

Information Literacy and Quality Assurance in South African Higher Education Institutions

KARIN DE JAGER AND MARY NASSIMBENI

Centre for Information Literacy, University of Cape Town, Cape Town, South Africa

The first decade of democracy in South Africa has seen intensive policy-making in the higher education sector with a view to transforming the teaching and learning practices to be more consistent with a modern democracy on the African continent. In addition to addressing specific problems and gaps caused by the destructive policies of the past, the government has sought to ensure that the higher education institutions improve the government's performance with respect to global competitiveness. This paper analyses the key policy trends that are likely to impact on academic libraries' efforts to extend their information literacy education pro-

grammes. The authors discuss the progress made by librarians in establishing partnerships with academics to deliver quality education and so participate in the transformative agenda. These efforts are viewed against the background of global moves towards definitions of graduateness and the establishment of quality assessment management systems for universities. The paper shows how librarians have developed their conceptions of information literacy education and makes the case that they can accelerate the uptake of information literacy education interventions in the curriculum by more pointed leverage of higher education policy initiatives.

Introduction

Academic librarians across the world acknowledge that one of their most serious challenges is to demonstrate to teaching staff the value of information literacy in the curriculum. Their question is how they can persuade teaching colleagues to afford them space and time in the timetable for information literacy education. Librarians should be able to build a more credible argument for their claims if they share the same teaching/learning discourse, if they are aware of education policies that impact on their work and if they know how to use the policies to achieve their goals. Two drivers of change in higher education are global moves towards identifying graduate skills, and the initiation of quality assurance systems. All over the world higher education institutions are trying to define their concept of graduateness and identify desirable generic graduate skills or attributes that support lifelong learning. Many

governments have established quality assurance controls that are shaping teaching and learning practices in institutions of higher learning which offer greater opportunities for libraries to insert themselves more directly into the academic curriculum.

Graduate skills

In 2000 UNESCO issued an important declaration concerning higher education and suggested explicit focus on a cluster of values:

There is a perceived need for a new vision and paradigm in higher education which should be student-oriented ... To achieve these goals, curricula need to be recast so as to go beyond simple cognitive mastery of disciplines, and include the acquisition of skills, competences and abilities for communication, creative and analytical analysis, independent thinking and teamworking in multicultural contexts (UNESCO 1998).

The skills or attributes listed in the Declaration are referred to variously as “graduate skills”, “graduate attributes”, “generic skills”, “core competencies”, “key skills” and “key competencies”. The emphasis on these skills (presumed to be transferable), in addition to the more general assumptions about the acquisition of specific disciplinary knowledge and skills, arises partly from concerns about employability of graduates, the cost of higher education and conceptions of the demands of the knowledge society. Jones (2001, 3) points out that there is a shared understanding of what a student should have on graduation:

- the acquisition of a body of disciplinary knowledge
- the critical understanding which comes from the communication, application and evaluation of a body of knowledge
- the commitment to ethical action and social responsibility
- a capacity for employment and lifelong learning.

Recognising their importance, and responding to pressure from governments and employers, higher education institutions have started to change teaching and learning practice to take account of the concept of gradueness, implied in the set of skills and attributes. For example, it is recognised that in order to achieve this, it is necessary to move from a teacher-centred approach to a learner-centred approach which emphasises the education experience of students and allows them to take their place in the emerging knowledge society (Huba and Freed 2000). The adoption of outcomes based education in a number of countries such as Australia, New Zealand, the United States, Canada, the United Kingdom and South Africa has been a steering mechanism in the higher education sector for curriculum reform to reflect student competence in disciplinary content, and thinking and critical skills. Associated with this move has been the demand by governments, employers and the public for greater accountability from higher education institutions. Spady (1994, 2), a major expert and exponent, defines outcomes based education as:

A comprehensive approach to organizing and operating an education system that is focused on and defined by the successful demonstrations of learning sought from each student. Outcomes are clear learning results that we want students to demonstrate at the end of significant

learning experiences and are actions and performances that that embody and reflect competence in using content, information, ideas and tools successfully.

The performance, according to Spady (2001), will reflect:

1. what the student knows
2. what the student can do with what he or she knows
3. the student’s confidence or motivation in carrying out the demonstration.

Nunan (1999) points out that one of the outstanding issues of developing and measuring graduate skills, is the decision about how conscious curriculum design, assessment and reporting are to reflect these skills, and the institutional commitment to giving effect to these goals. Many academics take these attributes for granted and assume their implicit acquisition by students over the period of their undergraduate studies. Because the skills can be diffused over many disciplines, the danger is that no one department will take responsibility for their implementation

Brown and Knight highlight the importance attached by students to assessment: “Assessment defines what students regard as important, how they spend their time, and how they come to see themselves as students and then as graduates” (1994, 12). This view is widely held by a number of educational theorists (e.g. Ramsden 1992; Entwistle 1997) and should be an important educational consideration for librarians planning information literacy education.

The South African higher education landscape

Once the current restructuring and merging of institutions has been completed, according to the National Plan for Higher Education there will be 21 institutions of higher education in South Africa. The purpose of the National Plan is to reshape and transform higher education which is facing great challenges such as the following:

- a very low annual graduation rate of 15%
- very low participation rates of black students relative to white students (Asmal 2001).

Higher education policy development in South Africa is based on three principles:

- overcoming social-structural inequalities
- contributing to reconstruction and development
- positioning South Africa to engage effectively in globalisation (Badat 2000).

At least two of the goals reflect international concerns: socio-economic development (reconstruction and development) and global competitiveness. These goals frame the discussions and debates about what knowledge, skills and competencies are required to meet the national goals, and how the curriculum needs to be changed to meet the demands. The legacy of huge socio-structural inequalities arising from the long history of oppression is a particular imperative. The ten-year review of higher education in the first decade of democracy by the South African Council on Higher Education (CHE) notes that South Africa needs to be part of the “network society” and that the higher education institutions should assist the government “to stay on the competitive side of the digital divide” (Council on Higher Education 2004, 37). The report sets out a specific role for higher education institutions in the national project of reconstruction and development: to ensure that graduate skills and competencies contribute to the goals of “equity, democracy and development” in a learning society (2004, 34–35).

The CHE has enumerated the graduate competencies required in the 21st century by South African graduates:

- computer literacy
- knowledge reconfiguration skills
- information skills
- problem-solving
- teamwork
- networking
- mediation skills
- social sensitivity (Council on Higher Education 2001).

These skills, viewed as transferable, relate both to the academic sphere, and also to the world of work (Council on Higher Education 2004, 114).

In a paper published in 2003, Reid notes the establishment of a number of national Quality Assurance Agencies indicating a shift in higher education institutions from the promotion of quality to the assessment of quality. “Through the work of these agencies, universities shape their activities and report upon them in order to dem-

onstrate that they have quality assurance processes in place” (2003). The South African higher education system has been greatly influenced by global movements including concerns about the nature of skills required for the knowledge economy, employability of graduates and demands for greater accountability. This has resulted in education policies requiring significant changes in approach to teaching and learning in the higher education sector.

The CHE through its Higher Education Quality Committee (HEQC) has been assigned the responsibility for quality assurance in higher education which it has started to exercise through the national institutional audits, associated with quality improvement and enhancement. The purpose of the quality assurance system put in place by the HEQC is “to ensure that institutions effectively and efficiently deliver education, training, research and community service which are of high quality and which produce socially useful and enriching knowledge as well as a relevant range of graduate skills and competencies necessary for social and economic progress” (Council on Higher Education. Higher Education Quality Committee 2001).

The HEQC enumerated its criteria for quality in its founding document:

- Fitness for purpose which will be measured against institutions’ public mission statements
- Value for money: where judgment will be made against (but not confined to) market responsiveness and cost recovery
- Transformation: which has the capacity to contribute to an individual’s personal enrichment, and also contribute to societal goals of social development and economic and employment growth
- Fitness of purpose which will be judged against the framework based on national goals (Council on Higher Education 2003)

The institutional audits will be evidence-based. As universities are driven towards supporting their claims with evidence, libraries will naturally have to participate in this process. Quality assurance activities will offer an opportunity to demonstrate with evidence that time and investment in integrating information literacy into the curriculum is more powerful than simply lobbying for support by assertion of the role of information literacy education in undergraduate formation.

Bundy has argued that university libraries should stress their distinctive educational rather than simply their informational role (Bundy 2004).

The South African Qualifications Authority (SAQA) has overall responsibility for quality assurance in support of the National Qualifications Framework (NQF). The NQF is a Framework on which standards and qualifications, agreed to by education and training stakeholders throughout the country, are registered. Of particular interest to librarians is the reference by the NQF to a number of generic outcomes, referred to as critical cross-field outcomes, among which are:

Collecting, analysing and critically evaluating information

This reflects the concept of *Information Literacy* and calls to mind the global search for graduate attributes. The NQF has stipulated that critical outcomes must be assessed.

The established information literacy standards suggest themselves as a possible instrument for the assessment of information literacy. The Association of College and Research Libraries (ACRL) has formulated information literacy standards which have been translated in Germany, Spain and Finland (2000). They have been adapted in Australia by the Council of Australian University Librarians (CAUL) (2001). In the UK the Standing Committee of National and University Libraries (SCONUL) has developed its model, the Seven Pillars (1999). Standards such as these may serve to measure students' acquisition of the generic skill of information literacy.

Information literacy initiatives in South Africa

University library consortia, individual institutions and the Library and Information Association of South Africa (LIASA) have all started to address how best to lobby for the integration of information literacy in the curriculum. Good progress has been made by drawing on policy directives for advocacy purposes and to position libraries as partners with academics in the teaching and learning process, making explicit the links between information literacy, graduate skills and lifelong learning. The authors have been engaged in a three-year research project on evaluating in-

formation competence and have done a lot of work with higher education librarians on curriculum, assessment and standards. In particular they wished to investigate two things:

- Whether the internationally well-established ACRL Standards would be suitable as benchmarks for information literacy tuition and assessment in South Africa
- To what extent their practice had been informed by policy developments in higher education and the extent to which they had been successful in locating information literacy education in the graduate skills discourse

The investigations were carried out by means of a couple of workshops, and a series of surveys.

At the National LIASA Conference held in September 2003, they therefore presented a Consultative Workshop on Information Literacy Standards and Assessment. Its aim was to establish whether librarians could or wanted to work with the ACRL Standards. An abbreviated version of this Workshop was repeated by special request in April 2004 for the Western Cape Higher Education Libraries Interest Group.

Findings from the LIASA workshop

The whole day pre-conference workshop in 2003 attracted seventy delegates, mainly from South African University and Technikon libraries and a few from school and public libraries. The programme consisted of three presentations, followed by a number of participative group work sessions and a final report-back. The formal presentations were on information literacy standards, policies and practice; information literacy curriculum design; and assessment strategies for information literacy interventions.

Participants were assigned to seven groups and were given several tasks throughout the day. The first was to design an information literacy curriculum. Somewhat surprisingly, four out of the seven groups decided to design a "generic" curriculum rather than one that would be integrated into an academic course of study. Motivation for doing so seems to have been the expressed need to deal with large numbers of first year students from very different backgrounds, who follow different courses of study. While it was clear from the reported discussions that librarians understood that the ideal position was to work with aca-

demics and to integrate information competencies into the teaching curricula, rather than delivering generic courses, it also became clear that actual liaison with academics still seemed to be patchy.

The groups were asked to specify the number of contact periods their courses would require. Responses indicated that single sessions were not regarded as sufficient and proposals ranged from two to ten sessions. Some of the information curricula that were designed still closely resembled traditional "library instruction" sessions, although there was some evidence of new and original approaches to teaching also emerging. The more traditional curricula comprised of basic library orientation, followed by computer based information instruction sessions. Three groups included basic computer skills as part of their curriculum and two groups included academic writing as a course component. One group entitled their course "The Knowledge Edge". Three groups specified that their courses were to be compulsory for all students.

A further task to the groups specifically concerned the assessment. Groups were asked to decide how they would assess information competencies of students in the course they had designed earlier. The results from this task confirmed that assessment remains a difficult issue. Approaches to assessment varied considerably and suggestions, some of which demonstrated an awareness of student-centred learning, included portfolios of work, self and peer assessments, questionnaires, assignments and games.

The next task was based on the performance outcomes from the ACRL Information Literacy Competency Standards that the workshop leaders had chosen as an exemplar as discussed above. The rationale for this exercise was to engage participants actively with established and accepted standards, to see whether they could be useful to South African practitioners. Afterwards, the participants expressed a general enthusiasm for Standards and all agreed that the ACRL Standards would also be appropriate for South Africa. While several respondents thought that some of the standards were difficult to understand and that simplification of the wording was required, they clearly expressed that they could use them and work with them.

A new sixth standard, taken from the CAUL Standard 6 for Lifelong Learning, was also pre-

sented for participants to consider whether it should be included as a standard for South Africa. Here the consensus was that information is a social responsibility and as such the standard was indeed appropriate, although some groups called for some rewording to reflect the South African situation more closely. Having worked with the standards, participants were now in a position to begin to consider the suitability of these standards for the local situation. The Workshop was very well received and produced lively discussion and appeals for more workshops of this kind. LIASA has subsequently been requested to draft standards based on these considerations.

Where are we now?

At the 2004 LIASA conference in Polokwane, a follow-up questionnaire was distributed among information literacy practitioners in order to track to what extent progress has been made in institutionalising and inculcating information literacy in South African higher education institutions since this investigation began with a small electronic survey to information literacy practitioners in 2001 (De Jager & Nassimbeni 2002, 176–179). The following year, a more substantial survey had been conducted at the LIASA conference (De Jager & Nassimbeni 2003, 111–112). Table 1 summarises these developments.

The first small electronic survey in 2001 represented mostly qualitative responses from 12 institutions, but already demonstrated that librarians were engaging with information literacy activities and that some of their courses were assessed, although they were not necessarily credit-bearing. At that time, there was very little evidence of institutional strategic awareness of the importance of information literacy or generic skills development in spite of the increasing national awareness of the importance of graduate skills as outlined above. In 2002 therefore, the authors wished to establish whether respondents thought librarians should bring about change by lobbying for institutional support for information literacy education initiatives (De Jager & Nassimbeni, 2003, 111). By 2004, 84% (27 out of 32) of respondents could agree that librarians do lobby in this way, and information literacy education is now much more institutionally entrenched as 59% (19 respondents) could state that their institution ex-

Table 1. Summary of information literacy development surveys.

What has changed?	2001	2002	2004
Institution explicitly requires generic skills?	Very little evidence		Yes; ours does: 59%
Strategic awareness of information literacy (e.g. library mission statements)	Few		Yes; ours is: 66%
Librarians lobby for information literacy		They should	Yes, they do: 84%
Information literacy integrated into academic curricula?	Some basic	Should be: 81%	Yes it is: 53%
Information literacy is taught in generic 'standalone' courses	Mainly	Agreed: 66%	Agreed: 56%
Information literacy is the sole responsibility of librarians	Mostly	Should be: 28%	Agreed: 50%*
Information literacy activities a collaboration between librarians & academics	Some	Should be: 94%	Agreed: 75%*
Information literacy Standards (e.g. ACRL, CAUL, Seven Pillars) are used	Not asked	Not asked	We use Standards: 53%
Information literacy courses are assessed	7 yes (out of 12; 58%)	Assessment required: 94%	Agreed: 91%
Information literacy NOT credit bearing	4 yes (33%)		Agreed: 75%
Information literacy IS credit bearing		Should be: 88%	Agreed: 56%

Although it looks contradictory that some respondents could agree that information literacy activities are the sole responsibility of librarians, and also agree that information literacy activities are a result of collaboration between librarians and academics, annotations seemed to indicate that activities were *taught* by librarians only, although academics had some *input* into what had to be taught.

Explicitly required generic graduate skills to be part of programme outcomes. More libraries also seem to have amended their mission statements, so that 66% of respondents (21) could say that their mission statements include references to information literacy.

The second half of both the 2002 and 2004 questionnaires consisted of a list of what are broadly regarded as information literacy topics, and respondents were asked whether or not each of these were taught in their courses. The results, which are summarised in Table 2, give some indication of how information literacy tuition has been developing:

The 2001 survey was not included in Table 2 as it consisted of only 12 mostly qualitative responses. The 2004 questionnaire included a few new questions, and the wording of the statements about the topics taught were in some instances slightly changed, to reflect more closely the information literacy standards with which we were trying to work.

Table 2 makes it clear that the inculcation of what is generally regarded as the 'higher order' information competencies such as selection, comprehension, critical use and communication of information, has increased substantially. It seems

Table 2. Summary of developments in teaching information literacy.

How has teaching changed?	2002	2004
We teach students how to:		
Identify an information need	85%	81%
Select most suitable information	75%	88% †
Define a topic (2002) /	75%	56%
Formulate a research question (2004)		
Distinguish between popular & scholarly publications	*	69%
Distinguish between primary & secondary resources	*	75%
Select most suitable resources	90%	97%
Use Boolean operators	90%	81%
Formulate search strategies for databases	90%	88%
Formulate search strategies for WWW	55%	81% †
Deal with information overload (2002) or with failed search strategies (2004)	30%	69% †
Distinguish between different types of resources	75%	84%
Use resources critically	50%	72% †
Evaluate & compare points of view	*	56%
Organise, use & communicate information	53%	69% †
Quote & cite correctly	70%	84% †
Understand copyright & avoid plagiarism	70%	86% †
Become a lifelong learner	*	72%

* Question not asked in 2002

† Increase of more than 10% between the two surveys.

clear that a need for students to be able to search the worldwide web more effectively intensified over the period in question, as teaching how to search the web increased from 55% to 81% in the period concerned. The responses also show a marked increase in teaching students about issues such as citation and copyright, which have become very much more prominent as students' cutting and pasting from the web proliferates in academic assignments. An increase of nine percentage points in teaching how to distinguish between different types of resources might indicate a greater need to emphasise differences as distinctions between resources such as journal articles, conference proceedings and web pages become ever more blurred on the Internet.

Smaller discrepancies between the two surveys are evident regarding the more traditional 'bibliographic instruction' skills such as identifying information needs (4%), formulating search strategies for databases (2%) and selecting suitable resources (7%). The generally high incidence of teaching these skills probably indicates that they are standard fare in most training suites. The apparent decrease of nine percentage points in the teaching of Boolean operators is interesting and might indicate that the need to teach the use of Boolean logic in searching might decrease as search engines gain ever more popularity.

The big discrepancy in responses to the statement "define the topic" in 2002 and "formulate a research question" in 2004 probably means that the rephrased question was interpreted differently by the two sets of respondents and therefore cannot be directly comparable.

The 2002 statement to "deal with information overload" is not exactly the same as dealing with failed search strategies (2004) either, but in this case information overload may be regarded as one aspect or outcome of a failed search strategy and the increase in responses (from 30% to 69%) does seem to indicate a realisation that students need to be taught how to deal with searches that do not produce anticipated or desired results.

Conclusion

Our findings seem to demonstrate that higher education librarians are moving towards inculcating skills of 'graduateness' in addition to traditional bibliographic skills, thereby accepting

some of the responsibility for meeting the demand of 21st century graduates as expressed by the Council on Higher Education (2001). We have found evidence of an increasing awareness of student-centred assessment and a willingness to work with quality standards. In our most recent survey we also found that collaboration between academics and librarians is becoming more established and the importance of credit-bearing courses realised. While the librarians seem to be most comfortable with the traditional "information skills" component of information literacy education, they are gradually paying attention to the communicative and critical aspects which are closely linked to the generally well-accepted notion of academic literacy. The boundaries between information literacy and other academic literacies will become more porous if the librarians continue to grow in self confidence as teachers, and can measure their contributions to the achievement of this portfolio of skills. It has been shown that there are a number of South African higher education policy initiatives that can be leveraged by academic librarians to accelerate the uptake by teaching colleagues of information literacy education interventions in the curriculum. The shifts observed in the course of the research project represent a platform from which librarians may continue to develop awareness of the policy debate and an ability to participate in the discourse of quality assurance, a critical element shaping higher education today.

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References

- Asmal, K. 2001. Address by the Minister of Education, Professor Kader Asmal, MP in Debate on the National Plan for Higher Education National Assembly, Thursday 5 April 2001. Available at URL: <http://education.pwv.gov.za/content/media/556.asp> [Viewed 28/8/2004]
- Association of College and Research Libraries (ACRL). 2000. *Information literacy standards for higher education*. Chicago: ACRL.
- Badat, S. 2000. *South African higher education at the beginning of the millennium: realities, problems, chal-*

- enges. *Discussion Paper*. Available at URL: <http://education.pwv.gov/che/consultconf/beginning.htm> [Viewed 26/10/2004]
- Brown, S & P. Knight. 1999. *Assessing matters in higher education: choosing and using diverse approaches*. Buckingham: Open University and Society for Research into Higher Education.
- Bundy, A. 2004. Beyond information: the academic library as educational change agent. Paper delivered at the 7th International Bielefeld Conference, February 2004. Available at URL: http://conference.ub.uni-bielefeld.de/proceedings/bundy_rev.pdf [Viewed 19/10/2004]
- Butler, A & S. Hambur. *Graduate skills assessment: what are the results indicating?* 2002. Available at URL: <http://www.aair.org.au/2002Papers/Butler.pdf> [Viewed 10/10/2004]
- Council of Australian University Librarians (CAUL). 2001. *Information literacy standards*. Canberra: CAUL.
- Council on Higher Education. 2004. *South African higher education in the first decade of democracy*. Pretoria: CHE. Available at URL: http://www.che.org.za/documents/d000081/SA_HE_10years_Nov2004.pdf [Viewed 8/12/2004]
- Council on Higher Education. 2003. Final press release. Available at URL: http://che.ac.za/documents/d000043/Press_Release_220703.pdf [Viewed 9/11/2004]
- Council on Higher Education. 2001. The state of higher education in South Africa. 2001. *Annual Report of the Council on Higher Education, 2000/2001*. Available at URL: http://www.che.org.za/documents/d000014/CHE_Annual_Report_2001.pdf [Viewed 13/12/2004]
- Council on Higher Education. Higher Education Quality Committee. 2001. *Founding document*. Pretoria: CHE. Available at URL: http://www.che.org.za/documents/d000002/HEQC_Founding_Document.pdf [Viewed 3/11/2004]
- De Jager, Karin & Mary Nassimbeni. 2003. An exploration of the current status of information literacy tuition in South African tertiary institutions and proposals for curriculum design. *South African journal of libraries and information science* 69(2): 108–114.
- De Jager, Karin & Mary Nassimbeni. 2002. Institutionalising information literacy in tertiary education: lessons learned from South African programs. *Library Trends* 51(2): 167–184.
- Entwistle, N. 1997. Contrasting perspectives on learning. In: Marton, F, Hounsell, D & Entwistle, N eds. *The experience of learning*. 2nd ed. Edinburgh: Scottish Academic Press.
- Huba, M and Freed, J. 2000. *Learner-centred assessment on college campuses*. Boston: Allyn and Bacon
- Jones, J. 2001. *Generic attributes: an agenda for reform or control?* Available at: URL: http://learning.uow.edu.au/LAS2001/selected/jones_2.pdf [Viewed 19/10/2004]
- Nunan, T. 1999. Graduate qualities, employment and mass higher education. Paper presented at the HERDSA Annual International Conference, Melbourne, 12–15 July 1999. Available at URL: <http://www.herdsa.org.au/branches/vic/Cornerstones/pdf/Nunan.PDF> [Viewed 27/10/2004]
- Our universities: backing Australia's future: a policy paper of the dept of education science and training. 2004. Available at URL: http://www.backingaustraliasfuture.gov.au/policy_paper/10.htm [Viewed 27/10/2004]
- Ramsden, P. 1992. *Learning to teach in higher education*. New York: Routledge.
- Reid, I. 2003. Quality education online – new research agendas. *Academic exchange quarterly* 7(1). Available at URL: <http://www.rapidintellect.com/AEQweb/mo2268w03.htm> [Viewed 17/09/2004]
- Standing Conference of National and University Libraries. 1999. *Information skills in higher education*. London: SCONUL.
- UNESCO *World Declaration on higher education for the twenty-first century: vision and action*. 1998. Paris: UNESCO. Available at URL: http://www.unesco.org/education/educprog/wche/declaration_eng.htm [Viewed 1/10/2004]

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