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# Drinking on the Job: Integrating Workplace Information Literacy into the Curriculum

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While employers may hire students for their proficiencies with new tools and technologies, many recent graduates find that they struggle to solve information problems in the workplace (Head, 2012). Proficient with academic databases and citation rule books, students notice that the strategies that worked for them in college fail to have the same success in environments that are driven by productivity, predetermined information needs or collective endeavor (Lloyd, 2013). Yet, information literacy empowers people to achieve occupational, personal and social goals (UNESCO, 2005). Furthermore, the demand for innovation within globally competitive marketplaces means that information literacy is crucial within a number of workplaces. How can librarians prepare students to engage in the variety of information activities that constitute workplace practice today?

Drawing on a series of interviews with professionals, this paper will introduce both the concept of workplace information literacy as well as how one librarian has successfully started to prepare students for information contexts that go beyond traditional academic structures. The paper will start by providing an overview of workplace information literacy. It will then present brief findings from the author's research into the information environments of working professionals, before exploring how this data can be integrated into classroom practice. Recognizing that the development of workplace information literacy is collaborative and located in the shared understandings of a community of practice, this approach situates information literacy within real life experiences. It also positions students to engage with the multimodal nature of modern information landscapes, thereby enabling them to take control of and manage their own learning for the workplace and beyond.

## Workplace Information Literacy

Like academic information literacy, interest in workplace information literacy arose from the recognition that information environments were growing ever more complex (Bruce, 1999). Yet, while academic and workplace information literacy were originally conceived very similarly as processes that employees or students "go through to seek and use information to complete their work," early research soon demonstrated that information practices were conceived very differently in the workplace, being non-linear, not always well planned, and rarely involving an individual working on their own (Cheuk, 2000, p.178). It was not until the mid-2000s, however, when Lloyd (2004; 2009) started to publish her studies of firefighters and emergency service workers that ideas of workplace information literacy began to develop more fully. In expanding notions of workplace information literacy beyond typical white collar information professions, Lloyd demonstrated that firstly, and unlike what had previously been assumed, information literacy relies on social and corporeal, or embodied knowledges as well as textual information modalities; and secondly, that information literacy is context-dependent, rather than a generic skill

that is transferable between settings. These ideas, which led her to reconfigure information literacy around knowing, or the development of understanding within an environment (Lloyd, 2007, p.182), have been crucial to the development of workplace information literacy research. Since these early studies, workplace information literacy can be said to have been 'popularized' by Head's research for Project Information Literacy in 2012, which explored the information experiences of students after they graduate. Focusing on employer and student perceptions of challenges in the workplace, Head found that while graduates had often been hired for their information competencies, employers perceived that an overreliance on digital sources meant that new employees were often unable to explore a topic thoroughly or to make connections and patterns in their work (Head, 2012). Students also perceived that the nature of information tasks was very different in the workplace, being seen as far more ambiguous as well as faster paced. Since this report, workplace information literacy has been mapped through the publication of two literature reviews on the topic (Inskip, 2014; Williams, Cooper & Wavell, 2014). Yet, while it is clear that interest in the topic is growing, these reviews highlight that workplace information literacy still seems to exist in a state of tension, both between functional and sociocultural ideas of practice, as well as in contrast to academic information literacy. In focusing on the integration of workplace information literacy into the academic sphere, this paper aims to explore one way of bridging these divisions.

## From the Theory to the Field to the Classroom

The literature that surrounds workplace information literacy is exhilarating and inspiring; on a personal note, it marked the first time that I realized that information literacy could move beyond the mechanics of the citation manual. Yet, as I read more and more of this literature, I was left with several outstanding questions. My most important question was ethical: does the concept of information literacy undermine a liberal arts education by focusing our attention on graduate employability and functional competence rather than intellectual agility and lifelong learning (Secker & Coonan, 2011, p.9)? Also, how can we design instruction in a way that engages with the core values of librarianship rather than merely increased productivity and the need to maintain a competitive edge (Nicholson, 2014)? These questions are complex, but in thinking about how workplace information literacy could be integrated into the classroom, I was inspired by research into Personal Learning Environments, or PLEs. Emerging from the field of educational technology, PLEs are defined as "a collection of loosely coupled tools, including Web 2.0 technologies, used for working, learning, reflection and collaboration with others" (Attwell, 2010). Rather than just being seen as a set of applications, however, PLEs are characterized as an approach to learning (ELI, 2009, p.1) in which collective and community practice is key. In other words, by scaffolding learner engagement with the tools and resources that we use to create, exLOEX QUARTERLY VOLUME 41

plore, and communicate within a setting (Dalsgaard, 2006, p.2), PLEs provide a practical way to engage learners with information environments. At the same time, by recognizing that the learner brings both past information experiences and future needs to a new setting, for example to be able to adjust strategies in the face of dynamic information environments, PLEs facilitate a holistic approach to information literacy that helps the learner to take responsibility for managing their own learning. The inherent focus within the PLE on individual, reflective practice assuaged my fear that workplace information literacy would have to center on functional skill based competence.

At the same time, PLEs are "a tool intended to immerse yourself into the workings of a community" (Downes, 2010); workplace information practices are constituted by the activities and sayings of a community and learner participation in a new setting must center on an understanding and a reconciliation of these ideas. My second question focused, therefore, on content: while information literacy is context dependent, the nature of academic majors means that often there is not one career path that students will take after they graduate. Given this constraint, how could I integrate meaningful and appropriate workplace opportunities into the curriculum? To answer this question, I looked to the pedagogy and guiding principles of the discipline that I was working with. One of the most important goals of world language education is the ability to make connections, or to recognize viewpoints that are only available through the studied language (ACTFL, n.d.). As a consequence, a number of world language educators encourage a reflection on the boundaries between cultures, an approach that helps learners to try and understand difference for what it is, rather than to try and translate one culture onto another, or to resolve conflict between two cultures (Kramsch, 1993, p.228). These ideas inspired me to think about how, rather than scaffolding the practices of a specific workplace environment or translating academic information literacy into the workplace, I could focus on, firstly, introducing students to the information environments of a number of Spanish and bilingual workplaces, and secondly, asking students to reflect on the differences between these workplace practices and their own habits, as well as on the differences between English, Spanish and bilingual information environments. By getting students to think about information and information practices, I could facilitate learning opportunities that were intricately entwined with both world language and information literacy goals. The focus on difference would also help to scaffold a number of the inter- or transcultural learning goals that are at the heart of many campuses today.

My next step, therefore, was to carry out audio-recorded interviews with bilingual and Spanish-speaking professionals. Interviews with bilingual workers, which included an immigration lawyer, a journalist, an interpreter and a teacher in higher education, were carried out in Colorado, where the recent growth in Latino residents means that a number of professions employ Spanish speakers (US Census Bureau, 2011). Interviews within Spanish-speaking environments were carried out during my research leave in Latin America and included an architect, an engineer, a journalist and a lawyer in Argentina, and a translator, a high school teacher, an editor and a graphic

designer in Chile. Using a semi-structured interview technique, questions focused on participant information practices in the workplace, including experiences, processes, tasks and sources (Hicks, 2014). Participants also reflected on their own progression in the field, or how they developed a sense of knowing within their professional arena. While a full description of findings is beyond the scope of this paper, interviews demonstrated that participants engage in a wide range of information tasks in the workplace: from looking for information (for example, researching house fittings) to information management (for example, cataloging data). This also means that participants use a variety of sources in their daily practice: while digital sources predominated, social information, or knowing who to ask, was very important, too. At the same time, there were a number of differences between interviewees in different countries. This was mostly related to environmental differences (for example, an unstable internet connection meant the Chilean teacher still used a number of print resources), or the size of the profession and the country (for example, Colorado's lack of Spanish speaking professional organizations meant that bilingual interviewees had to rely on national networks.) Notwithstanding, the limited nature of this research means that findings should not be used to draw broad inferences about the nature of information work in a specific country or profession.

The final stage in this project was to prepare these interviews for use in the classroom. Yet, while the higher education context may be preparatory (Lloyd, 2013) it is clear that there are a number of skills and understandings that students need to develop in order to navigate the academic culture in which they will be immersed for three years or more (Deitering, 2015). My third question therefore centered on the pragmatic: how could I make space to integrate workplace information literacy into an already overloaded academic curriculum? My answer lay in curriculum mapping, or establishing an understanding of the paths that students take through the major. This allowed me to design and integrate a series of paired seminars into the Spanish undergraduate curriculum at key points of the major, and, most importantly, ensured that I had the flexibility to introduce concepts of workplace information literacy into my teaching. Another important step was getting buy in from teaching faculty. As it happened, the instructor and I had already been growing increasingly dissatisfied with the structure of one of the paired seminars, which was taken just before students graduated. A wish to move beyond pay-walled resources that would be unavailable to students had pushed us to think about social justice issues (Hicks, 2015). At the same time, changing campus priorities meant that the instructor started to integrate a focus on the workplace throughout her curriculum, rather than just in the research sessions with a librarian, a development which helped to reinforce my pedagogical goals. Accordingly, while the push for workplace information literacy came from the librarian, the initiative was backed up by the integral role that the librarian and information literacy already played in the curriculum.

Concepts of workplace information literacy, therefore, are introduced into the classroom through student reflection on their current practices, as well as through the interviews. Supplemented by images of PLEs from the web, classroom prac-

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tice centers on introducing students to the concepts of a PLE, as well as the purpose of reflecting on the tools and resources that individuals use for leisure and for school. Students then start to brainstorm and plot out the beginnings of their own PLE within a particular context, whether this is for a hobby or for writing a paper. Next, they compare their diagrams or lists to the person next to them, before discussing what they have learned from their partner with the class. Having been sensitized to the concepts of information environments and PLEs, the class then listens to two of the interviews (the Argentine journalist and the bilingual journalist), paying careful attention to the sources that the interviewees use, as well as the reasons for this, and how they evaluate information in the workplace. A brief discussion about the nature of these professionals' information environments, as well as the differences between countries, and between student practices ensues. Students then reflect further on these ideas as they finish their own PLE diagrams for homework. Adapted to meet the instructor's needs and time frame, I hope, in future, to be able to engage the class in more written reflection about areas of their own practice that they would now like to improve. Notwithstanding, initial analysis of PLE homework drawings shows that students engage productively with the assignment as they reflect on their uses of information. The class has also attracted attention from other instructors, and if this model proves successful, it will be introduced into other classes that focus on Spanish for the professions.

#### Conclusion

This paper has demonstrated that a focus on workplace information literacy is both feasible and necessary. While the concept raises a number of ethical and pragmatic questions regarding its implementation, it is clear that there are a number of ways that librarians can introduce these concepts into higher education. A new area of study, workplace information literacy is only just starting to be thought about in terms of the classroom and this paper only serves as an example of one approach that could be taken. These ideas could easily be adapted to other contexts, as well as expanded, for example, by getting students to carry out their own interviews with professionals in the field. In fact, the biggest challenge may well be for librarians, who must move beyond ideas of generic, individual processes to engage with the idea that information literacy forms a rich, sociocultural practice that centers on ideas of knowing and becoming. These ideas are complex, and raise interesting questions about the nature of learning transfer and transition. Yet, they are of vital importance if we are to graduate students who are prepared for the workplace and beyond.

### References

- ACTFL (American Council on the Teaching of Foreign Languages). (n.d.) *World readiness standards for learning languages*. Retrieved from <a href="http://www.actfl.org/sites/default/files/pdfs/World-ReadinessStandardsforLearningLanguages.pdf">http://www.actfl.org/sites/default/files/pdfs/World-ReadinessStandardsforLearningLanguages.pdf</a>
- Attwell, G. (2010). *Personal learning environments and Vygot-sky*. Retrieved from <a href="http://www.pontydysgu.org/2010/04/personal-learning-environments-and-vygotsky">http://www.pontydysgu.org/2010/04/personal-learning-environments-and-vygotsky</a>
- Bruce, C. S. (1999). Workplace experiences of information literacy. *International Journal of Information Management*, 19(1), 33-47.
- Cheuk, B. W. (2000). Exploring information literacy in the workplace: A process approach. In C. Bruce, P. Candy & H. Klaus (Eds.), *Information literacy around the world: advances in programs and research*, (pp.177-191). Wagga Wagga, N.S.W: Centre for Information Studies, Charles Sturt University.
- Deitering, A. (2015). Culture is what people do. *Info-Fetishist*. Retrieved from <a href="http://info-fetishist.org/2015/04/10/culture-is-what-people-do/">http://info-fetishist.org/2015/04/10/culture-is-what-people-do/</a>
- Downes, S. (2010). *Pedagogical foundations for personal learn-ing*. Retrieved from <a href="http://www.slideshare.net/">http://www.slideshare.net/</a>
  <a href="mailto:Downes/pedagogical-foundations-for-personal-learning">http://www.slideshare.net/</a>
  <a href="mailto:Downes/pedagogical-foundations-for-personal-learning-foundations-for-personal-learning-foundations-for-personal-learning-foundations-for-personal-learning-foundations-foundations-foundations-foundations-foundations-foundations-foundations-foundations-foundations-foundations-foundations-foundations-foundations-foundations-foundations-foundations-foundations-foun
- ELI (Educause Learning Initiative) (2009). Seven things you should know about personal learning environments.

  Retrieved from <a href="http://net.educause.edu/ir/library/pdf/ELI7049.pdf">http://net.educause.edu/ir/library/pdf/ELI7049.pdf</a>
- Dalsgaard, C. (2006). Social software: e-learning beyond learning management systems. *European Journal of Open, Distance, and E-Learning*. Retrieved from <a href="http://www.eurodl.org/materials/contrib/2006/">http://www.eurodl.org/materials/contrib/2006/</a> Christian Dalsgaard.htm
- Head, A. J. (2012). Learning curve: How college graduates solve information problems once they join the workplace. *Project information literacy research report*, 1-38. Retrieved from <a href="http://projectinfolit.org/images/pdfs/pil\_fall2012\_workplacestudy\_fullreport\_revised.pdf">http://projectinfolit.org/images/pdfs/pil\_fall2012\_workplacestudy\_fullreport\_revised.pdf</a>
- Hicks, A. (2014). Bilingual Workplaces: Integrating Cultural Approaches to Information Literacy into Foreign Language Educational Practices. *Journal of Information Literacy*, 8(1): 21-41. Retrieved from <a href="http://scholar.colorado.edu/libr\_facpapers/20/">http://scholar.colorado.edu/libr\_facpapers/20/</a>

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- Hicks, A. (2015). Knowledge societies: learning for a diverse world. In, H. Jagman & T. Swanson (Eds.), Not just where to click: Teaching students how to think about information (pp.217-242). Chicago: Association of College and Research Libraries.
- Inskip, C. (2014). *Information literacy is for life, not just for a good degree: a literature review*. Retrieved from <a href="http://www.cilip.org.uk/sites/default/files/documents/IL%20in%20the%20workplace%20literature%20review%20Dr%20C%20Inskip%20June%202014.%20doc.pdf">http://www.cilip.org.uk/sites/default/files/documents/IL%20in%20the%20workplace%20literature%20review%20Dr%20C%20Inskip%20June%202014.%20doc.pdf</a>
- Kramsch, C. (1993). *Context and culture in language teaching*. Oxford: Oxford University Press.
- Lloyd, A. (2004). 'Working (in) formation: conceptualizing information literacy in the workplace'. In P. A. Danaher, C. Macpherson, F. Nouwens, and D. Orr (Eds.), Lifelong learning: Whose responsibility and what is your contribution?: Proceedings of the 3rd International lifelong learning conference, Yeppoon, Queensland, Australia, 13-16 June 2004. (pp. 218-224). Rockhampton: Central Queensland University Press. Retrieved from <a href="http://library-resources.cqu.edu.au:8888/access/detail.php?pid=cqu:1415">http://library-resources.cqu.edu.au:8888/access/detail.php?pid=cqu:1415</a>
- Lloyd, A. (2007). Learning to Put Out the Red Stuff: Becoming Information Literate through Discursive Practice. *The Library Quarterly*, 77(2), 181-198.
- Lloyd, A. (2009). Informing practice: information experiences of ambulance officers in training and on-road practice. *Journal of Documentation*, 65(3), 396-419.
- Lloyd, A. (2013). Building information resilient workers: The critical ground of workplace information literacy. What have we learnt? In *Worldwide commonalities and challenges in information literacy research and practice* (pp. 219-228). Springer International Publishing.

- Nicholson, K. (2014). Information literacy as a situated practice in the neoliberal university. In *Proceedings of the annual conference of CAIS/Actes du congrès annuel de l'ACSI*. Retrieved from <a href="http://www.cais-acsi.ca/ojs/index.php/cais/article/view/901">http://www.cais-acsi.ca/ojs/index.php/cais/article/view/901</a>
- Secker, J., & Coonan, E. (2011). A new curriculum for information literacy: Curriculum and supporting documents (pp. 1-41). Retrieved from <a href="https://newcurriculum.wordpress.com/project-reports-and-outputs/">https://newcurriculum.wordpress.com/project-reports-and-outputs/</a>
- UNESCO (2005). *A lexandria proclamation of information literacy and lifelong learning*. Retrieved from <a href="http://archive.ifla.org/III/wsis/BeaconInfSoc.html">http://archive.ifla.org/III/wsis/BeaconInfSoc.html</a>
- U.S. Census Bureau. 2011. *State characteristics: Population by race and hispanic origin*. Retrieved from <a href="http://factfinder2.census.gov">http://factfinder2.census.gov</a>
- Williams, D., Cooper, K., & Wavell, C. (2014). *Information literacy in the workplace*. Retrieved from <a href="http://www.researchinfonet.org/wp-content/uploads/2014/01/">http://www.researchinfonet.org/wp-content/uploads/2014/01/</a> Workplace-IL-annotated-bibliography