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# General Introduction to the Role of the Library for University Education

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## INTRODUCTION

Our society is undergoing a process of rapid change, moving toward what is called the information society, the knowledge society, the network society or the informational mode of development (Castells, 1996; Inglis et al, 2002: 17) refer to the following features of the current period: dynamic and continuous change and transformation; the failure of great theories such as Marxism to locate and predict directions of change; the discontinuous and erratic rather than evolutionary nature of social change; the juxtaposition of various images of social, economic and political life and the transformation of images like Disney world, TV sports and Web pages into the realities with which we deal. It is believed that information and knowledge are distinguishing features of this modern society and the main driver of this change is the growing use of information and communication technologies (ICT).

Education and training are perceived to be the key elements in the process of change and central in the development of knowledge-based economies. However, transformation in society requires a new approach to education. Several reports have pointed to the 'new learning reality' and the need for 'rethinking the whole learning enterprise' if countries were to succeed in the global knowledge-based society. Therefore, along with all other sectors of society, education is undergoing major transformation, rationalization, restructure and redefinition (Inglis et al, 2002) to respond to many socio-economic developments and educational needs of the modern society. Several observers have pointed out that during the last decade, technology, globalisation, and competition have caused the ground to shift under higher education worldwide, defying national borders and calling into question honoured traditions, scared myths, and previously unquestioned assumptions (Green, Eckel & Barblan, 2002: 7; Virkus & Wood, 2004a).

As an integral part of the campus, the academic library will be profoundly affected by changes in the academy itself. Thus it is important that the library, while implementing and managing internal change, continues to look outward at the university as a whole (CETUS, 1997: 3). Changes in higher education, the new student-centred paradigm and new learning and teaching approaches have also created a need for a reconceptualisation of the roles and responsibilities of librarians. The authors of this paper examine current trends and developments in higher education (HE) and the responses of HE institutions and libraries to these changes.

## TRENDS AND DEVELOPMENTS IN HIGHER EDUCATION

It is acknowledged that universities all over the world face an imperative to adapt and adjust to a whole series of profound changes that fall into six major categories: the increased demand for HE in a lifelong learning context, the internationalisation of education and research, the need to develop co-operation between universities and industry, the proliferation of places where knowledge is produced, the reorganisation of knowledge, and the emergence of new expectations (European Commission, 2003, Virkus and Wood, 2004a).

Changes in HE are so profound that several observers refer to a paradigm shift. Kathy Tiano has characterised the old and new paradigms of HE as follows:

Figure 1. Paradigms of HE (after Kathy Tiano, cited in Inglis et al, 2002: 22)

| Old Paradigm for HE | New Paradigm for HE |
|---|---|
| Take what you can get | Courses on demand |
| Academic calendar | Year-round operations |
| University as a city | University as idea |
| Terminal degree | Lifelong learning |
| University as ivory tower | University as partner in society |
| Student = 18- to 25-year-old | Cradle to grave |
| Books are primary medium | Information on demand |
| Tenure | Market value |
| Single product | Information reuse/info exhaust |
| Student as a 'pain' | Student as a customer |
| Delivery in classroom | Delivery anywhere |
| Multi-cultural | Global |
| Bricks and mortar | Bits and bytes |
| Single discipline | Multi-discipline |
| Institution-centric | Market-centric |
| Government funded | Market funded |
| Technology as an expense | Technology as differentiator |

Changes and challenges in European HE refer to what is commonly known as the Bologna Process (UNESCO, 2003). The creation of a Europe of knowledge has been a prime objective for the European Union (EU) since the Lisbon European Council of March 2000. The universities have a particularly important role in the Lisbon agenda. This is because of their twofold traditional vocation of research and teaching. They are

also significant players because of their increasing role in the complex process of innovation, along with their other contributions to economic competitiveness and social cohesion, e.g. their role in the life of the community and in regional development (European Commission, 2003; Virkus and Wood, 2004a).

The main trends and developments that have influenced and are going to have a major role in the future of HE in Europe are the following (UNESCO, 2003: 28-29; Virkus & Wood, 2004a):

- the growing demand for HE institutions to assert themselves - through teaching, learning, and research - as knowledge providers and learning organizations;
- the strong impact of ICT on the organization of studies and curricula and the modes of study programme delivery; the wide diversification of HE providers;
- the emerging markets of HE at national, regional, and global levels;
- the increasing concern with academic quality assurance in HE and the need to establish a new pan-European framework for quality assurance, accreditation, and recognition of qualifications;
- the need to develop a European qualifications framework focused on common references such as the sequencing of study cycles with specific descriptors of the profiles of degrees, introduction of ECTS, and Diploma Supplement;
- the need for governments to provide the most appropriate incentives for encouraging HE institutions to be innovative and entrepreneurial in conditions where the public financial support of governments to HE is diminishing;
- the need to reduce the gap between the level of development of HE in the developed countries and those from certain transition countries;
- the demand for programmes of lifelong learning, etc.

In this context, the quest for successful management of change in educational environments has become a focus of activity for many educationalists, educational managers and researchers. They are looking for the best way to manage change, which, for the most part emerges as a series of steps or 'recipes' to be followed to create an efficient, effective, successful educational setting. Robinson notes: "Though research has produced deeper understanding of the processes, productive educational change appears to proceed on an unsteady course, veering between over-control and chaos and no simple template or checklist can hope to predict and resolve the complex interactive processes involved in this type of change process" (Robinson, 2001: 16). Fullan (1993) describes it as "fraught with unknowns" and emphasis problem solving as an integral part of the change process. However, the fundamental assumption is that changes facing education

are so profound that traditional approaches may no longer be appropriate and radical alternatives have to be considered (Virkus, 2003a).

To respond to these changes many HE institutions have had to rethink their environment in the light of new technologies and have increased the use of educational technology. Increasing numbers of instructors are experimenting with student-centred learning approaches and basing their teaching on constructivist models of learning. There has been an attempt to improve and innovate traditional HE as well as to provide new and alternative learning opportunities. In particular, on-line education and electronic learning environments are perceived as innovations that offer the potential to promote flexible lifelong learning. Many educational institutions also open their doors to non-traditional learners, design new programs and courses and experiment with collaborative learning and teaching supported by ITC. However, change in education is a long process. According to an international comparative survey on the current and future use of ICT in HE in the USA, Australia and Europe, the traditional lecture has still remained the 'core medium' for many HE institutions with ICT serving as a complement to already existing instructional tools (Collis & Van der Wende, 2002; Virkus & Wood, 2004a).

## THE ROLE OF THE ACADEMIC LIBRARY IN UNIVERSITY EDUCATION

The academic library has traditionally been seen as the 'heart of the university' serving the academic community of its parent institution. However, Grimes notes (cited in Brophy, 2001: 21) that the metaphor has been used loosely and with little evidence that it reflects institutional realities. He refers to a number of areas: "Students and faculty alike fail to involve library resources and services in regular learning and instruction, turning to the library primarily as an undergraduate study hall or reserve book room … National initiatives … fail to mention, much less to plan, improvement of library resources … [There is] a disheartening decrease in academic library share of institutional funding … they remain, for the most part, on the periphery of decision-making and innovative processes … librarians are often not involved in information policy development. … In all, the 'library is the heart of the university' metaphor leads librarians and academics to erroneous conclusions about the real relationships between the library and the university. Brophy (2001: 21) notes that many other commentaries on the academic library as the centre of scholarly activity neglect the fact that for most university researchers such notions simply do not reflect reality, if they ever did.

In this context, there has been a continuous concern about the role and status of the academic library. Many authors have pointed out that academic libraries will have to change and the roles and responsibilities of librarians need reconceptualisation. For example, in 1979 Osburn highlights the need for change in research libraries because of the changing patterns of scholarship in America, the emerging dominance of the sciences

in the university's hierarchy of disciplines and the demands of government funding agencies for relevant research. He emphasized that research libraries needed to be more responsive to the new academic agenda and more service-oriented model of collection development was needed (Osburn, 1979). In 1999, at the LIBER Annual General Conference in Prague, Wätjen (1999: 439) notes: "All of us know that we have to redefine the traditional role of the library: what and how to select, to acquire, to classify, to catalogue, to provide, to archive or to give access to and how to assist people in the use of information and more important: how to provide free and equal access to information according to the mission of libraries". Brophy notes: "Libraries, among the most-intensive organizations in existence, will have to change (Brophy, 2001: xiv) … to enter any academic or public library in almost any part of the world is to be greeted by a scene not that different from that which would have met a visitor half a century ago" (Brophy, 2001: 5).

During the last decade the discussion about change in academic libraries focuses most frequently on the ICT developments, the implications of information in digital format, new learning and teaching concepts, new economic models and legal frameworks. Many authors discuss expectations for the academic library in today's information age, an array of new functions and partnerships for library staff that flow from changes in society and HE, the implications that these changes within the library will have for all parts of the academy and what will the changes mean for students, faculty, academic administrators, technical staff, and library staff themselves. Several authors believe that these "changes could catapult the library into a central role within the teaching/learning enterprise if appropriate adaptations are made; if not, they could further remove the library from the institutional center" (CETUS, 1997).

At the start or the 21st century, academic libraries explore service developments to support a series of new scenarios (Brophy, 2001: 25):

- new publication and scholarly communication scenarios;
- more intensive use and delivering of digital resources;
- serving increasingly heterogeneous student population;
- continuing high demand from students for traditional resources;
- new modes of study, including ICT-based and distance learning, with which libraries have had little involvement in the past;
- ever-reducing levels of resources, particularly in staffing, leading to enormous pressures on individual staff and a severe challenge to management.

The new student-centred paradigm and new learning and teaching approaches have created the need for a reconceptualisation of the roles and responsibilities of librarians in learning and teaching processes. There is a growing literature that discusses

bibliographic instruction, user education, and more recently, information literacy. However, the topic is mainly discussed among librarians and information professionals and is hardly explicitly and extensively recognized in other circles (Behrens, 1994; Town, 2002; Homann, 2003; Skov & Skærbak, 2003; Audunson & Nordlie, 2003; Virkus, 2003b).

## INFORMATION LITERACY EDUCATION

The information-literacy movement has evolved from precursors such as library instruction, bibliographic instruction and user/reader education. The history of the development of library user education is well documented and several analysis and bibliographies have been written for various time periods (Fjällbrant & Malley, 1984; Salony, 1995). Although the majority of information literacy initiatives and programmes have been initiated in the last decade, academic librarians have been involved in user education for many years. It is generally agreed that user education in libraries evolved at the end of the nineteenth century, but there is evidence that library instruction was given at German universities already in the 17th century in the form of lectures about reference books, study techniques, and how to use the library (Salony, 1995: 33). However, it is believed that Melvil Dewey was the first who urged librarians in 1876 to become educators in his article published in the *American Library Journal* (Rice-Lively and Racine, 1997).

During the 1970s and 1980s, many academic libraries in the United Kingdom, Canada, the United States, Germany, Scandinavia and Australia started fairly ambitious programmes of user education, bibliographic instruction, or reader education and they have provided user education in the form of one or more of short orientation courses in the use of the library, its information resources and catalogues for new students, and/or courses in information literacy for undergraduate and/or postgraduate students (Fjällbrant, 2000; Homann, 2001; Virkus, 2003b).

Although traditional user education can be counted as a part of information literacy, there is a general agreement that information literacy is a wider and more comprehensive concept than ‘user education’. There are lots of definitions and models of information literacy, but the most widely accepted and cited is that provided by the American Library Association (ALA) Presidential Committee on Information Literacy: “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: 1). It is believed that information literacy education requires a shift in focus from teaching specific information resources to a set of critical thinking skills involving the use of information. Kuhlthau (1993: xvii) notes: “The objective of academic library has been to increase access to resources and information and basic access has been provided through

selection, acquisition, and organization of resources. Increased or enhanced access is provided primarily through two services, reference and instruction. Enhanced access encompasses intellectual as well as physical access. Physical access addresses the location of resources and information. Intellectual access addresses interpretation of information and ideas within resources". It is believed that information literacy focus more on intellectual access of information and necessitates partnerships between the library and other stakeholders in teaching people how to be effective lifelong learners, in whatever context they are operating.

User education has grown visibly during recent years and information literacy has become an issue in many academic libraries. Different approaches have been used to develop information literacy among students. For example:

- developing a guide for students to use or for resource evaluation,
- presenting class sessions,
- developing stand-alone courses,
- creating a course Web site giving students a guided tour for searching the Web,
- developing an assignment where students work on a search strategy appropriate to a problem statement,
- assisting students in preparation of their literature reviews,
- developing online tutorials or integrating information literacy into curricula.

It is believed that an integrated curricular approach is a best practice (Wilson, 2001). Many educators have written extensively about the need to promote information literacy as an integral part of the education process (Breivik & Jones, 1993; Lenox & Walker, 1993; Nahl-Jakobovits and Jakobovits, 1993) beginning in the earliest grades (Brittingham, 1994; Boekhorst, 2003). It is to be expected that an integrated information literacy component in learning would have a positive impact on students' mastering of context, fulfilling research tasks and problem solving, becoming more self-directed, and assuming greater control over their own learning (Todd, 1995: ACRL, 2000), enabling individuals to engage in a variety of learning situations and opportunities in optimal ways (George & Luke, 1995; Virkus, 2003b).

Several authors have discussed about the characteristics of good practice in information literacy education (Bruce, 2001; Wilson, 2001). The Association of College and Research Libraries has developed *Characteristics of Programs of Information Literacy that Illustrate Best Practices: A Guideline.* The characteristics identify and describe features notable in information literacy programs of excellence (ACRL, 2003.

A collaborative approach is seen as essential for the success of information literacy education (Breivik & Gee, 1989; Raspa & Ward, 2000; Bruce, 2001; Wilson, 2001). Wilson (2001: 5) notes: "In model approaches, information literacy is prominent in mission and vision statements, strategic plans, and program descriptions. Information literacy is an institution-wide agenda and part of the president's and the provost's vocabulary. Information literacy is not viewed as one department's purview. The faculty recognizes that information literacy matches the educational goals of the institution, that it adds value to learning, and that it is complementary to discipline-based goals". She adds that best practices are student centered, employ resource-based or problem-based learning, use collaborative and active learning methods, take assesment and evaluation seriously, support faculty learning and development, and put technology into the service of information literacy education.

It is believed that ICT offers librarians opportunities to redefine how information and associated instruction are communicated to students and faculty. As information systems increase in complexity and new resources continue to spring up, librarians are becoming indispensable counsellors in the electronic environment. They are called upon to assist faculty and students in identifying and evaluating many sources, and to serve as true advisors and teachers independently of time and place rather than as custodians of collections (CETUS, 1997).

In ICT context, the university librarian will have to rethink and reassess information strategy, offering alternative modes of delivery. Many academic libraries are experimenting with online information literacy tutorials, courses and instruction. Hepworth (2000) confirms that Web-based guides such as guides to literature searching are increasingly common. Stubbings and Brine (2003) analysed electronic information literacy packages in the UK and divided these into three types: virtual tours (4); OPAC tutorials (9) and information skills tutorials (28). Of the 21 tutorials reviewed, four were subject specific with the remaining being generic in nature. The content as well as instructional design principles varied to a great extent and didn't refer always to sound pedagogy. Sometimes tutorials were also too text-based, lacking sufficient interactivity to create adequate active learning experiences (Virkus, 2003b).

However, there are many examples of successful online information literacy initiatives in Europe: for example, the SWIM (Streaming Web-based Information Modules) project developed by the Aalborg University Library which use streaming-server technology where the tutorial enables the student to make a number of choices about search strategy and problem solving. Considerable work has been done at the British Open University and the Universitat Oberta de Catalunya for delivering information literacy in distance learning programmes (Virkus, 2003b).

New roles for librarians in the learning and teaching context are discussed by many authors, including:

- partnering with discipline faculty and other specialists for delivery of information and instruction;
- designing instructional programs for information access;
- teaching students and faculty how to access information, whatever its format or location, and how to evaluate what they find;
- serving as consultants on information resources, issues, and problems;
- developing and implementing information policy;
- creating information access tools;
- selecting, organizing, and preserving information in all formats;
- serving as leaders and facilitators in introducing information technologies and ensuring their effective use (CETUS, 1997; Virkus, 2004b).

It is believed that the library staff's changing role will benefit students, faculty, university administrators and librarians. Students will acquire better information skills, stronger critical thinking skills, greater confidence, and the ability to transfer what they have learned to their post-graduate lives. Faculty will get opportunities to learn new information access, management, and evaluation skills which support better their research and teaching. Administrators will begin to view the benefit of new collaboration initiatives and new organizational relationships. Librarians will be called upon to think differently about their assignments in both the library and the broader academic community, they will develop closer relationships with discipline faculty and with technical staff assigned to other campus units, familiarizing themselves with each group's goals, culture, and curriculum (CETUS, 1997).

However, Peacock (2000) notes that this new "complex role demands more than sound pedagogical knowledge, advanced teaching skills and an ability to develop and deliver effective learning experiences. It also requires that the teaching librarian functions as an educational professional; that is, as one who can engage in educational debate and decision-making processes, influence policy, forge strategic alliances and demonstrate diplomatic sensitivity".

Specific elements essential for the success are identified by Kirk (1995) (cited in Peacock, 2000: 6):

- knowledge of educational theory and its practical application through instruction design, including knowledge of theories of learning and human development;
- the ability to write instructional goals and objectives;

- the ability to develop instructional programs and materials appropriate to the instruction goals and consistent with a personal theory of learning and human development;
- the ability to formulate and execute an evaluation of instructional sessions and programs.

These skills cluster into the three main categories of design, delivery and evaluation. The teaching librarian also needs deep knowledge of specific subject fields.

Several authors pose the question how many librarians are qualified for the role as teachers (Brophy, 2001; Asher, 2003). Brophy put it in this way: ”Is it not more likely that teachers will develop their own information expertise?” (Brophy, 2001: 8). Breivik (1989: 9-10) also argues about the new active role of librarians. She notes: “few librarians become active in any professional organization that is not library related. Too few do research and publishing; the little that is done seldom focuses on issues of concern to educators; and libraries almost never publish in non-library publications”. As a result of the study carried out by the Information School of the University of Washington, in cooperation with the Washington State Library, Bruce and Lampson (2002: 81) note: “And yet while library and information professionals are often cast as primary players in the quest for universal information literacy, many of them still feel they lack the training and expertise for this role”.

The report *Libraries and Lifelong Learning* of the Charted Institute of Library and Information Professionals (CILIP) points out the constraints that restrict the ability of libraries to effectively contribute to learning. The report notes that there is a need to define the learner support skills required by library staff. Only a few institutions in the education sector formally acknowledge library staff to be part of the teaching and learning process. There remains a major advocacy job to be done to convince key players of the important contribution libraries and library staff have to make. The report also refers to the lack of central encouragement, especially through funding arrangements, for the creation of partnerships to achieve the seamless service that learners seek (CILIP, 2002: 9). Bunzel and Poll (2002: 424) also note that funding is not high enough for the dual task of keeping up everyday routines for the needs of the present student generation and at the same time introducing new and more effective services. They highlight the fact that funding institutions often believe that electronic information costs nothing and note that libraries need joint initiatives to demonstrate the value of their activities and its outcome.

Peacock (2000: 27) argues that the relative inequality of librarians and academics prevents library professionals from fully integrating information literacy into curricula. Peacock suggest to develop a new generation of librarian educators, retrained as

"learning facilitators" and to forge campus-wide "alliances" to ensure that librarians and libraries to overcome their marginalisation.

Peacock identifies four key barriers preventing librarians to have a greater role in the teaching and learning:

- Limited understanding of the inherent link between generic attributes and information literacy and the library's contribution to the development of both.
- Narrow appreciation of the role of the library as an active contributor to teaching and learning process (as that which extends beyond being a passive resource).
- Reluctance to engage the library in teaching and learning partnership and projects, either by exclusion or oversight.
- The high profile technologically driven initiatives which inhibit a library's ability to (i) equally attract funding that relates to teaching and learning initiatives, (ii) acquire access to course development pathways and (iii) participate in collaborative faculty and/or university projects (Peacock, 2000: 29-30).

Bruce and Lampson (2002) note, that despite some progress over the past decade, library and information professionals still report that universal information literacy is a distant, if not a receding, goal. Johnston and Webber (2003, 338) also argue that even in the United States: "Whilst much attention has been paid to information literacy by American policy-makers, librarians and academics, the results are still relatively narrow, giving a potentially superficial guide to the nature of a curriculum for information literacy in HE". (Virkus, 2004b).

Brophy (2001: 25) concludes that the role that academic libraries will play in the future is thus far from clear. However, the CILIP (2002) report *Libraries and Lifelong Learning* draws the picture of the future where the library will continue to emphasize selecting, accessing, and subsidizing information resources and of equal importance will be teaching students and faculty time and place independently to identify, locate, and evaluate information. The library of the future will blend the best traditions of the past - those of structure, service, and subsidy - with an electronic or virtual library. The academic library will offer collections in all formats, as well as networked information services and materials for self-paced learning and programs that support new ways of teaching and delivering information resources. The new academic library will be creative, flexible, and closely allied with the academic disciplines. Collaborative relationships in both public and private settings, from the local and regional to the state, national, and international levels will be developed.

## CONCLUSION

The new educational paradigm has created the need for a reconceptualisation of the roles and responsibilities of librarians. In this context, information literacy has become an issue in many academic libraries and much work has been undertaken to deliver information literacy education. Information literacy initiatives in HE have taken a variety of forms, but there are trends towards the integration of information literacy into subject areas. Successful initiatives report on effective partnership between library and faculty, integrated 'information literacy' programmes, the integration of the potential of modern ICT and the use of active learning methods. However, implementation and delivery of information literacy education depends on many factors: national as well as institutional policy, teaching and learning approaches, understandings and attitudes of faculty and students, and resources (budget, staffing, facilities, and time).

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CILIP - Charted Institute of Library and Information Professionals. http://www.cilip.org.uk/default.cilip

The Open University. http://www.open.ac.uk/

Universitat Oberta de Catalunya. http://www.uoc.edu/web/eng/index.html