any or all of those things are going to be constantly changing. The mechanisms also vary by discipline. My discipline is nursing. Finding information and manipulating information and disseminating information in my discipline is going to be totally different from finding, manipulating, and disseminating information in mathematics or in computer science.

Gail Matthews-DeNatale: There are at

least three pieces to the puzzle. One piece is information technology fluency, one is information literacy, and another piece is media literacy. And they're all overlapping, like a Venn diagram. For example, with nursing, you may know how to look up information within some kind of database, but that process might be being mediated through a PDA. And I could think of any number of examples like that. So when it comes down to one piece, one domain, I worry that we're missing out on some of the interconnectedness. I tend to agree with Sandy that this is a real challenge because by the time you get an assessment together, it's obsolete. One of the things we've tried to do is to identify some of the larger fluencies and then say: "Here are some of the resources that are out there that might help you meet some of these fluencies." For example, at Simmons we created a site in our learning management system for iComps, a program to develop baseline fluencies in first-year undergraduate students. The site provides a wealth of resources, self-assessments, and information about opportunities on campus to improve technology, information, and media fluency. In the spring semester, after all first-year students have had ample opportunities and encouragement to self-teach, they participate in an assessment. They have two tries, after which they are automatically enrolled in a course designed to accomplish those learning goals.

Also, I'm concerned that we're talking about this as training. Everything that we know about learning so far is that things take on meaning and reality when they're embedded, when they're authentic. So if we're trying to treat this as a parallel track or a co-curricular track, I think we're going to be in trouble. You get bang-for-

the-buck when the fluency is part of students' learning. And they're saying: "Wow, some of these media literacies that I'm learning are immediately relevant in my learning or my future workplace, but they have substance, they're grounded in the needs of the discipline." I don't see a cheap way around that.

Bayne: Make information literacy/fluency an opportunity, not a requirement?

Fry: If you make students want the information and want to do things with it, they will naturally figure out how to do those things. But I do think we need to encourage them to create. The main lesson I'm getting at this EDUCAUSE Learning Initiative meeting is a reminder that it's all about students creating content. And that won't happen naturally; we have to make that happen. Get students *wanting* to create stuff, and then they will learn the technology to do it. I don't see the need to have the technological part be separate. Students should have help available. There should be workshops—even having a part of class be a workshop on how to get started on a tool would be fine.

Schaeffer: Finding a way to use a little camera or a device is not a particularly challenging issue these days; the issue is coming up with some way to make doing so useful as a learning exercise.

Draude: We're getting to a point that maybe there is so much content that there's no way to cover it. Maybe we should look at how to help a student figure out what is the *priority* information—not what information does the student have to know, but what information can the student go find that will supplement what he or she knows? In the long run, the student ends up still an educated person but without as much emphasis on "this is the set amount of content that has to be covered."

Matthews-DeNatale: I want to go back to this idea of literacy, because to be literate means not only, in the traditional sense, to be able to read critically but also to be able to write. The writing or the making process changes our understanding and, by extension, the doing. How will our understanding of a podcast be different

because we've edited out the "ums" and "ers," because we now know what can be deleted and how that can change the sense of the content?

There are a gazillion great tutorials out there, but then there's the other question: what are we teaching? Are we teaching not only how to learn and how to gather information as appropriate but also how to create in a way that is congruent with the level of expectation that we have for higher education? Yes, students are coming to college with Facebook accounts and with this, that, and the other, but how have they been using all of this to reach that higher level of meaning? And how would our courses need to be designed to be able to do this, to be *literate* in that sense of the term?

Schaeffer: There have been discussions about, "Will the faculty member be relevant as we move into the future?" As I listen to your comments, Gail, I think the faculty member is more important than ever before, to help guide the student through that process of making sense

out of all this. I've had a complete flip of that mindset. We could just turn students loose and say: "There's this vast world of information. Sally forth and become knowledgeable." We all laugh at that. The issue is not, of course, that we have a shortage of information. The shortage is in how to make sense of the information in a way that's meaningful at a level congruent with higher education.

Clockwise, from top-left: Sandy Schaeffer is Director, Advanced Learning Center, University of Memphis. Michael Fry is Professor of Mathematical Sciences, Lebanon Valley College. Barbara Draude is Assistant Vice President for Academic and Instructional Technologies, Middle Tennessee State University. Gail Matthews-DeNatale is Associate Director of Academic Technology, Simmons College.

