By Joan K. Lippincott

Student Content Creators: Convergence of Literacies

Higher education needs a new framework for promoting the value of information and technology skills for undergraduate and graduate students. This new focus should speak in a language that resonates with academic administrators, faculty, and students and that deemphasizes the jargon of information professionals. Many librarians and information technologists believe that acquiring information and technology literacy skills is an important part of a college student's education. However, despite reports and standards from groups such as the National Academies and the Association of College & Research Libraries (ACRL), few institutions have implemented information or technology literacy educational components throughout the curriculum.[1]

So, what perspective might resonate with academic administrators, faculty, and students? I suggest using a framework that focuses on higher education's need to prepare students to be content creators within their disciplinary or professional specialties. Delineating the skills that students need in order to create content within the disciplinary context could be a more meaningful way of encouraging the integration of a wide variety of skills into the curriculum. Although information professionals may be able to neatly compartmentalize various literacies, these divisions are beside the point for student content creators. A student who creates a video for an advertising spot for a business communications class may need a variety of skills to accomplish the task: getting background information about a company, product, industry, and target audience; developing a script using compelling language; locating visuals to incorporate and being aware of the intellectual property restrictions that are involved; using a video-camera and editing software; and understanding overall how to make an impact on an audience using video as the medium. Similarly, a student in history may develop a Web site for a project by researching secondary sources, locating and scanning primary-source materials (both text and nontext items), and writing a narrative to give the project context. He or she would need to have skills to locate the appropriate resources, understand intellectual property restrictions, use scanning equipment to produce useful images, develop a narrative context for the Web site, and design a visually engaging Web site. To accomplish this type of work, students need a wide range of skills to use in concert with their disciplinary knowledge. Ideally, a convergence of literacies—written, information, technology, new media/visual—would inform the digital, multimedia products that would result from such work.

There is ample evidence that students are creating all types of digital content and disseminating it via the Internet.[2] When they graduate from universities and colleges and enter such fields as business, education, government, medicine, research, or the arts, they will continue to produce digital content, whether that content is text documents, podcasts, videos, multimedia presentations, data sets, simulations, games, or other new media. Employers often select new graduates for positions in the expectation that they will take on technology-intensive assignments related to the Web presence of the organization. While in school, many students create digital materials without the benefit of instruction from faculty, information technologists, or librarians, but such products are typically recreational in nature and do not have the hallmarks of academic work. When students employ multimedia in their assignments, for example, they are often criticized for being facile in their work or for not developing a narrative or argument in an academically rigorous manner. This is not to say that producing academic-quality work in the Internet environment is impossible or beyond our current understandings. Some faculty use digital media in creative and compelling ways to publish and disseminate research in their disciplines.[3] However, it seems that few academic programs have identified the preparation of students, whether undergraduate or graduate, to be digital authors of all types of content as a desired outcome of their studies. Can universities and colleges do a better job in readying students to become content creators within their professions? Is it likely that faculty and academic administrators will be convinced that this is an aspect of their educational role?

Many faculty would acknowledge the need for students to acquire information and technology skills, even if they do not explicitly build into their own courses the type of assignments that might assist students in acquiring those skills. However, another aspect of literacy, media literacy, is generally less understood or accepted by faculty. Elizabeth Daley and her colleagues at the Institute for Multimedia Literacy at the Annenberg Center at the University of Southern California believe that "those who are truly literate in the twenty-first

century will be those who learn to both read and write the multimedia language of the screen."[4] They offer coursework that helps students attain, for work in digital media, analytic skills that are similar in scope and depth to those skills developed by literature students. Others advocate that such skills be taught even before students reach the college or university level. As part of a major initiative of the MacArthur Foundation, Henry Jenkins and his colleagues have described a range of skills needed by pre-college students. They state that new media literacies, research skills, and technical skills must now accompany the development of written skills for students so that students will be able to engage in today's communities in a meaningful way.[5] Jenkins and his coauthors emphasize that new media literacies should be thought of in addition to, not as replacements for, written literacy. In higher education, there are many class projects that could give students practice in employing the principles of written, information, technology, and media literacies: creating vodcasts of themes in a past presidential election; developing a visualization of environmental data with an accompanying text analysis; or producing a Web site of endangered species, including visual, audio, and textual information.

In addition, as students become active participants in the information society, they need to develop an understanding of the factors that will assist them in acting responsibly in this environment. This includes developing an understanding of the ethical and legal use of information and technology and an understanding of personal responsibility and privacy (or lack thereof) in the network environment. Staff from the institution's student life or legal office may have an educational role here, in addition to information professionals and faculty.

If it is already difficult to implement information and technology literacy programs on campus, how can we develop a coordinated, discipline-oriented literacies program? I don't think information professionals can "solve" this problem.

Can universities and colleges do a better job in readying students to become content creators within their professions?

However, they can serve as catalysts in initiating discussions about these issues in faculty groups such as the faculty senate, the general education committee, or departmental curriculum committees. They can assist faculty and academic administrators in understanding this emerging curricular emphasis on content creation in the digital environment. They can demonstrate the value that information professionals can add by helping to identify relevant skills, assisting with the design of engaging assignments to incorporate those skills into the curriculum, suggesting rubrics for the assessment of multimedia assignments, and developing learning objects and/or participating directly in teaching students about these areas. Whereas information professionals can do this with faculty on an individual basis, ideally they would work with programs, departments, and colleges in order to have more impact. In many institutions, information professionals such as librarians and information technologists have no formal representation on bodies that oversee the curriculum, but they may find ways to be invited to participate on university, college, or departmental curriculum committees or general education committees, and this would be a prime way to advocate for the inclusion of a variety of literacy skills in the curriculum.

Information professionals could also host discussions—in various venues such as meetings of academic departments, teaching-and-learning centers, and accreditation committees—on the topic of the need for students to develop a variety of literacies. They could look for interested parties representing various types of literacies to form a campus group to develop strategies for focusing attention on literacy issues and to begin working together on pilot projects with interested faculty or departments. Campus groups could also meet to discuss the less-understood areas such as media literacy, bringing in guest speakers, if needed, to explore issues.

In the way that we produce content today, it is difficult to separate out where media literacy ends and where technol-ogy literacy begins—or where information literacy begins and where technology literacy ends. There is a convergence of literacies, and they can all inform academic work in separate but integrated ways. It is time to frame the discussion of literacies in the context of academic work products rather than in the context of organizational structures (e.g., library, computing, English department, media department). Faculty and professionals from a variety of areas could collaborate to develop experiences that can be embedded in the curriculum to assist graduates in becoming sophisticated digital-content producers in their professional lives. This is most certainly a twenty-first-century challenge for higher education.

Notes

1. Association of College & Research Libraries, Information Literacy Competency Standards for Higher Education (Chicago: ACRL, 2000), ⟨http://www.ala.org/ala/acrl/acrlstandards/informationliteracycompetency.htm⟩; Computer Science and Telecommunications Board, Commission on Physical Sciences, Mathematics, and Applications, and the National Research Council, *Being Fluent with Information Technology* (Washington, D.C.: National Academy Press, 1999).

2. Amanda Lenhart, John Horrigan, and Deborah Fallows, *Content Creation Online* (Washington, D.C.: Pew Internet & American Life Project, 2004), ⟨http://www.pewinternet.org/pdfs/PIP_Content_Creation_Report.pdf⟩. See also Amanda Lenhart and Mary Madden, *Teen Content Creators and Consumers* (Washington, D.C.: Pew Internet & American Life Project, 2005), ⟨http://www.pewinternet.org/pdfs/PIP_Teens_Content_Creation.pdf⟩

3. A well-known example is the Valley of the Shadow Project, highlighting Civil War primary source material and developed at the University of Virginia by Edward L. Ayers and his team: ⟨http://valley.vcdh.virginia.edu/⟩. Many examples of digital creativity in scholarship are evident in *Vectors: Journal of Culture and Technology in a Dynamic Vernacular,* produced at the University of Southern California School of Cinema & Television: ⟨http://www.vectorsjournal.org/.⟩

4. Elizabeth Daley, "Expanding the Concept of Literacy," *EDUCAUSE Review,* vol. 38, no. 2 (March/April 2003): 34, ⟨http://www.educause.edu/ir/library/pdf/erm0322.pdf⟩.

5. Henry Jenkins, with Ravi Purushotma, Katherine Clinton, Margaret Weigel, and Alice J. Robison, "Confronting the Challenges of Participatory Culture: Media Education for the 21st Century," John D. and Catherine T. MacArthur Foundation, Occasional Paper on Digital Media and Learning, 2006, ⟨http://www.projectnml.org/files/working/NMLWhitePaper.pdf⟩.

Joan K. Lippincott is Associate Executive Director of the Coalition for Networked Information (CNI).