

# INTEGRATING INFORMATION LITERACY IN THE GENERAL EDUCATION MODULE AT THE DURBAN UNIVERSITY OF TECHNOLOGY, SOUTH AFRICA

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## ABSTRACT

A university curriculum re-design process provides a promising opportunity for the Durban University of Technology (DUT) Library to become an active academic partner as it modifies its contribution to enhance teaching, learning and research in the twenty-first century information environment. This article provides a conceptual framework for the library to engage in the General Education Module (GEM) for first-year undergraduate students. The GEM at DUT emanated from a curriculum renewal strategy to enhance student-centred learning across all six faculties of the university. The GEM is underpinned by a humanistic educational university strategy. Constructivist theory underpins the compulsory credit-bearing information literacy (IL) programme in the GEM at DUT. The article shows how an academic library can become a cohesive instructional partner in contributing to academic success. The library, in addition to its traditional role as the gatekeeper of learning resources and information

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provision, offers an integrated credit bearing IL programme in the GEM. This also constitutes a paradigm shift for instructional design at DUT.

**Keywords:** academic libraries, information literacy, teaching and learning, Durban University of Technology Library, General Education Module

## 1. INTRODUCTION

Academic libraries have a long and rich tradition of promoting lifelong learning in the university. The influence of information and communications technologies (ICTs), including the development of e-learning within the new higher educational landscape, presents unique opportunities for the library to become an active academic partner in teaching and learning.

South African higher education has undergone a formidable educational and technological transformation over the past five years. Unprecedented changes in student diversity, and the proliferation and sophistication of student needs have altered the way in which curricula and syllabi are conceived. The country's higher education system is under pressure to innovate and develop new ways of teaching and learning, including curriculum re-design and the use of technology to meet these new challenges.

The knowledge society represents a new paradigm for future developments in education. Access to the global information pool is the driving force for the development of a knowledge society. An opportunity exists in higher education for the library to become integral in developing new strategies for educational development in the pursuit of student-centred learning, that is, in the creation of a knowledge society in South Africa. Afgan and Carvalho (2010, 1) define a knowledge society as: 'A human structured organization based on contemporary developed knowledge and representing new quality of life support systems. It implies the need to fully understand distribution of knowledge, access to information and capability to transfer information into knowledge'.

Academic librarians can play an active role in promoting the creation of knowledge by the use of learning resources. According to Dale, Holland and Matthews (2006, 191), 'Subject librarians are uniquely placed to develop the role of the knowledge broker, working with students and academics to enhance their contributions to learning and teaching'. Further, many academics are keen to incorporate information literacy (IL) competencies in promoting student-centred learning.

The Council on Higher Education (CHE) in South Africa indicates that further impetus to formalise IL has come from new requirements included in the South African Qualifications Framework (SAQA) which include generic literacy outcomes known as critical cross field outcomes. This article provides a conceptual framework

to integrate the library into the General Education Module (GEM) in fulfilling SAQA's critical cross-field outcomes.

## 1.1. Context

### 1.1.1. The Durban University of Technology

The Durban University of Technology (DUT) is one of six universities of technology (UoT) in South Africa and is a member of the International Association of Universities. DUT is a multi-campus university situated in the city of e-Thekweni, in the heart of KwaZulu-Natal, South Africa, offering undergraduate and postgraduate programmes.

DUT's mission is to: offer a teaching and learning environment that values and supports the university community; promote excellence in learning and teaching, technology transfer and applied research; and engage externally in a way that promotes innovation and entrepreneurship through collaboration and partnership.

The DUT Library mission is to be 'a student-centred library that enhances learning, teaching and research through the provision of information services, access policies and instruction programmes in line with the objectives of the institution' (DUT 2016).

The focus of a UoT seems to engage with a knowledge-based society. Du Pré (2004, 6–7) sees this as typified in engaging with the development of lifelong learning skills; students acquiring computer literacy with a sound understanding of entrepreneurial and work ethics; students acquiring a basic knowledge of IL and business practices; students acquiring language proficiency in at least one international language; and qualifications that lead to employability. The above characterises teaching and learning at DUT.

### 1.1.2. The impetus for curriculum re-design at DUT

DUT embarked on a strategy in 2015 to re-design the curriculum in pursuit of student-centred teaching and learning. The ultimate aim of teaching is to enhance student learning. Researchers, such as Ramsden (1994), Cottrell and Jones (2003) and Lonka (2012), affirm that student learning outcomes are most improved when faculty development is focused on student-centred teaching strategies. Spurred on by the challenges in South African higher education, DUT and other universities must address the challenge of how to instil lifelong learning in students.

The applicable pedagogical and didactic trends important to learning in the knowledge society emerge from the following premises: the student is a self-paced learner; the teacher is no longer the foremost source of knowledge; and the student learns by experience, individualised pedagogy and cooperative instruction (Gilchrist

2007, 79). These issues, interpreted in the light of contemporary student-centred learning theory, contrive a changing focus of the library.

Transformation of pedagogy and the tenets inherent in the scholarship of teaching and learning (vision, design, interactions, outcomes and analysis) serve as a model to support university initiatives for academic success (Cottrell and Jones 2003). Such a model serves an example for integrating IL into DUT curricula and research.

The outcomes-based education model in South African higher education, as accredited by the National Qualifications Framework (NQF), is another reason pedagogical transitions are significant to higher education. Traditional assessment efforts focused on students relaying what they know about a subject and less about applying that knowledge. The ‘outcomes’ model in South African universities requires that academics at all levels of an institution establish learning goals; design instructional experiences in an integrated manner; and make changes based on information from summative and formative assessments.

In contrast, outcomes-based assessment has changed educational pedagogies which must now discover what a student can do with the knowledge and skills acquired in higher education. Therefore, the importance of the curriculum within a UoT, also articulated by Mthembu (2012, 190–191), is to

provide career focused education; be responsive to community and industry needs; provide social and technological innovations; provide more open access; frequently use advisory groups to ensure that curricula align with business/industry demands and provide work integrated learning and thereby ensure that students also learn from real-life workplaces.

Transforming these elements into curriculum re-design implies a shift to work-based programmes and technology-enhanced teaching and learning methodologies. Within this context, the GEM seeks to empower students with a critique of what is presented as knowledge and that which aims to provide a holistic education.

## 2. THE GENERAL EDUCATION MODULE

The term General Education (GE) is concerned with the knowledge, abilities and mind-set that characterise a well-educated individual. These requirements aim to broaden a student’s intellectual horizon; to develop critical and creative thinking skills for independent learning; and to promote spoken and written articulacy. The GE curriculum consists of humanistic (educational theory which leads to student self-actualisation) modules that cut across a wide range of disciplines. It encourages students to explore disciplinary practices and thinking in the humanities, social sciences, sciences and engineering.

The GE curriculum also engages all students in discussions about the social, cultural, scientific and historical topics that will lay the foundations for important life skills, such as critical thinking, communication and reasoning. The GE curriculum

aspires to inculcate scaffold learning by taking cognisance of student educational experiences and building upon enquiry based learning. This differs from previous curricula that were mainly discipline specific without much engagement for a multi-disciplinary approach.

The GEM at DUT is based upon a humanistic philosophy as an approach to instil lifelong learning and promote graduate attributes. DUT graduate attributes consist of students becoming: (1) critical and creative thinkers who work independently and collaboratively; (2) knowledgeable practitioners; (3) effective communicators; (4) culturally, environmentally and socially aware within a local and global context; and (5) being active and reflective learners (DUT 2014, 1). The aim of GE at DUT is to: (1) build a student-centred educational experience embedded in the local context; (2) prepare students for an increasingly diverse and complex globalised work environment; and (3) cultivate an engaged and critical citizenry in the context of an emerging and fragile democracy in an ever-changing world order.

With the rise of GE internationally, libraries have been able to move beyond ad hoc course-integrated library instruction into a formal student-centred instruction. In light of the above, the author draws attention to the opportunity for the library to become integral in collaborative instructional design in promoting IL and lifelong learning in the university.

There is, however, limited evidence of GE curricula being adopted in South Africa, with DUT adopting a renewed undergraduate curricula instruction model. Collaborative teaching strategies involving strategic alliances, strong partnerships with academics and an interest in IL are pursued to enhance teaching and learning.

In alignment with the above, the role and intervention of the library is important in promoting academic success (lifelong learning) in the university. This is further sketched in the competencies identified (DUT 2014) as pivotal for attaining graduate attributes in the teaching, learning and research agenda in the university. The following constitute the principles for the GEM offering:

1. basic proficiency and competencies: information literacy, communication (oral and written), numeracy, technology applications;
2. innovation: entrepreneurship, leadership;
3. social responsibility: ethics, diversity, critical and engaged citizenry embedded in a local and in a global context;
4. personal development: self-awareness, self-directed and life-long learning; and
5. broad understanding of their chosen discipline and/or profession: an appropriate discipline approach to knowledge production and workplace adaptability.

The above principles reflect the lifelong learning and critical citizenry approach instituted in the GEM and purposed in the DUT graduate attributes as espoused in the DUT Senate document guidelines (DUT 2014). Thus, the DUT GEM propogates

instilling graduate attributes through the teaching and learning process from the undergraduate to the postgraduate levels. A purposive model for integrating IL programmes is provided within this framework.

### 3. THE FRAMEWORK FOR INFORMATION LITERACY IN THE GENERAL EDUCATION MODULE

The GEM is based upon seven faculty themes, namely: (1) environmental sustainability; (2) history, politics, economics and philosophical systems; (3) culture and society; (4) work preparedness; (5) entrepreneurship; (6) personal development; and (7) health and wellness.

The changing role of the library and leadership to educational transformation within the context of higher education and that which adopts a learning paradigm is also alluded to by many authors (Bell and Shank 2011; Campbell and Maggs 2006; Stueart and Moran 2001), also considered in the DUT IL framework for the GEM.

Quality assurance standards in universities require faculty to incorporate learning resources into the curriculum. Fuller (2003) indicates that information retrieval (access to and searching relevant learning resources) is important for undergraduate success. Further, locating information needed to make decisions and solve problems ranks as a crucial skill for undergraduate education, preceded only by defining and solving problems. However, Fuller's study does not mention the library's role nor its potential leadership in furthering a student's ability to connect information use with decision-making and problem solving. This gap points to the need for developing the foundations for integrating the library into the academic process. The DUT Library would provide an ideal context for achieving this via the GEM which develops IL competencies and help students connect information use with problem-solving.

The relevant characteristics framing the role of the DUT Library in the GEM focuses on lifelong learning, active and engaged learning and deep curricular integration. Hill (1980) and Snavely and Dewald (2011) state that interdisciplinary educational value, team teaching, diverse learning environments, and pervasive interactions with academic constituencies create a 'web of influence', elevating the visibility and educational role of the library. This is further supported by Lonka (2012, 19), who states that the 'value of educational activities may be measured in terms of how they promote engagement and self-regulated learning'. The 'Google generation' student requires more engaging, experiential and creative learning methods (e-learning, games, simulations, social media and knowledge-creation projects). The DUT GE learning environments, therefore, foster active learning with the library and learning resources, collaborative scientific inquiry, and problem-solving skills.

The integration of IL into the GEM attempts to deviate from merely teaching information access or retrieval. Mbambo (2006, 179) also cautions about the emphasis placed on the information retrieval training role of the librarian at the expense of the need to train users in critical thinking. Critical users of the library would be active contributors to knowledge, not merely consumers. Subject librarians are well positioned and trained to encourage critical thinking. IL is integrated into the GEM with the opportunity for the subject librarian to play a proactive role in encouraging the varied use and evaluation of relevant learning resources which foster critical thinking in students.

The author is of the opinion that the prevalence of digital libraries and online resources demands that librarians become more student-centred in teaching and learning environments. Subject librarians need to be conversant with e-learning management tools, and become skilled in using the virtual learning environments, such as BlackBoard, Moodle and Edmodo. Dale, Holland and Matthews (2006, 191) agree that ‘paradoxically, to introduce and develop successful electronic resources, subject librarians need to be good verbal communicators and fully integrated with academics as well as library networks’.

The DUT GEM framework envisaged in Table 1 builds upon a collaborative, constructivist faculty/library approach. The approach outlined above to foster critical thinking and active engagement is alluded to in the DUT IL framework. Mbambo (2006, 178) comments that library subject specialisation models with close faculty/library collaboration have a positive impact on student learning and that collaborative teaching and co-operation between faculty and libraries enhances student success.

Table 1 outlines the crux of the GE course for the Cornerstone Module which is an integrative approach to IL teaching and learning at DUT.

**Table 1:** The crux of the GE course for the Cornerstone Module

<b>General Education course content with outcomes for the Cornerstone Module</b>
<p><i>Introduction:</i></p> <p>The Cornerstone Module is an instructional collaborative constructivist theoretical approach to curricula. This module is compulsory for all 1st year undergraduates. It is a cross-faculty thematic approach to curricula with information literacy being infused into the module.</p> <p>The outcomes of the General Education Module are to:</p> <ul style="list-style-type: none"> <li>• develop students’ awareness of self and society through engaging with text and lived experiences;</li> <li>• develop students’ practice of critical and engaged citizenry;</li> <li>• induct students into specific communicative practices that characterise higher education;</li> <li>• develop information literacy competencies.</li> </ul>



<b>General Education course content with outcomes for the Cornerstone Module</b>
<p><i>Course content:</i>                      The module content is developed around the concept of Southern African journeys, across time, across space, and across human relationships. The module will bring different disciplinary perspectives to this content.</p> <p>The module will start with the analysis of a current issue (one critical event or development will be identified and analysed; the event in focus will be selected on the basis of its connections to the theme of journeys and its relevance to the issues of ethics, diversity and critical citizenry).</p> <p>Students will be able to identify and question their existing constructions about themselves and others in the context of a diverse knowledge society. They will develop communication practices appropriate to various contexts by:</p> <ol style="list-style-type: none"> <li>1. They will recognise themselves as constructors of knowledge;</li> <li>2. They will demonstrate values of respect, accountability and responsibility, which promote leadership.</li> </ol> <p>The above requires that elements such as quantitative reasoning and information literacy are embedded in the teaching and learning activities.</p> <p>Assessment – development of a student journal – reflective writing; Small group activities, such as reading and writing with tutors, class discussions with individual or group presentations.</p> <p>Independent student study: reading, writing, research activities (including working with quantities), students work on presentations/ assignments for summative assessment.</p>

Table 2 outlines an infused approach to the role of the library in the GEM. This approach forms the framework for IL teaching to instil graduate attributes – critical thinking and lifelong learning.

**Table 2:** An infused approach to the role of the library in the GEM

<b>Information literacy performance indicators</b>	<b>Learning outcomes</b>
1. Identify and differentiate between the various relevant sources of information	The student will: <ul style="list-style-type: none"> <li>• be able to understand primary and secondary sources</li> <li>• determine how information is organised</li> <li>• establish what other research exists in the literature</li> </ul>
2. Develop effective search strategies to retrieve relevant information	<ul style="list-style-type: none"> <li>• identify keywords and able to develop effective search strings</li> <li>• conduct an effective literature review using various discovery tools – databases, information portals, search engines</li> </ul>



Information literacy performance indicators	Learning outcomes
3. Ability to evaluate the sources and information for relevance	<ul style="list-style-type: none"> <li>• apply criteria for critical appraisal</li> <li>• consider research performance data as a measure of quality (citation analysis, impact factors)</li> </ul>
4. Ability to stay abreast of new research or developments	<ul style="list-style-type: none"> <li>• apply methods available to locate and keep up to date with work of particular researchers or in subject areas</li> </ul>
5. Ability to manage your information	<ul style="list-style-type: none"> <li>• have the ability to use bibliographic management tools</li> </ul>
6. Ethics in the use of information	<ul style="list-style-type: none"> <li>• understand related concepts as applied to the scope of the assignment</li> <li>• understand and use open educational resources</li> <li>• be able to interpret and create citations for work consulted</li> <li>• know how to use bibliographic management tools</li> </ul>
7. Publishing and presentation of research	<ul style="list-style-type: none"> <li>• understand publishing processes and concepts</li> <li>• know how to present research data – use of open educational resources and subject specific databases</li> </ul>

## 4. INFORMATION LITERACY

The academic library enables students to gain higher order thinking abilities ‘through a process of acculturation into communities of expertise located in real situations, not contrived, academic ones’ (Lave 1991, 127) by engaging with the literature and problem solving in their real situations, also envisaged in the GEM at DUT.

To be considered information literate, students have to: be aware of key information; be able to select and interrogate appropriate information resources; be able to evaluate and apply information appropriately; be able to undertake research; and to practise academic integrity (Neerpath 2012, 257). Sharma (2006, 129) observes that the mastery of IL skills prepares students to tackle research-based tasks throughout their academic and professional careers. This is purposively driven by integrating IL into the GEM.

The Association of College and Research Libraries (ACRL 2010) identified five competency standards for higher education that the information-literate student

should meet which was adopted by the DUT Library, namely, to: determine and access the required information effectively and efficiently; evaluate critically the information and its sources and incorporate this new information into his or her existing knowledge base; use information effectively in his or her studies and work; understand the economic, legal and social issues pertaining to the use of information; and access and use information ethically and legally.

The DUT IL framework takes cognisance of the ACRL (2015) framework which provides good guidelines for academic libraries. The ACRL framework is adopted in the DUT Library because of the deeper levels espoused for academic integration to enhance teaching learning and research, also prudent for developing DUT graduate attributes. Bell and Shank (2007, 151) and Jager, Nassembeni and Underwood (2007) aptly state that the role of the subject librarian is to serve the needs of faculty in order to enhance teaching and to provide students with better learning experiences. The ACRL (2015) framework provides a new strategy for integrating IL in the context of adopting new technologies and applications for improved pedagogy and teaching methods in educating students about research inquiry.

The author is of the opinion that embedding IL into the GEM is shaped by design thinking. Within the DUT context, the ACRL (2015) framework is applied and applicable to the GEM, which is also driven by a constructivist theoretical approach.

## 5. CONSTRUCTIVIST THEORY

The concept of the student-centred library emerges from the constructivist approach, which is situated in the principles and context expounded for teaching and learning in UoTs in South Africa, also applicable to the DUT GEM. This approach has been advocated by educationists, such as Jean Piaget, Lev Vygotsky, Howard Gardner, Carl Bereiter and Marlene Scardamalia. It is a philosophy of learning founded on the premise that, by reflecting on our experiences, we construct our own understanding of the world we live in. Within constructivism, the DUT Library has the potential to be a change agent by integrating IL into curricula to deepen the student learning experiences in the university.

The Constructivist Theory advocates for making optimum use of the library's resources and instruction to encourage student success and lifelong learning. All this interaction within the environment of the learning library creates a 'web of influence' or a 'multiplier effect' in which librarians become more visible and where new instructional opportunities arise, such as the GEM. Gilchrist (2007) aptly states that the teaching and learning environment is transformed because librarians act as change agents and serve on curriculum committees. The extension of the

Constructivist Theory to the library, then, occurs through design on four linked elements based on: communication; interactions among students, faculty and librarians; information resources; and the curriculum (Simons, Young and Gibson 2000, 125). The GEM provides an opportunity for DUT librarians to advance library integration in teaching and learning by using the above four linked elements alluded to in the literature.

## 6. INSTRUCTIONAL DESIGN OF THE GENERAL EDUCATION MODULE

Constructivist learning involves collaboration; inquiry or enquiry-based learning; and critical thinking. Each of these resonates with Vygotsky's theory, which suggests that students' progress in understanding is supported by information/library resources to develop the next stage of their cognitive ability. The GEM supports this type of learning. Collaborative instructional design is articulated in the DUT GEM where faculty and the library present a team approach to teaching and learning. This also involves the librarian's expertise in curriculum re-design which fosters self-paced learning. While teaching time is perceived as the most critical resource in an academic institution, its efficient use to maximise student learning is key to the future sustainability of higher education in South Africa, particularly in universities with high student-staff ratios and constrained budgets.

A study by Gilchrist (2007, 21–25) showed that the current academic structure and culture views team teaching as the exception, despite it having been shown to optimise faculty time and improve student-centred learning. Instructional design still almost always occurs at faculty level without involving library collaborations. The DUT GEM, with its integrated credit bearing IL programme, offers a paradigm shift in instructional design.

## 7. CONCLUSION

The article has shown how an academic library can be a proactive contributor in the instructional design to promote student learning in the curricula. Four themes, namely: collaboration; pedagogy; IL competencies; and knowledge building (Dale, Holland and Matthews 2006; Derakshan and Singh 2011) have been used as an approach to enhance teaching and learning in the GEM at DUT. The DUT framework ascribes for an integrated IL offering which seeks to build academic success and enhance student-centred learning in the university.

## REFERENCES

- ACRL *see* Association of College and Research Libraries.
- Afgan, N. H. and Carvalho, M. G. 2010. The knowledge society: A sustainability paradigm. *Cadmus* 1(1). <http://cadmus.newwelfare.org/2010/10/23/the-knowledge-society-a-sustainability-paradigm> (accessed August 9, 2015).
- Association of College and Research Libraries. 2010. Information literacy competency standards for higher education. <http://www.ala.org/ala/acrl/ilcomstan.html> (accessed July 2, 2015).
- Association of College and Research Libraries. 2015. Framework for information literacy for higher education. <http://www.ala.org/acrl/standards/ilframework> (accessed March 10, 2016).
- Bell, S. J and J. Shank. 2011. Blended librarianship: [Re]envisioning the role of librarian as educator in the digital information age. *Reference and User Services Quarterly* 51(2): 105–110.
- Campbell, J. and P. Maggs. 2006. Serving different constituencies: Undergraduates. In *Subject librarians: Engaging with the learning and teaching environment*, ed. P. Dale, M. Holland and M. Matthews, 103–172. London: Ashgate.
- CHE *see* Council on Higher Education.
- Cottrell, S. A. and E. A. Jones. 2003. Researching the scholarship of teaching and learning: An analysis of current curriculum practices. *Innovative Higher Education* 27(3): 169–181.
- Council on Higher Education. 2009. South African higher education: Past, present and future. <http://www.che.org.za/documents/d000081/SA> (accessed December 2, 2015).
- Dale, P., J. Beard and M. Holland, eds. 2011. *University libraries and digital environments*. London: Ashgate.
- Dale, P., M. Holland and M. Matthews, eds. 2006. *Subject librarians: Engaging with the learning and teaching environment*. London: Ashgate.
- De Jager, K., M. C. Nassebeni and P. G. Underwood. 2007. Libraries, literacies and learning: Retrospect and prospects. In *Libraries for the future: Progress and development of South African libraries*, ed. T. J. D. Bothma, P. G. Underwood and P. Ngulube, 133–147. Pretoria: Library Information Association of South Africa.
- Derakhshan, M. and D. Singh. 2011. Integration of information literacy into the curriculum: A meta-synthesis. *Library Review* 60(3): 218–229.
- Du Pré, R. H. 2004. *Universities of technology in South Africa: Position, role and function*. Pretoria: Committee of Technikon Principals.
- Du Pré, R. H. 2009. *The place and role of universities of technology in South Africa*. South African Technology Network. Durban: Art Printers.
- Durban University of Technology. 2014. DUT graduate attributes. Senate document. Durban: DUT.
- Durban University of Technology. 2016. Library strategic plan 2015–19. Durban: DUT.
- DUT *see* Durban University of Technology.
- Fuller, V. 2003. *University of Washington office of educational assessment research and assessment reports*. <http://www.washington.edu/oea/reports/index.html> (accessed July 30, 2015).

- Gilchrist, D. L. 2007. Academic libraries at the center of instructional change: Librarian and faculty experience in library leadership in transformation of teaching and learning. PhD thesis, Oregon State University, Oregon.
- Hill, P. 1980. Who will lead the transformation of higher education? Librarians will! *Washington Center Newsletter* 3: 1–4.
- Lave, J. 1991. *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Lonka, K. 2012. Engaging learning environments for the future: The 2012 Elizabeth W. Stone lecture. In *The road to information literacy: Librarians as facilitators of learning*, ed. R. Gwyer, R. Stubbings and G. Walton, 15–29. Berlin: Saur, International Federation of Library Associations (IFLA publication; 157).
- Mbambo, B. 2006. A review of international trends in library faculty support in higher education: A special focus on Southern African university libraries. In *Subject librarians: Engaging with the learning and teaching environment*, ed. P. Dale, M. Holland and M. Matthews, 175–188. London: Ashgate.
- Mthembu, T. 2012. Curriculum transformation at universities of technology: Towards development of new generation universities. *South African Journal of Higher Education* 26(2): 185–197.
- Neerpath, S. 2012. Academic integration of information literacy at the Durban University of Technology. In *The road to information literacy: Librarians as facilitators of learning*, ed. R. Gwyer, R. Stubbings and G. Walton, 253–266. Berlin: Saur, International Federation of Library Associations (IFLA publication; 157).
- Sharma, S. 2006. From chaos to clarity: Using the research portfolio to teach and assess information literacy skills. *Journal of Academic Librarianship* 33(1): 127–135.
- Simons, K., J. Young and C. Gibson. 2000. Learning library in context: Community, integration, and influence. *Research Strategies* 17(2–3): 123–132.
- Snavely, L. and Dewald, N. 2011. Developing and implementing peer review of academic librarian's teaching: An overview and case report. *Journal of Academic Librarianship* 37(4): 343–351.

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