

Information Literacy Strategy Development in Higher Education: an exploratory study.

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Abstract

Information literacy (IL) is recognised internationally as an essential competence for participation in education, employment and society. Communities and organisations need strategies to ensure their members are efficient and effective information users. An investigation of formal IL strategies in UK universities was initiated to examine their content and presentation. The study breaks new ground in undertaking an in-depth qualitative analysis of ten institutional cases, evaluating IL practice from a strategic management perspective and discussing how corporate strategy concepts and models could increase effectiveness in this emerging area of professional practice. Its insights and suggestions contribute to the development of IL and related strategies at both conceptual and practical levels. The study found that all the strategies aimed to integrate IL into subject curricula by engaging stakeholders in collaborative partnerships. Common approaches included the adoption of professional standards and development of new methods of delivery, including e-learning. The majority of strategies covered IL of academic and other staff in addition to students. Most strategy documents provided extensive contextualisation, demonstrating the relevance of IL to corporate concerns; many included case studies of good practice. Few documents conformed to strategic planning norms: none provided mission or vision statements and several contained poorly-specified objectives. The study concluded that corporate strategy tools, such as stakeholder mapping, portfolio analysis and customisation models, could strengthen IL strategies. Future research could test the use of such analytical techniques to advance information literacy strategies in higher education and other sectors.

Keywords: Higher education, Information literacy, Information management, Information strategy, Strategic planning.

1 Introduction

The ability to find, assess and use information effectively is now widely recognised as an essential competence for effective participation in contemporary society. The concept of information literacy (IL) has been promoted by library and information professionals for several decades. The first use of the term is credited to Paul Zurkowski, President of the Information Industry Association, who submitted a proposal for a national programme to achieve universal IL to the (US) National Commission on Libraries and Information Science in 1974, asserting that

‘People trained in the application of information resources to their work can be called information literates. They have learned techniques and skills for utilizing

the wide range of information tools as well as primary sources in molding information-solutions to their problems' (Eisenberg et al., 2004, p. 3).

Librarians around the world have championed the development of IL through their professional associations. The definition of the American Library Association (ALA) is widely cited:

'To be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information' (ALA, 1989, p. 1).

Despite Zurkowski's emphasis on the importance of IL in the workplace, the main arena for subsequent developments has been formal education. Rader (2002) estimates that 60 per cent of the annual published output on IL relates to higher education, with another 20 per cent concerned with schools. The school sector is particularly known for the many models of information literacy developed to support teaching and learning (Loertscher & Wools, 2002). In higher education, librarians have developed standards, frameworks and models to promote the concept and its application at national and local levels (ACRL, 2000; Bundy, 2004; SCONUL, 1999). Eisenberg et al. (2004, p. 139) identify a trend for higher education institutions to undertake strategic planning for IL to determine information competencies, incorporate them in curricula and specify them a graduation requirement. Johnston and Webber (2003) go further and advocate 'strategic rethinking' to realise their vision of an 'information literate university', in which all members of the institution – administrators, academics and researchers, as well as students – become information literate.

Alongside IL activity in education, there is evidence of growing interest and concern elsewhere. A report from the OECD (1996, p. 13) avoids the term, but flags the need for such competencies thus,

'As access to information becomes easier and less expensive, the skills and competencies relating to the selection and efficient use of information become more crucial'.

Mutch (1997) sees IL as a vital ability for business managers and Kirk (2004) explains its importance at senior management level. Bruce (1999) argues its relevance to professional practice in all sectors, connecting this with current conceptions of lifelong learning and the 'learning organisation'. Empirical evidence confirms the existence of significant development needs in diverse settings, ranging from pharmaceutical researchers (Bawden et al., 2000) and company auditors (Cheuk, 2000) to government statisticians (Cliftlands, 2005) and fire fighters (Lloyd, 2005). Commentators have underlined the relevance of IL in the contemporary business environment by linking it explicitly with knowledge management (Abell & Oxbrow, 2001; Gasteen & O'Sullivan, 2000; Koenig, 2003). Gasteen and O'Sullivan's (2000) profile of an 'information literate law firm' makes the commercial case for a strategic approach to IL development, showing how an IL strategy needs to be integrated with other strategies.

Further impetus to the IL movement has come from UNESCO's sponsorship of two seminal international meetings of experts in 2003 and 2005, which issued important statements on IL, known respectively as the Prague Declaration and Alexandria Proclamation. These confirmed IL's critical role in personal, economic, social and cultural development and asserted the need

for governments and others to support ‘vigorous investment in information literacy and lifelong learning strategies’ to create public value and enable the development of the Information Society (Horton 2006, p. 266).

Until recently, IL strategies have generally been subsumed in other institutional strategies, notably those of library and information services: IL often features in information service mission, vision and values statements (Corrall, 2000); information skills training or library ‘reader instruction’ has also featured in institutional information strategies, especially in the context of networked access to electronic information resources (Allen & Wilson, 1996, p. 248). IL may also be included in institutional learning and teaching strategies, which often cover the development of students’ transferable skills (Gibbs et al., 2000). However, in parallel with these developments, the concept of an institutional-level strategy or strategic plan for IL is gaining currency, particularly in Australia and the US (Bruce, 1994; George et al., 2001; Burkhardt et al., 2005).

The purpose of this paper is to examine this phenomenon in the context of higher education, by assessing the quality of current IL strategy documentation and exploring the application of corporate strategy concepts and techniques to this emergent field of professional practice. It aims to advance knowledge and understanding of IL strategy development in several ways: first, by moving beyond previous self-reported single-case accounts to an independent comparative multi-case study; secondly, by introducing a different perspective on IL strategy, examining its manifestation in documentary form through the lens of strategic management; and thirdly, by then proposing models and specific techniques from the corporate strategy arena that could increase the effectiveness of IL strategies.

Although the particular focus is UK universities, the findings arguably are applicable to other countries and different sectors. The intention is to help those engaged in or considering the formulation of IL strategies, by providing insights into current practice, points of critique and suggestions for enhancement. A further intent is to stimulate thinking among both practitioners and researchers about the place of IL in organisational strategy frameworks and the relevance and benefits to other information-related strategies of the approaches discussed. The paper reviews the literature on IL, corporate strategy and strategic planning in academic institutions, concentrating on strategic developments in IL and key themes in the strategy literature. It next analyses the contents of a sample of contemporary IL strategy documents and then discusses the results in the context of the literature on strategic management.

2 Literature review

2.1 Information literacy

The challenge of integrating IL into the educational curriculum is a recurring theme; ‘embed’ is also used in this context, although some commentators differentiate these concepts. Hepworth (2000) identifies two dimensions of curricular integration, which can be pursued together or separately: integration into the subject domain and into the formal (credit-bearing) curriculum. Recent literature shows how integration efforts have been pursued with varying success at module, programme and institutional levels, through discipline-based and generic routes (Jackson & Mogg, 2005; Lindstrom & Shonrock, 2006; Stubbings & Franklin, 2006). Hart et al. (2003, p. 434) argue that even generic capabilities ‘are most effectively developed within a disciplinary context’, but MacDonald et al. (2000, p. 247) suggest both approaches

are viable, as long as IL teaching is ‘strategically linked to particular general education courses and to core courses in each discipline’.

Booth and Fabian (2002, p. 139) similarly advocate a ‘strategic, forward-looking, entrepreneurial approach’ and stress the need for a broad view of library partnerships, to include campus administrators and academic departmental leaders, as well as teaching faculty. Doskatsch (2003) also emphasises the need to ‘think and act strategically’, by relating library activities to the institution’s strategic plan and educational mission, and seeking partnerships with those who have influence. Partnerships and collaboration are recurring themes, particularly the crucial faculty-librarian relationship (Bruce, 2001; Lindstrom & Shonrock, 2006). The pedagogical role of librarians and related professional development needs is another concern (Peacock, 2001; Powis, 2004); some information professionals take credit-bearing courses alongside lecturers, but others are only offered modified versions of such programmes (Smart, 2005; Stubbings & Franklin, 2006).

The need to address integration at a more strategic, whole-institution level is reflected in the development of formal IL strategies and plans. Significant examples include the landmark *Information literacy blueprint* for Griffith University, the institution-wide strategy presented as ‘a curriculum-based initiative’ at the University of South Australia and the plan developed by librarians at the University of Rhode Island, who then published a practical guide on the subject (Bruce, 1994; George et al., 2001; MacDonald et al., 2000; Burkhardt et al., 2005). British examples have emerged more recently (Boden & Holloway, 2005; Howard & Newton, 2005). Alternative approaches with similar intent, found in the UK and Australia, include IL frameworks and policies (Everest et al., 2005; Hart et al., 2003; Jackson & Mogg, 2005). At one institution, a draft IL strategy evolved from a discrete document to become part of a related student skills strategy; library staff ‘found it politically expedient to enshrine IL in an existing strategy’ as the institution was perceived to be suffering from too many strategies (Smart 2005, p. 30).

Practitioners emphasise the importance of embedding strategies institutionally, by linking them to an institutional mission or teaching and learning strategy and obtaining endorsement from teaching and learning committees, including faculty and school committees (Burkhardt et al., 2005; Everest et al., 2005; George et al., 2001; Hart et al., 2003; Howard & Newton, 2005; Jackson & Mogg, 2005). Library task forces, cross-service working parties and university-wide advisory groups have been used to plan and implement strategic developments (George et al., 2001; Hart et al., 2003; MacDonald et al., 2000). Several libraries have researched developments at other institutions and some have sought permission to use others’ materials as a starting point for their own frameworks (Boden & Holloway, 2005; MacDonald et al., 2000; Stubbings & Franklin, 2006). Use of specific planning techniques is seldom mentioned; notable exceptions are Warren et al.’s (2001) description of using market segmentation to plan strategic initiatives in library instruction and Lorenzen’s (2006) brief discussion of the applicability of tools such as vision, mission, SWOT analysis and objective-setting. However, the Institute for Information Literacy’s Best Practices Initiative lists mission, goals, objectives and environmental scans among characteristics representing best practice in IL planning (ACRL, 2003).

2.2 Corporate strategy

The literature on corporate strategy is extensive; its antecedents can be traced back to writings on long-range planning in the 1950s. Corral (2000, Chpt. 1) summarises the evolution of strategic management and outlines the perspectives represented by different schools of thinking. Further discussion of the ideas and theories of influential thinkers can be found in strategy textbooks containing case studies and readings from the primary literature (e.g. De Wit & Meyer, 2005; Johnson et al., 2005; Lynch, 2006). Successive editions show how the theory and practice of corporate strategy has evolved over the last two decades: established concepts and techniques continue to be recommended and used alongside new or refined methods. Examples of standard tools include mission and vision statements, environmental scans, SWOT and stakeholder analysis, scenario planning and portfolio matrices; Ansoff's 1957 growth vector matrix (also known as the product-market matrix) remains a popular model for identifying alternative strategies for firms wanting to grow (Fleisher & Bensoussan, 2003; Johnson et al., 2005; Lynch, 2006). The extent to which outputs from use of such tools are included in strategy documents is rarely discussed in the corporate strategy literature, but Bryson (2004, p. 208) offers guidance for non-profit organisations on key content elements, including mission, vision, values, situation analysis (i.e the outcome of an environmental scan), goals, strategies and implementation/action plans.

The range of analytical tools and techniques is extensive and growing (Ambrosini, 1998; Fleisher & Bensoussan, 2003). Thus stakeholder theory, which originated in the 1960s at the Stanford Research Institute, has generated numerous models for characterising key constituencies (De Wit & Meyer, 2005; Johnson et al., 2005; Lynch, 2006); Bryson (2004) elaborates 15 stakeholder analysis techniques, including power-interest diagrams and various tabulations of attributes and influences. Corporate strategists are increasingly emphasising customer-driven strategies and utilising concepts drawn from the marketing discipline, such as market segmentation, customer profiling and mass customisation, which is seen as the ultimate realisation of niche marketing, accelerated by the technological revolution (Lynch, 2006; Fleisher & Bensoussan, 2003). The most significant strategic model introduced in recent years is the Balanced Business Scorecard and related Strategy Map developed by Kaplan and Norton (1992; 2000), which has been widely adopted in the public sector and higher education, in addition to the business world (Bryson, 2004; Shapiro & Nunez, 2001). As the name indicates, this model encourages holistic thinking by requiring goal-setting in four areas, including customer service and organisational learning, to avoid excessive focus on operational and financial data. Its rationale echoes that of the McKinsey 7S Framework, promoted in the 1980s, which similarly emphasises consideration of both 'hard' and 'soft' aspects of an organisation when developing and evaluating strategy (Lynch, 2006).

2.3 Academic planning

Higher education strategy literature is distributed across the education and management domains. Publications on institutional strategic planning date from the 1970s and are characterised by their exhortatory nature, with limited emphasis on theory or empirical research (Holdaway & Meekison, 1990; Dooris et al., 2002). Contributions are typically case studies in the form of reflective or descriptive accounts (Holdaway & Meekison, 1990; Shapiro & Nunez, 2001). Several authors discuss the application of portfolio matrices and other business strategy tools to the sector, using their own institutions as illustrative cases (Doyle & Lynch, 1979; Foster, 1983). Some argue that such tools need to be adapted to the different culture and values of the academy (Kotler & Murphy, 1981; Groves et al., 1997).

Many institutions are using Kaplan and Norton's (1992) balanced scorecard as a strategic measurement system, but sometimes in a form bearing little resemblance to the original model (Shapiro & Nunez, 2001). Dooris et al. (2002) suggest that rational-deductive planning models are being tempered by cultural and political perspectives, accommodating different stakeholder interests. The political dimension of academic planning is a recurring theme (Fuller, 1976; Holdaway & Meekison, 1990; Groves et al., 1997).

2.4 Library planning

Library strategy literature similarly dates from the 1970s, when the US Association of Research Libraries (ARL) issued its first publication to support academic library planning (Webster, 1971). Textbooks and practical guides appeared in the following decades, including books aimed specifically at academic libraries (Biddle, 1992; Hayes, 1993). Molz (1990) analyses and critiques the early decades of library planning, identifying heavy reliance on management science and business models, but little apparent influence from the literature of organisation theory and policy science. Most of the literature on academic library planning consists of articles reflecting on processes used at individual institutions, typically highlighting distinctive features, particular issues or specific dimensions of the process used. Reviews by Birdsall (1997) and Corral (2003) identify key themes, including involvement of library staff and other stakeholders, institutional and political dimensions of library planning and the use of business planning tools, such as scenarios. Progress from strategic planning to strategic management is evident in the growing number of libraries adopting Kaplan and Norton's (1992) scorecard system; proponents claim the framework has helped libraries develop broader more coherent strategies and achieve better linkage with institutional plans (Cribb & Hogan, 2003; Pienaar & Penzhorn, 2000).

There have been relatively few formal surveys or multi-case studies. ARL has published the results of periodic surveys of planning practices as short reports accompanying examples of planning documentation (Clement, 1995). Marco (1996a; 1996b) draws on statements from a variety of libraries in his analysis of concepts and terms used in library plans, offering points of critique in relation to mission, goals, objectives, strategies and outcomes. He gives examples of poorly formed goals ('feeble intentions') and claims most plans are weak in specifying strategies and actions to achieve their objectives. Pacios (2004) conducted a form and content analysis of 65 public and university library plans from the US, UK and Australia, finding 32 different content elements (plan headlines or items) in her university sample and identifying 11 elements as a basic model. Items commonly found in library planning documents include an environmental scan, mission, vision, values, goals, strategies and actions (Corral, 2003; Marco, 1996b; Pacios, 2004), which is similar to Bryson's (2004) list.

Pacios (2004) points out that scrutiny of planning documents can provide insights into planning processes and levels of management know-how. Her study broke new ground in employing a Google search for institutional website documents in the public domain to survey library planning practices. McNicol (2005) also used this approach to review strategy documents from 12 UK higher education institutions prior to an interview-based survey of library planning processes. She found varying practice in the alignment of library strategies with institutional goals and outcomes, with highly formalised links and significant synergies in some cases, but limited interaction with few visible connections in others.

3 Research methods

This study had three objectives:

- to examine the substantive content of IL strategy documents, including the issues identified and goals articulated;
- to consider the formal presentation of IL strategy documents, including their main sections and content elements;
- to explore the application of established strategic management concepts and tools to this emerging field of practice.

Following Pacios (2004), a Google search for IL strategy documents was conducted (restricted to the ac.uk domain), which identified five examples. An enquiry to the LIS-INFOLITERACY discussion list generated substantive responses from 12 institutions, which resulted in three additional documents. (Some documents offered were too broad and others duplicated those already identified.) The websites of all UK universities were then searched individually, using keyword searches and also browsing categories of web pages where relevant documents had previously been found (e.g. learning and teaching websites, library and information service pages). This yielded two further documents, which were not formal strategies, but discussion papers fulfilling similar functions, providing a total sample of 12 documents from 10 institutions.

Tables were used to record, code and categorise the data, aiming to capture the format, structure, provenance, status, content elements and key themes of the documents. The results were then reviewed and compared with findings from the literature. Table 1 summarises key dimensions of the documents examined. The designations 'Research' and 'Teaching' reflect the classification of UK universities into those acquiring the title before and after 1992, the former being perceived as more research-oriented.

4. Analysis

4.1 Strategic themes

Despite variation in the purpose, nature and length of the documents, there were strong commonalities in the objectives and strategies presented. Table 2 shows the incidence of key themes across the sample.

All documents emphasised integrating IL with subject studies by embedding it in curricula and assessments; Uni H also specified integration of IL with information technology skills. All stressed the need for library/information services to work closely with academic staff. Additional partners were identified in 7 cases, mainly staff/educational development and academic services, but also the Student Union (Uni G) and the Registry (Uni I), in relation to progressing integration at the *policy* level. Advocacy/awareness raising was also prominent, specified as the first objective in 2 cases and associated with 'an effective marketing strategy' in another. Uni B stressed marketing at programme and institutional levels, giving library senior management the task of promoting IL and the library's role in teaching 'at the most senior level in the University'. The extent of activity envisaged was confirmed in its action plan,

‘We need to have a top-down, grass-roots and inside-out approach. Need to have clear overall...policy and effective liaison at level of individuals’.

Other documents recognised this need implicitly, with 4 outlining strategy implementation roles for school/departmental teaching and learning committees, including development of school IL strategies (Uni C) and discussing IL at least annually (Uni J).

Adoption of recognised IL standards was another key theme. Seven specified the SCONUL (1999) framework, with 4 translating this into learning outcomes at up to five different levels, 2 citing Godwin’s (2003) information skills benchmarks as their model; one used the ACRL (2000) standards. E-learning developments featured prominently, typically as online tutorials in a virtual learning environment, often proposing customisation of resources for different disciplinary contexts; this was generally part of a broader aim to develop new methods of delivery or continue improving provision. Five documents highlighted the professional development of staff engaged in IL education, mentioning both teaching skills and educational theory: 2 included purpose-designed Library staff development programmes in their plans, 2 mentioned participation in University teaching and learning development activities, and one specified a procedural change to bring the library’s teaching activities into the university’s quality assurance system. Uni G was alone in including a high quality teaching and training environment among its objectives.

4.2 Contextualisation

All the documents contained a substantial section (typically around one-third of their length) explaining the context of their proposals, usually sub-divided into external evidence of the need for IL and institutional support drawn from documentary and other sources. Five had substantial sections defining or describing IL, suggesting awareness raising as an important function of documentation, irrespective of whether this was an explicit aim of the strategy.

The main messages about the external environment centred on challenges presented by the growth in digital information (including student plagiarism) and employer demands for skilled workers; one institution mentioned requirements of evidence-based practice in specific professions. External evidence commonly cited included official reports, Quality Assurance Agency subject benchmark statements, findings from government-funded studies, professional standards for IL and references to other institutions’ strategies. Five documents referenced 4 or more external sources, with one citing 9 items. Several cited research findings which foreshadowed approaches recommended later in their document.

The ALA (1989) definition of IL was the most widely cited, but the SCONUL (1999) ‘headline skills’ model was most often used to elaborate the concept. Most documents emphasised the importance of IL in both formal and lifelong learning and some also mentioned its relevance to employment. Two research-led institutions put more emphasis on IL’s value as a research skill: Uni J described the focus of its IL teaching as ‘empowering students to undertake their own research’ and Uni E asserted that ‘research skills are now being taught at a higher level and are called Information Literacy’. Uni G referred to ‘research literacy’ as one aspect of a multi-faceted construct incorporating several different literacies.

The main internal reference points were existing strategies and institutional concerns. Eight documents quoted their institution's learning and teaching strategy. Other sources included mission statements, corporate aims, employability/skills documents, information strategies and library/information service plans; two mentioned widening participation agenda. Several documents related IL to specific educational developments within their institutions, such as module/programme frameworks and personal development plans. Stakeholder concerns were represented by quotes from external examiner reports and feedback from quality reviews and user surveys. Additional stakeholder support was demonstrated by reference to the involvement of academic (and other) staff in strategy development. The majority also included summaries of existing IL provision and 4 added appendices of 'good practice' case studies, again indicating a perceived need to raise awareness of relevance and benefits.

4.3 Strategic focus

While there were many similarities in aims and arguments, there were a few distinctive points and some significant differences in emphasis. None of the documents included an explicit overarching IL purpose or mission statement, but most contained one or two high-level aims or equivalent, which in effect fulfilled this role. Three strategies demonstrated an *inclusive* remit up-front, using phrases such as 'all members of the university' and 'the X university community'. Many of the rest conveyed an ambiguous message, stating initially that the strategy was intended to enable all students to become information literate, but later including explicit provision for others (mainly academics/researchers, but sometimes staff in general). Some variations were apparent in the range of learning and teaching modes specified, for example 3 cases explicitly acknowledged the less formal skills development that takes place at enquiry desks and other library settings; Uni B embraced this as one of its 'key principles':

'All staff with contact with readers will be trained to be aware of the importance of developing information skills in readers when they provide assistance.'

There were three instances of practitioners *positioning* their activities distinctively in relation to the external community: Uni H specified external review of its programme, 'to ensure the highest quality standards'; Uni I aspired 'to be regarded a centre of excellence for information literacy on the national and international scene'; and Uni D aimed 'to develop a research profile' in IL.

4.4 Organisation

Many of the documents analysed were not formally described as strategies and/or were designed as committee papers. Six documents set out formal strategic aims and/or objectives and another 2 contained sets of recommendations of similar scope. Four supported their aims/objectives with paragraphs explaining their rationale and one with more specific actions (Uni D). Uni B and Uni J had action plans with responsibilities and timescales. Irrespective of their labels, most of the aim/objective statements were a mixture of role, direction and result statements, with many pitched at a level covering some movement or development, but relatively few defining specific targets. The most specific and potentially measurable statements related to adopting standards or competencies, whereas statements about working with others or improving the quality of provision were often expressed in more general terms.

Another striking feature was the manner in which aims/objectives were presented and distributed through the document. Uni E offered two different (but compatible) aims, in its introduction and in its review of past activities: ‘to promote a coordinated approach to IL teaching, in support of the Teaching and Learning Strategy’ [p.1] and ‘to ensure all students have equal access to quality IL teaching, and to work with academic staff to embed this teaching within the curriculum’ [p.5]. Uni F set out 4 headline aims as formal proposals, which included increasing the amount of IL training in the curriculum, but later stated an ‘ultimate aim...to deliver compulsory IL training to all UG and taught PG students’ in a subsection on new methods of delivery, thus introducing a bolder version of the previous aim in a different section. Some documents also expressed their objectives tentatively (‘the Library would like to...’), but others seemed more confident (‘We will...’).

Seven strategy documents were in the public domain, but their website locations varied. Four were located in an IL section of the library website, while the other 3 were on university learning and teaching websites (with a link from an information service site in one case). At Uni F, there were links in both directions between the University Learning & Teaching Support website and the Library IL web pages, but the IL strategy was not mentioned on the Learning & Teaching pages and its case studies were not included in the cases section of this site; the existence of the IL strategy only became apparent after clicking through several layers of Library web pages.

5 Discussion

5.1 Strategy content

The key themes identified in the documents are consistent with published literature, particularly embedding IL in curricula and collaborating with academics. However, it is notable that 7 strategies adopted Booth and Fabian’s (2002) broad view of partnerships, by including administrative and academic service colleagues and (in one case) the student union. The majority proposed adoption of formal standards as a means of embedding IL, supporting another common goal to co-ordinate provision, which was exemplified by references to the need for more consistency and equity of access to IL.

The emergent nature of institution-wide IL activity was shown by the emphasis on marketing and advocacy, which also feature prominently in the literature (Burkhardt et al., 2005; Stubbings & Frankin, 2006). However, some of the client groups targeted here, notably academic and other staff, have received less attention in the literature. This suggests that the process of formalising an institutional strategy may encourage practitioners to take a more holistic view of their activity and to review its purpose and scope. The UK Joint Information Systems Committee has promoted ‘i-skills’ development for all staff in tertiary education, after identifying a lack of strategy in this area (Mackenzie, 2005), but the influence of this is unclear as only one document explicitly mentioned ‘i-skills’. This broader staff focus might lead to future iterations of IL strategies containing more explicit and extensive commitments to helping all university members become information literate and even to more ambitious goals in line with Johnston and Webber’s (2003) vision of an information literate university.

The development of information professionals as teachers and learning facilitators is another key theme in the literature. This was identified as a strategic issue requiring specific action in 5 cases, as shown in Table 2 by the ticks against ‘Develop LIS staff’; it is interesting that 4 of

the 5 examples here fall within the *research-oriented* category. However, it was evident that the other institutions also recognised the pedagogical dimension of their activities, as all the strategies acknowledged the importance of specifying learning outcomes, with 6 reproducing these in their documentation (see Table 3). The absence of explicit statements about developing teaching competencies of IL practitioners in some cases should not necessarily be interpreted as a failure to address such needs; this may simply arise from the nature of the documents and these needs may be covered in other documents not examined for this study.

5.2 Strategy presentation

Although 7 documents were labelled as strategies, the majority contained few of the content elements identified by Bryson (2004) and the library literature, but included other items and characteristics distinguishing their approach from typical library strategies. Table 3 shows the prevalence of key features across the sample, in terms of the type of content represented.

Most documents followed accepted practice in providing commentary on the external and institutional environment. Detailed explanations and illustrations of IL and extensive referencing of government publications and professional literature were distinctive features in comparison with other academic library strategy documents: Pacios (2004) found references in only 12.5 per cent of plans. Another striking feature was the quoting or citing of institutional strategies and stakeholder opinion (including external assessors and student learners) as evidence of strategic issues, effectively relating and aligning IL to institutional goals (Dorskatsch, 2003; McNicol, 2005). Positioning of 3 IL strategies on institutional teaching and learning websites reinforced this alignment.

In contrast, there were few of the elements typically at the centre of strategy documents, such as a mission, vision, goals and outcomes. (Uni D came closest to strategy norms, with four specific objectives, each supported by a rationale and activities.) A failure to differentiate between aims/objectives at the level of ongoing policy (e.g. 'Work with other agencies...', 'Provide an effective...environment' or 'Continually improve library training...') and those representing significant, specific developments (e.g. 'Establish information literacy attributes' or 'Develop a diagnostic tool') further diluted their focus. Thus 'feeble intentions' and 'continuation' goals (Marco, 1996a, pp. 21-22) risked undermining other well-formed goals, which represented the key result areas for the period. The value and impact of IL strategies could be improved by clarifying where different intentions fit in a 'hierarchy of objectives' and adopting a more coherent framework to distinguish continuing functions from programme goals and project deliverables (Corrall, 2000, pp. 76-79).

The universal absence of mission and vision statements again contrasts with customary professional practice: Pacios (2004) found missions in 75 per cent and visions in 53 per cent of documents surveyed, the ACRL (2003) guidelines include a mission and Burkhardt et al. (2005, p. 21) discuss its place in an IL plan, suggesting reference to both institutional and library missions, reinforcing previous messages about strategic alignment. A mission typically specifies the products and services of an enterprise, along with its markets and customers, as well as reflecting the concerns and values of organisation members (Peeke, 1994). Articulating a mission for IL activities could be a useful means of dealing with the apparent ambiguity surrounding the scope of some programmes.

Accompanying the mission with a vision of success could help to convey the added value of an IL programme. Bryson (2004, pp. 224-237) identifies an important motivational role for vision statements in strategy implementation, in helping people understand why things need to be done, what is expected of them and how they fit into the organisation's big picture. Stakeholders might find a positive picture of appropriate information behaviour an inspiring counterpart to the deficit model which seems to underpin some IL documents. This would go beyond sets of learning outcomes to a 'vivid description' (Collins & Porras, 1991), providing a clear, coherent and compelling image of information literate people in action. Ideally, such a vision would be inclusive in its portrayal of the whole organisation working well in an information-rich environment, illustrating how different members could contribute to and benefit from an information literate university in their various capacities.

5.3 Strategy tools

Strategic management concepts and techniques could similarly inform other aspects of strategy development, such as environmental appraisal, including stakeholder relations; programme/portfolio development; and supporting/enabling strategies.

5.3.1 Stakeholder relations

The evident importance of external influences, internal issues and advocacy activities suggests a role for stakeholder analysis tools in defining and managing critical relationships. Practitioners could use a Power-Interest Grid to evaluate key influences, understand the political context of activities and devise workable strategies (Bryson, 2004; Freeman & Reed, 1998; Scholes, 1998). Tabulating the interests, demands, impact, importance, strengths and weaknesses of stakeholders would be a preparatory step (Fleisher & Bensoussan, 2003, p. 303). Mapping the linkages between stakeholders, in terms of their influences on each other and/or interests in particular issues could provide additional insights (Bryson, 2004; Fleisher & Bensoussan, 2003).

5.3.2 Portfolio development

The multiplicity of potential recipients of IL interventions and frequent reference to developing new or improved offerings suggest a role for portfolio analysis tools in evaluating and prioritising IL activities. Practitioners could use Ansoff's Growth Vector Matrix to identify strategic options in relation to present and new markets and products; the expanded nine-box version would be particularly suitable, as it differentiates new and extended/related markets and products or services (Fleisher & Bensoussan, 2003, p. 336). Segmentation of potential markets into meaningful customer groups with distinct, similar characteristics, wants and needs should be part of this exercise: university libraries have proved the utility of segmentation in tailoring IL marketing plans and service offerings to new audiences (Warren et al., 2001). Customisation strategies could be used to tailor provision to individual needs; Gilmore and Pine's (1997) matrix of adaptive, cosmetic, transparent and collaborative strategies could help IL strategists consider different approaches to customisation.

5.3.3 Strategic enablers

Primary strategies for service innovation or enhancement generally have implications for organisational development, which need to be reflected in secondary supporting or enabling

strategies, for areas such as staff development, learning environments, etc. Several models could be used to incorporate a rounded, balanced perspective into IL strategies. The Balanced Scorecard encourages strategists to define goals and performance measures in four areas reflecting different perspectives on the overall strategy with identifiable cause-and-effect relationships:

‘Briefly summarized, balanced scorecards tell you the knowledge, skills, and systems that your employees will need (their learning and growth) to innovate and build the right strategic capabilities and efficiencies (internal processes) that deliver specific value to the market (the customers), which will eventually lead to higher shareholder value (the financials).’ (Kaplan & Norton, 2000, p. 169)

The McKinsey 7S Framework (Pascale & Athos, 1981; Peters & Waterman, 1982) takes a similarly holistic view of the organisation, emphasising the interrelationships between seven connected aspects of corporate strategy:

‘Fundamentally, the framework makes the point that effective strategy is more than individual subjects such as strategy development or organisational change – it is the relationship between strategy, structure and systems, coupled with skills, style, staff and superordinate goals.’ (Lynch, 2006, p. 792)

The balanced scorecard is increasingly being used in universities as a strategic planning model and there could therefore be advantages in its adoption in IL strategy (Cribb & Hogan, 2003). However, the 7S is arguably a simpler model, but more comprehensive, and particularly relevant to current IL strategy concerns: it encourages strategists to consider both the staffing resource needed for IL support (e.g. numbers and categories of staff) and skills development needs, as well as covering issues such as organisational structure and style (culture) more explicitly. It has been criticised as weak on customer focus, but other tools cover that area (e.g. those discussed in the previous section).

6 Conclusions

IL is an essential competence for the information society. Its contribution in formal education is widely recognised, but it is now also acknowledged as a critical enabler of personal, economic, social and cultural development, and a vital ability for managers and workers in contemporary information-rich organisations. IL practitioners are responding to environmental changes by formalising policies and strategies to embed IL institutionally, forging strategic alliances with key stakeholders in this process. The present study investigated the development of IL strategies in higher education by examining the content and presentation of strategy documentation from 10 UK universities and exploring the application of corporate strategy concepts and techniques to this emerging field.

The results showed variety in the format and styles of documentation, but consistency in the objectives and strategies represented, which reflected themes in the literature. All aimed to embed IL into disciplinary activity, working collaboratively to achieve this. Almost all planned to develop e-learning resources alongside traditional IL interventions and most also proposed adoption of professional standards to improve consistency, seven proposing the SCONUL (1999) 7 Pillars model as a framework.

Significant findings included the broad nature of partnering envisaged (in most cases with other academic and administrative services, as well as academic staff) and similar breadth in audiences for IL initiatives (in many cases including academic and other staff, in addition to students). IL market development has received less attention in the literature, but could be connected with a recent UK initiative to develop 'i-skills' among all tertiary education staff (Mackenzie, 2005). All ten institutions reflected the educational dimension of their IL activities in references to IL learning outcomes and five explicitly recognised the strategic importance of IL practitioners being given the opportunity to develop teaching skills and pedagogical knowledge, specifying a range of approaches to achieving this, including participation in institutional programmes for teaching staff and development of tailored programmes for library staff.

Despite the history of strategic planning in academic libraries, IL strategies contained few of the elements normally found in strategy documents, but exhibited some distinctive features reflecting the present status of IL. Most documents included sections on the environmental context which were generally much fuller and more extensively referenced than in other library plans. The majority also defined and/or explained the concept of IL, often appending extra material, such as IL case studies and learning outcomes, indicating that awareness raising was an important concern, even when not articulated as an objective. Formal articulation of objectives was often weak, with a confusing mix of policy-oriented role or high-level direction statements alongside more specific measurable results statements, whose impact was frequently diluted by unfortunate juxtaposition and structural incoherence. This could be remedied by following the basic hierarchical model of a mission, vision, goals and actions, which should also resolve ambiguities over the audiences covered by strategies. Several more specialised strategic analysis tools could also be used to support and enhance stakeholder relationships, portfolio development and marketing activities.

One of the most important findings was the revelation that many strategists aspire to reach out beyond their traditional student constituency to help all members of their organisations become information literate, in line with Johnston and Webber's (2003) vision of the Information Literate University. However, in many cases, inconsistencies in presentation and poor articulation of goals resulted in ambitious plans not coming across as such. It has been proposed above and in previous sections that several models and tools commonly used in strategic management could productively and beneficially be applied to different aspects of IL strategy formulation and development, but arguably the most important change in practice suggested by this investigation is the adoption or creation of an overarching framework to ensure IL strategies are not only externally aligned and intellectually sound, but also internally consistent and structurally coherent.

Such a framework could be based on one or more of the models used in the private and public sectors, including those used in higher education institutions and information service organisations, although some tailoring might be needed to accommodate some of the distinctive features of IL strategies identified. It would incorporate specific tools and techniques (such as those proposed above), but crucially would also show how different elements and particular aspects of strategies related to each other and in addition indicate areas of critical importance requiring special attention. An articulated framework of this kind could help IL strategists (particularly those with limited experience of strategy and planning), to avoid the weaknesses identified here, extend and focus their thinking, and maximise the effectiveness of their strategising; the framework could also help IL practitioners, information service managers and others to evaluate the fitness for purpose of IL strategies.

Further research is needed to review existing strategy models, tools and techniques and assess their suitability for IL strategy development in the light of these findings; selection of potentially suitable candidates could be followed by action research to test their feasibility and utility in formulating, developing and implementing IL strategies in different contexts. The present study was limited (by time and resource constraints) to analysis of strategy practice as represented in institutional documentation; its focus was thus on strategy *content*, though it also touched on strategy *context*. In this respect, it followed most strategy research which tends to focus on one, or at most two, strategy dimensions (De Wit & Meyer, 2005, p. 6). However, the *process* of developing – and enacting – strategy is another key dimension, which should be considered alongside the other two, as it is hugely influential and often problematic (De Wit & Meyer, 2005; Lynch, 2006). As anticipated by Pacios (2004), some indications of strategy processes could be inferred from references to involvement of academic and other staff in the documents examined, but it would be particularly valuable to conduct further research of a more holistic nature which included this critical dimension, to explore the interactions of process, context and content and their effects on strategy quality.

Other areas suggested for future research include the investigation of relationships between IL strategies and other organisational strategies, including the extent to which IL missions and goals are reflected in other documents; and comparative studies of IL strategy development in different sectors, such as further education colleges, government agencies, law firms and pharmaceutical companies.

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Biography

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