
Business and Workplace Information Literacy

Three Perspectives

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Businesses want workers who are critical thinking problem-solvers, who know how to find, evaluate, and use information to address work-related issues, and communicate effectively regarding those issues,¹ much like the information literacy (IL) or media and information literacy (MIL) efforts worldwide recently described in this column.² In businesses at all levels and in the workplace, IL/MIL is not a familiar phrase. Undaunted, however, librarians in many types of libraries try to help their users with these very issues. Those librarians face challenges, including constant and rapid change in directions and needs, little or no grasp of the availability of data (or lack thereof), especially on emerging topics, and the need to address and communicate work-related issues speedily, yet with valid evidence. The challenge for librarians in all types of libraries is how to support each other through sharing materials and approaches, perhaps in a new repository for workplace-related IL. The discussions that follow take a first step in that direction. Next steps could include analyzing the contents of such a repository and developing sequential supportive curricula and materials for librarians and for their users to extend and expand their business and workplace IL.—*Esther Grassian, Co-Editor*

BUSINESS EMPOWERED AT THE PUBLIC LIBRARY

Elizabeth Malafi

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Anyone who has been to more than one public library in their lifetime knows that they are all very different. Sure,

most public libraries offer the basics—circulating books and media, educational programming, and public-access computers—but content and delivery vary widely depending on the library and its community. Public libraries know that first and foremost they must reflect the needs and wants of their community. The same is true for business services in public libraries. These services must reflect the local business community.

Miller Center's Focus

The Miller Center is part of the Middle Country Public Library (MCPL) and is located on Long Island, an area with more than sixty public libraries. Each of these libraries is run independently and truly reflects its community. Following feedback from the local business community, MCPL began offering programming and resources to businesses and entrepreneurs more than twenty years ago. In 2003, funding from philanthropist John D. Miller allowed us to brand ourselves as the Miller Center and to expand our reach. Since then we have grown and enhanced services to meet the needs of the people we are serving.

Currently five MCPL librarians focus half of their time on the Miller Center. This team plans more than thirty programs and two trade shows each year. Each librarian also attends at least one outside networking event each month. Much of their time is spent on the more than fifteen hundred reference inquiries the Miller Center receives each year.

On any given day the Miller Center gets a wide range of questions from the public. The most popular questions from these patrons are related to careers, finances, and law. Patrons with these types of questions are usually looking for immediate assistance.

Questions about Careers

Career questions are usually related to a current job listing or an upcoming job interview and come from first-time or returning job seekers. Books covering resumes and potential interview questions are appreciated as are the one-on-one career counseling appointments we offer. While a librarian might help a patron review a job listing or find sample résumés, we rely on trained career counselors to help patrons put together résumés and cover letters.

Questions about Financial Literacy

Financial literacy has become a hot topic in libraries in the past several years. As an important topic, it is relevant to the mission of many libraries. At the very least, most libraries will have a wide selection of titles that will help create a budget, buy a home, and plan for retirement. Others offer monthly programs covering these topics and more. In our community, although we know this information is needed, programs covering financial literacy topics are extremely poorly attended. While the books and other resources

circulate well at the Miller Center, we found that these same patrons did not want to sit in a class. We know there is a lot of fear and embarrassment surrounding financial topics, but we also know that our community needs this information. So how can we help? After much trial and error, we found a solution; we began offering one-on-one financial counseling with a certified counselor. Though slow to start, with aggressive promotion, we are seeing the numbers for this program grow exponentially, from struggling to make even one appointment in 2016 to filling up the six monthly appointments a month or more in advance. While we will continue to offer financial literacy programs for the few that will bravely attend, our focus is moving toward one-on-one assistance.

Legal Questions

And finally, the dreaded law question! Is there another topic more feared by public librarians? No matter how many volumes of laws and cases we shelve in our library we are not lawyers or legal experts. It is imperative that this is impressed upon patrons. If your library is consistently receiving detailed legal questions, forming a relationship with a local legal aid society would be beneficial for all. Thankfully, at the Miller Center a typical reference law question is straightforward—either related to the wording of law or a getting a blank legal form.

Help for Librarians

While the Miller Center has a team of business librarians, it is not staffed exclusively by them. The reference interactions detailed above are handled by general reference librarians. These librarians also help walk-in business patrons who have straightforward questions such as the following:

- Can I get a sample business plan for a coffee shop?
- Where are the local real estate agents located?

Since we know MCPL librarians can be intimidated by the Miller Center's business questions, we have created an internal guide for them to easily answer some of our basic business questions. This guide includes a list of frequently asked business reference questions and answers with lists of resources used to answer the questions. Also included is a list of all our business subscription databases with a detailed description of what each offer. While we offer all this assistance to the librarians, we understand that many are just not comfortable with the topic and recommend that they contact a Miller Center librarian for anything they feel they cannot handle.

One-on-One Reference Instruction Help

Because of their relationships with the business community, business people and entrepreneurs tend to contact the

business librarians directly with more detailed, specialized questions and research requests.

While we do not currently have a written policy, it is important that the business librarians understand how much we can do for each patron. Many of these patron relationships begin with a one-on-one session with a business librarian. These one-on-one sessions have grown by leaps and bounds over the past few years. Once we realized that many of our business patrons wanted this one-on-one assistance, we made it a standard of our service. It is a win-win for all involved. Business people and entrepreneurs enjoy the personalized assistance. These sessions also give our business librarians the opportunity to really get to know the business people and entrepreneurs in the community. After getting an overview of the business and its needs, the business librarian will review specific databases, programs and community resources that can help them. They will also generally leave the session with a specific reference request that can be as simple as a list of potential customers.

More detailed requests are handled several ways. Questions with a quick turn-around (“Can you help me identify the other dry cleaners in a five-mile radius of my business?”) are handled completely by a business librarian with information sent via email. For business patrons who need immediate information that is not quickly attainable, a business librarian may guide them toward the specific resources they need to find the information. For instance, recently, a business patron asked for a list of licensed insurance salespeople by state. Not accessible through any of our databases, we quickly realized that many states offered this information online through their departments of insurance. We referred the patron to these websites and he could get most of the information he needed on his own.

For those who have a longer lead time, a business librarian may use those same resources to find the information for the patron. Miller Center business librarians do not interpret the information. For instance, a patron looking to open a frozen yogurt shop may ask for information on the industry and daytime traffic patterns for a potential location. While we would supply the information, we would not use it to determine whether they should go ahead with a potential business.

Keeping Up with Business Reference

Like your general library services, providing services to business patrons is not static. They should constantly be changing to reflect your community at that moment. The only way to get to know your local business community is to meet them. Talk to them at your programs. Visit local business groups and partner with local business organizations. None of us should work alone.

The Miller Center has been working with businesses for almost two decades. We work hard to learn and understand the needs of our local entrepreneurial and business population. While we are lightyears ahead of where we had been we never stop learning and growing.

BUSINESS INFORMATION LITERACY IN ACADEMIC LIBRARIES: CHALLENGES AND OPPORTUNITIES IN MEETING TRENDS IN BUSINESS EDUCATION

Grace Liu

Grace Liu has drawn her understanding of the business information literacy from diverse experiences working for both private and public sectors as a research assistant at the Morrison & Foerster LLP Beijing office, as a content developer in LexisNexis China, and from her current role as the business reference librarian at the University of Maine. She has actively engaged in the discussion of the trends in business education and its effects on business reference services and organized a webinar on this topic for RUSA.

Business information literacy (IL) in academic libraries is driven by changes in business education. Five emerging trends underlying the changing landscape in business education will have great impact on business library services and business IL instruction (ILI).

Trend 1: The “Engagement, Innovation and Impact” Principles

In 2013, the Association to Advance Collegiate Schools of Business (AACSB), the world’s most prestigious accrediting agency for business programs, revised its accreditation standards. The new standards demanded that business schools provide evidence of continuous quality improvement in three vital areas: engagement, innovation, and impact. Business schools are encouraged to work with other stakeholders, recognize the importance of experimentation, and seek their impact on business and society.³ In 2016, AACSB released the Collective Vision for Business Education: “the world will view business schools as catalysts for innovation, hubs for life-long learning, enablers of global prosperity, co-creators of knowledge and leaders on leadership.”⁴

In past years, we have seen a growing trend of business faculty and students engage in projects with local entrepreneurs and small business owners, and a growing role for business librarians to support university entrepreneurial initiatives and experiential learning projects. Responding to these changes, business library services need to transform our current liaison service practice to a more engaged service model, offering more embedded and integrated library services and ILI.

Trend 2: Data-Driven or Evidence-Based Decision-Making

Data-driven or evidence-based decision-making constitutes another trend in business education. Many business schools offer business analytics and decision-making courses. Some business courses have research components to enhance students’ capacity for analyzing information and evidence

to make sound business decisions. A 2013 survey by the Association of American Colleges and Universities indicated that employers believed colleges should place more emphasis than they do today on critical-thinking and analytical-reasoning skills. They would support education practices that enable students to conduct research and carry out evidence-based analysis.⁵ Critical-thinking skills, analytical-reasoning skills, evidence-based analysis, or data-driven decision-making tie closely with the library's ILI.

Business ILI offers great opportunity for business librarians to demonstrate their educational impact. Many creative models of ILI have been developed by business librarians over the years. Business librarians at the University of Texas at San Antonio (UTSA) collaborated with business faculty and designed the "Secondary Marketing Research Certificate (SMRC)" program.⁶ Richard Stern, the business librarian at the Seton Hall University library, used to take business students on a tour of the Consumers Union. Students met with Consumers Union research staff to learn about consumer research methodology, evaluation of research, and the research process. He pioneered experiential learning in business ILI.⁷

Despite these good practices and programs, business ILI in academic libraries faces great challenges. One of the big challenges is helping users understand the complexity of information sources, the constraints of accessing business information behind paywalls and limited or nonexistent information on emerging or niche markets. Another great challenge is to help users see discrepancies across business databases, critically evaluate information sources, and then help them develop agility to choose wisely from available research tools. Finally, business ILI faces great challenges in scaffolding students' learning. Many business librarians must stick to one-shot ILI and that instruction is highly dependent on the business class schedule. Swiftly evolving business class projects are disruptive to library instruction. Because of these challenges, one-shot library sessions can barely scaffold students' research capacity and assist them in developing well-rounded research skills.

Trend 3: Customization, Specialization, and Innovation

Many business schools advertise customized business studies. The University of Chicago provides tremendous flexibility for course selection with only one required course in leadership training.⁸ Yale is conducting an experiment where the curriculum is highly integrated. Faculty do not teach functional courses.⁹ The Wharton School of Business encourages students to pursue academic interests outside of business.¹⁰ Business students at the University of North Carolina at Chapel Hill are able to customize their degrees by adding emphasis on management consulting, entrepreneurship, real estate studies, energy, and healthcare.¹¹

Currently, masters in business administration (MBA) courses are often offered in multiple formats such as full-time MBA, executive MBA, flexible MBA, and online MBA.

Some business schools offer nighttime or weekend MBAs. Today's MBA classroom setting is much more complicated than ever before. Some classes offered at the University of Maine Business School incorporate in-class instruction, synchronous online sessions, and asynchronous online sessions. Faculty face challenges in managing different formats at the same time. Library instruction in this context is even more challenging.

Under these circumstances, business librarians face challenges in flexibly providing customized services, adapting to different class environments, and familiarizing themselves with a variety of instruction formats such as in-class instruction, online instruction, flipped classrooms, workshops, and video tutorials.

Trend 4: Experiential Learning

Experiential learning is a buzzword in today's business education. Internships, co-ops, service-learning projects, study-abroad experiences, and student-managed investment funds offer students new opportunities to reinforce their knowledge outside of the classroom. These types of experiential learning enhance students' critical-thinking skills, problem-solving skills, self-directed-learning skills, and teamwork skills.

However, experiential learning poses great challenges to library ILI because in the real business world, students will rarely find easy and unambiguous answers to their questions. Real business problems cannot be solved easily by searching several library databases and summarizing information from a limited number of relevant articles. Real-world business problems occur in such a dynamic that the topic must be reformulated quickly as new information turns up, and that information must be checked across all available sources. In a real world, decisions are made under many constraints and influenced not only by the availability of resources, but also by the pressure of deadlines and the temperaments of researchers.

To prepare for experiential learning and the real-world work environment, students need to develop more flexible and expanded IL capacity. In addition to drawing understanding from diverse information sources, they need to grasp the concept of researcher biases. They need to move from knowledge of research tools to developing effective strategies for using them. Finally, in addition to cognitive challenges, they need to acknowledge the emotional challenges involved in information researching. The new ACRL Information Literacy Framework would better fit in this context. It offers new opportunity for librarians to teach IL skills that are overlooked in current library instruction, such as strategic thinking, affective learning, and metacognition.

Trend 5: New Business Curricula

The hottest discussions of trends in business education focus on business curricula. Business ethics, leadership, corporate

social responsibility, entrepreneurship and innovation, globalization, and integrating business with other disciplines are becoming new trends in business curricula. These trends will demand ILI and IL curriculum mapping aligned with the learning outcomes of these new business curricula.

In sum, business IL in academic libraries, driven by the changing needs of our users and trends in business education, faces great challenges in engaging with faculty and diverse student groups, dealing with dynamic learning environments, new technologies, experiential learning, fragmented one-shot topics, and scaffolding students' learning.

However, the changing environment also offers enormous opportunity for us in academic libraries to align our business ILI with the new vision and mission of business schools. It offers opportunities to incorporate IL Framework concepts in business ILI and curriculum mapping. Finally, it offers the opportunity to help students develop well-rounded IL skills, improve their strategic thinking, critical thinking, and affective learning, and build their confidence and self-efficacy in business research and lifelong learning.

WORKPLACE INFORMATION LITERACY

Stéphane Goldstein

Stéphane Goldstein is Executive Director, InformAll CIC, and Advocacy and Outreach Officer, CILIP Information Literacy Group, and has written about workplace information literacy, notably with the reports "A Graduate Employability Lens for the SCONUL Seven Pillars of Information Literacy" and "DeVIL—Determining the Value of Information Literacy for Employers." Using such evidence, he has promoted the relevance and importance of information literacy with a variety of players in the realm of employment, such as the Confederation of British Industry, the British Chambers of Commerce, and the Trades Union Congress. He has presented on workplace information literacy themes at the European Conference on Information Literacy (ECIL), the Librarians' Information Literacy Annual Conference (LILAC), the CILIP annual conference, and the Business Librarians Association annual conference.¹²

Information literacy (IL) matters in the workplace, even if the term itself is not readily recognized in business settings. An abundance of academic literature since the early 1990s testifies to this. Two literature reviews from 2014 give a sense of the variety of studies undertaken over the past twenty years and more in numerous employment settings;¹³ the pervasive nature of IL in contemporary workplace culture and practices has also been analyzed more recently from different perspectives.¹⁴ Although there are many ways that workplace IL might be defined, one useful summary encapsulates much of what has been written: "A set of abilities for employees to recognize when information is needed and to locate, evaluate, organize and use information effectively, as well as the abilities to create, package and present information

effectively to the intended audience. Simply speaking, it is a set of abilities for employees to interact with information when they need to address any business issues or problems at work."¹⁵

A major conclusion from the many analyses is that manifestations of IL in the workplace are determined largely by the social contexts of work environments. The capacity to learn about and handle information tends to be specific to, and influenced by, different working environments and by the social interactions that influence how information is shared and used. An important aspect of this is how information know-how is acquired through employees' practice and experience, and the construction of information practices specific to their professions. Research undertaken around fifteen years ago with firefighters in Australia exemplifies this point: IL in the workplace is not only based on texts and documents, but also on the social interactions that take place there. It is largely about the informal exchange of information, and informal learning, which comes through professional know-how.¹⁶ In addition, in the workplace, the effective handling of information—and the IL that goes with that—contributes to the growth of organizational knowledge; and workplace information tends to be less structured and more chaotic than is the case in educational settings.

It follows that IL is not only beneficial for individuals in the workplace, and for the contribution that they can make, but also for entire enterprises. The promotion of companywide knowledge creation, sharing and use—and the critical IL competencies that underpin these—can lead to greater operational efficiency and the exploitation of business opportunities.¹⁷ It can add value and provide returns on investment—although these are difficult to quantify—by contributing to such business factors as efficiency, profitability, the capacity to provide good customer service, staff self-motivation, and compliance with legal, ethical and other requirements.¹⁸ IL may also help to address significant organizational challenges, such as dealing with information overload,¹⁹ formulating adaptive strategies for coping with uncertainties,²⁰ better informed decision-making,²¹ and ensuring evidence-based practice in particular sectors such as healthcare.²²

IL also contributes to employability, a fact that librarians can utilize effectively in outreach and publicity regarding their IL offerings. At one level, employability is about the skills and knowledge necessary for being effective in the workplace. As such, there are well-recognized employability attributes—essentially, generic and soft skills—where an ability to handle, share and make judicious use of information is an important factor. These include teamworking, problem-solving, analytical skills, business or customer/client awareness, and communication. But at a more holistic level, employability can also equate to an ability for individuals to learn and develop to make the most out of lifelong opportunities and challenges, including work. In that context, IL is relevant to keeping informed about career opportunities, the evolving nature of work, and the adaptability and

resilience needed to cope with that, as a means of charting career paths and defining lifelong learning and self-development preferences.²³ Thus employability may be seen in the context of lifelong learning processes (and proactive commitment to learning) dependent on the achievement of a range of literacies, including digital and information literacies.²⁴

A more holistic approach to employment and employability could help to define what IL might mean in the coming years in the context of the evolving nature of work. Future trends point to a capability to participate in knowledge societies, characterized by new social and technological environments that apply to everyday life, community engagement and citizenship as well as work. Cultivating a population capable of mastering information is essential to this sort of societal development. As suggested above, such mastery is dependent on achieving different but intersecting literacies, or metaliteracy, a concept illustrated for instance in Lee's research paper "Literacy and Competencies Required to Participate in Knowledge Societies."²⁵ This identifies three broad sets of competencies—conceptual, practical, and human—each of which is characterized by particular skills. In this model, media and IL are deemed to be practical competencies, along with learning skills. Conceptual competencies are ways of thinking, including critical and reflective thinking; human competencies, described as ability to interact with people, include virtual collaboration and digital citizenship.

Although IL features specifically as a practical competency, it is arguably dependent on the other outlined sets of competencies and skills; thus, for instance, critical thinking is crucially important for demonstrating information discernment—that is, the ability to show judgement and to demonstrate a questioning attitude when searching for, interpreting, using, and sharing information. In addition, IL is a powerful contributor to the information savviness necessary to exercise digital citizenship. And while these factors are not specific to workplace settings, they contribute to the societal contexts which nurture the emergence of new workplace practices and cultures characterized by

- less security and greater casualization;
- greater degrees of fragmentation in terms of attention, tasks, work time, and work space;
- dislocation from traditional workplace; and
- automation or at risk from automation.

These characteristics represent features typical of the gig economy. Addressing these challenges is likely to require the flexibility, nimbleness, and associated capabilities needed to assimilate and communicate information, apply information and knowledge to real-world problems, and manage knowledge, all of which relate to IL directly or indirectly.

References and Note

1. See Bryan Goodwin and Heather Hein, "What Skills Do Students Really Need for a Global Economy?," *Educational*

Leadership 74 no. 4 (2016): 83–84.

2. Esther Grassian, "Teaching and Learning Alternatives: A Global Overview," *Reference & User Services Quarterly* 56 no. 4 (2017): 232–39, <https://doi.org/10.5860/rusq.56.4.232>.
3. "AACSB Accreditation Standards," Association to Advance Collegiate Schools of Business, 2013, updated 2017, <http://www.aacsb.edu/accreditation/standards>.
4. "A Collective Vision for Business Education," Association to Advance Collegiate Schools of Business, accessed July 17, 2017, <http://www.aacsb.edu/vision>.
5. Hart Research Associates, "It Takes More Than a Major: Employer Priorities for College Learning and Student Success," *Liberal Education* 99, no. 2 (Spring 2013), <https://www.aacu.org/publications-research/periodicals/it-takes-more-major-employer-priorities-college-learning-and>.
6. Natasha Arguello, "Secondary Marketing Research Certificate: Library Collaboration with the College of Business and Marketing Faculty," *Journal of Business & Finance Librarianship* 18, no. 4 (2013): 309–29, <https://doi.org/10.1080/08963568.2013.825559>.
7. Eric J. Forte and Michael R. Oppenheim, *The Basic Business Library: Core Resources and Services* (Santa Barbara, CA: Libraries Unlimited, 2012), 207.
8. "Curriculum and Concentrations," University of Chicago Booth School of Business, accessed July 17, 2017, <https://www.chicagobooth.edu/programs/full-time/academics/curriculum>.
9. "How We Teach," Yale School of Management, accessed July 17, 2017, <http://som.yale.edu/mission-objectives/how-we-teach>.
10. "Flexible Curriculum," University of Pennsylvania Wharton School, accessed July 17, 2017, <https://undergrad.wharton.upenn.edu/flexible-curriculum/>.
11. "Concentrations," University of North Carolina Kenan-Flagler Business School, accessed July 17, 2017, <http://www.kenan-flagler.unc.edu/programs/mba/curriculum/concentrations>.
12. InformAll (<https://www.informall.org.uk/>) is an independent research consultancy and social enterprise that, through developing the evidence base, seeks to promote the relevance, importance, and benefits of information literacy. CILIP is the Chartered Institute for Librarians and Information Professionals, the professional body and advocacy organization for information, library, and knowledge practitioners in the United Kingdom. The CILIP Information Literacy Group works within CILIP and encourages debate and the exchange of knowledge in all aspects of information literacy. "Information Literacy Group," CILIP: The Library and Information Association, accessed August 12, 2017, <https://www.cilip.org.uk/about/special-interest-groups/information-literacy-group>.
13. Dorothy Williams, Katie Cooper, and Caroline Wavell, "Information Literacy in the Workplace—An Annotated Bibliography," Robert Gordon University Institute for Management, Governance, and Society, in association with InformAll, accessed August 12, 2017, <https://pdfs.semanticscholar.org/39f2/63cb17222cacb8923a4628a8af2f61ab0aa5.pdf>; Charles Inskip, "Information Literacy is for Life, Not Just for a Good Degree," CILIP: The Library and Information Association, June 16, 2014, <http://www.cilip.org.uk/cilip/blog/information-literacy-life-not-just-good-degree>.
14. Marc Forster, ed., *Information Literacy in the Workplace* (London: Facet, 2017).
15. Bonnie Cheuk, "Delivering Business Value through Information Literacy in the Workplace," *Libri* 58 no. 3 (2008): 137–43.
16. Annemaree Lloyd, "Working (In)formation: Conceptualizing Information Literacy in the Workplace," in *Proceedings of 3rd International Lifelong Learning Conference, 13–16 June 2004*, edited by P. A. Danaher, C. Macpherson, F. Nouwens, and D. Orr, 218–24 (Rockhampton, Australia: Central Queensland University Press, 2004); Annemaree Lloyd, "Learning to Put Out the Red

- Stuff: Becoming Information Literate through Discursive Practice,” *Library Quarterly* 77 no. 2 (April 2007): 181–98, <https://doi.org/10.1086/517844>.
17. Bonnie Cheuk, “Information Literacy in the Workplace Context: Issues, Best Practices and Challenges,” white paper prepared for UNESCO, the US National Commission on Libraries and Information Science, and the National Forum on Information Literacy, for use at the Information Literacy Meeting of Experts, Prague, the Czech Republic, 2002.
 18. Stéphane Goldstein and Andrew Whitworth, “DeVIL—Determining the Value of Information Literacy for Employers,” report produced for the CILIP Information Literacy Group, 2015, https://www.informall.org.uk/wp-content/uploads/2015/11/DeVIL_report_final_draft_v05.pdf.
 19. Carmel O’Sullivan, “Is Information Literacy Relevant in the Real World?,” *Reference Services Review* 30 no. 1 (2002): 7–14.
 20. Xue Zhang, Shaheen Majid, and Schubert Foo, “Environmental Scanning: An Application of Information Literacy Skills at the Workplace,” *Journal of Information Science* 36 no. 6 (December 2010): 719–32.
 21. Maureen Grieves, “The Impact of Information Use on Decision Making: Studies in Five Sectors—Introduction, Summary and Conclusions,” *Library Management* 19 no. 2 (1998): 78–85.
 22. Stephen Ayre, “Workplace Based Information Skills Outreach Training to Primary Care Staff,” *Health Information & Libraries Journal* 23 (December 2006): 50–54, <https://doi.org/10.1111/j.1471-1842.2006.00676.x>.
 23. Stéphane Goldstein, “A Graduate Employability Lens for the SCONUL Seven Pillars of Information Literacy,” SCONUL, December 2015, <https://www.sconul.ac.uk/sites/default/files/documents/Employability%20lens%20and%20report.pdf>.
 24. Helen Beetham, Lou McGill, and Allison Littlejohn, “Thriving in the 21st Century: Learning Literacies for the Digital Age (LLiDA Project),” Jisc, 2009, <http://www.caledonianacademy.net/spaces/LLiDA/uploads/Main/LLiDAreportJune09.pdf>; Peter Chatterton and Geoff Rebbeck, “Technology for Employability,” Jisc, November 2015, http://repository.jisc.ac.uk/6249/3/Technology_for_employability_-_full_report.PDF#JR0053D_EMPLOYABILITY_REPORT_FULL_OCT2015_v10.indd%3A.84987%3A2833.
 25. Alice Y. L. Lee, “Literacy and Competencies Required to Participate in Knowledge Societies,” in UNESCO and the World Summit on the Information Society, *Conceptual Relationship of Information Literacy and Media Literacy in Knowledge Societies: Series of Research Papers* (Paris: UNESCO, 2013), 3–75, http://www.globalmediapolicy.net/sites/default/files/WSIS_-_Series_of_research_papers_-_Conceptual_Relationship_between_Information_Literacy_and_Media_Literacy.pdf#page=4.