INFORMATION LITERACY:
AN INTERNATIONAL STATE-OF-THE ART REPORT

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www.uv.mx/usbi_ver/unesco

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General Introduction

Background

The information literacy initiative of UNESCO/IFLA requires an assessment of what has been achieved in leading countries, and explore what direction should be taken to foster further development in libraries and nations that need to start a program in this field. As part of the project, an international database was created to compile a directory of information literacy resources.

The directory website is available since late January, 2006 at www.uv.mx/usbi_ver/unesco. The input of records is open to anyone interested in reporting IL resources, either the author or users of such tools. Regional/language coordinators were appointed, plus country contacts whose role was to promote the directory in their geographical or language regions. However, the directory database is just gaining momentum in the information literacy world community. The database records information literacy outcomes that could be used as a model/guide for new information literacy actions in different parts of the world. The directory, in a few words, benefits the international community because some of these tools could be used as they are, can be adapted or can serve as examples to build new information literacy applications.

The International State of the Art Report

This international report on the state of the art of Information Literacy in different corners of the world attempts to give an overview of what is going on in the subject. The project was funded by UNESCO, throug the Information Literacy Section of the International Federation of Libraries and Associations (IFLA).

The goal of the report is to identify information literacy trends around the world in five broad subjects: resources for user education; publications devoted to the subject; organizations, such as associations, and other professional groups; training programs for IL facilitators; and communication events, such a conferences, and meetings. The data reported was obtained doing a literature search and was limited to English, Spanish and French languages due to the linguistic limitations of the research team. An additional information source was the *International Information Literacy Resources Directory* of UNESCO/IFLA, a repertory compiled under the same UNESCO grant as this report, more information about this reference tool is provided in the next paragraphs. The state-of-the art report is divided into five categories, which are similar to the taxonomy used in the directory database, plus a general introduction, and a section of concluding remarks about the actions required at international level to create an international literacy agenda for citizens of all walks of life. The full scheme is at the end of the document (Please, See Proposed outline). The writing style is schematic for easy reading.

Different experts, those active at IFLA, were approached and asked to write a report about their regions or countries. Some guidelines were prepared to propose a layout for the different topics to be covered in the document; most of the experts follow the plan, however, each of them gave their own slant or personal highlighting to the topics they consider most important in ther countries or regions. There are some reports that go into details, such as the one on Spain, which is lenghty and well documented despite it deals with a single country; to certain extent, the same can be held in regard to the reports on the United Kingdom and Latin America. Some others are brief, like that of Africa and the one that covers the US and Canada, however, it has been requested to the authors to give more details or more text to their reports.

Despite the differences on each report, there is a great source for any educator or librarian interested in information literacy, that is, the different websites, and the bibliography of the main documents produced by each region or country. The report is a living document, it can be changed, updated according to whoever reads it and is willing to share opinions.

The document will be discussed in an open session during the next IFLA World Library and Information Conference to be held in Durban, south africa, where participants will be asked to review and check the accuracy of the document in regard to their countries or regions.

Each report is divided in seven up tu nine sections, and each one of them is divided according to the information that each author regarded important. The countries included within the report are certainly those who are leading in information literacy in the wolrd scene. It is assumed that countries like Germany, Portugal, Italy, the Netherlands and others have IL activity; these are not yet included, although we expect to have contributors in the next year or so. The asian continent, North Africa and Eastern Europe are missing in the report; hopefully, after this report is opened to the public, some volunteers will help by giving an overview about their countries.

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I. Australia
Information Literacy State of the Art Report
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A. Introduction

Information literacy in Australia is an increasingly well-established and widely understood and accepted concept. This awareness is supported and cultivated through sophisticated practices and models underpinned by rich research.

Informed by a national framework of standards and principles, Australian library professionals are developing and implementing models of success for the broader development of information literacy via an interplay of teleological and practical strategies. These strategies range from intensive engagement with policy development and strategic planning processes, to the implementation, testing and evaluation of methods which support the specific embedding of information literacy into educational curriculum and/or through to the application of information literacy in the civic and social activities of the broader population.

In general, much of the work in the area of information literacy is founded on a common understanding that:

"Information literacy is an intellectual framework for recognising the need for, understanding, finding, evaluating, and using information. These are activities which may be supported in part by fluency with information technology, in part by sound investigative methods, but most importantly through critical discernment and reasoning. Information literacy initiates, sustains, and extends lifelong learning through abilities that may use technologies but are ultimately independent of them."[1]

In Australia, information literacy is closely associated with the concept and goal of lifelong learning, and many key documents and policy statements advocate the central role of information literacy in the lifelong learning process. In 1994, Candy,

Crebert and O'Leary's seminal report, *Developing lifelong learners through undergraduate education*" connected information literacy with lifelong learning. Its profile of the lifelong learner included the following information literacy qualities or characteristics:

- knowledge of major current resources available in at least one field of study;
- ability to frame researchable questions in at least one field of study;
- ability to locate, evaluate, manage and use information in a range of contexts;
- ability to retrieve information using a variety of media;
- ability to decode information in a variety of forms: written, statistical, graphs, charts;
- diagrams and tables; and
- critical evaluation of information[2].

However, in seeking to identify the uniqueness of the concept of information literacy, [Australian discourse] has endeavoured to accommodate and respect other perspectives on lifelong learning[3]. Likewise, the importance of information literacy in workplace learning, lifelong learning and participative citizenship, as expressed in the Australian Library and Information Association's 2001 *Statement on information literacy for all Australians* (see Section 3), is also prominent in much of discussion and activities which form the information literacy learning environment in Australia.

The interrelationship and differences between information literacy and technological literacy is also articulated and understood by administrators and practitioners. Bundy defines this relationship, stating that "information literacy initiates, sustains, and extends lifelong learning through abilities that may use technologies but are ultimately independent of them."[4]

A number of federal and legislative imperatives have had a significant impact on the growth and development of information literacy education in Australia, and on the strategic buy-in by public and private organisations and educational institutions. However, while information literacy development is understood, supported and advanced across a wide range of organisations and sectors, unquestionably, within Australia, the predominant sphere of influence and activity resides within the post-compulsory educational sectors.

In 1998, the Review Committee on Higher Education Financing and Policy, chaired by Roderick West, released its final report *Learning for Life*. The Commonwealth Government commissioned the Review Committee in January 1997 to recommend reforms to equip Australia's higher education institutions for the next twenty years.

Commonly known as the West Review, this report recommended a useful framework for Australian graduate outcomes in higher education… including "research, discovery, and information retrieval skills and a general capacity to use

information"[5]. Although no university has yet adopted a university-wide strategy for curriculum integration and assessment focussed on generic skill development[6], it is clear that most have defined a core set of graduate outcomes which explicitly or implicity identifies information literacy as one of the core attributes to be acquired as an outcome of a tertiary qualification.

Most Australian universities are now working towards embedding lists of graduate attributes into the curricula and developing strategies for assessing and recording outcomes. As Bundy notes, "progressive universities have recognised that their teaching, and learning outcomes should be liberating, not domesticating… This is implicit in their attempts to develop and integrate graduate attributes into their program approvals, curricula, pedagogies and assessment."[7] In this context, it is generally agreed that "achieving information literacy requires an understanding that such development is not extraneous to the curriculum but is woven into its content, structure, and sequence"[8]. Since 1998, all Australian universities have been required to specify their generic graduate attributes in quality assurance and improvement plans, which are submitted to the Department of Education, Science & Training[9].

Quinn believes that "when we commit to a vision to do something that has never been done before, there is no way to know how to get there.... we simply have to build the bridge as we walk on it."[10] Australian library professionals continue to build that bridge that links Australians with the skills and knowledge to function as information informed citizens and productive members of the communities in which they live and work.

B. Online learning tools (IL Products for Users)

A wide number of online learning tools are available to users in Australia. These tools commonly are web-based, designed for students in the tertiary sector (undergraduate and postgraduate). Most are "tutorials", allowing for self-paced, self-directed learning; some are more "course-based" in nature, offered as facilitated or semi-moderated learning opportunities for individuals and groups. Many products are hosted on proprietary learning management systems and/or are available to institutional members only. Some products are open systems, available for access and use by the wider public.

Not a definitive list, notable examples of online information literacy tutorials/courses are:

1. *InfoTrekk and InfoTrekk Plus*
   http://library.curtin.edu.au/infotrekk/index.html.
   http://library.curtin.edu.au/infotrekkplus/index.html.

   Produced and hosted by Curtin University (WA), InfoTrekk takes students through a series of 10 steps they can use to approach any essay or presentation topic, whether studying from home or on campus. Students can

start with Trek 1, or any Trek that interests them, and test their knowledge as they go through quizzes. Students are able to do the ten Treks in less than an hour. InfoTrekk Plus continues on from InfoTrekk, with 10 Treks on finding specialised information for preparing a thesis or a major project, such as statistics, Acts of Parliament and theses. InfoTrekk Plus also helps students to learn how to keep up-to-date and manage all that information. Each Trek takes approximately 10 minutes.

2. *PILOT: Your Information Navigator*
   http://pilot.library.qut.edu.au/.

   Produced and hosted by QUT Library, PILOT encompasses all facets of information searching, retrieval, management and evaluation. Learning is targeted at the specific needs of undergraduate, entry-level students. Content is modularised and based on the ANZ Information Literacy Standards (2nd edition). PILOT supports activity- and enquiry-based content designed to meet the needs of adult learners.

   PILOT has been provided to a number of national and international institutions for the purpose of local customisation, including:
   - Australian National University (ACT) - InFlite (ANU authentication required)
   - University of Technology Sydney (NSW) - *Catalyst* [http://www.lib.uts.edu.au/catalyst/]
   - Victoria University of Technology (VIC) - *InfoWiz* [http://w2.vu.edu.au/library/infowiz/index.htm]
   - University of South Australia (SA) – *Infogate* [http://www.library.unisa.edu.au/infogate/index.htm]
   - James Cook University (QLD) - *VISA* [http://www.library.jcu.edu.au/VISA/]
   - Leeds Metropolitan University (UK) - *Pilot* [http://www.lmu.ac.uk/lskills/pilot.html]
   - University of South Australia (UniSA) - *InfoGate* [http://www.library.unisa.edu.au/infogate/]
   - Education Queensland - EQUiP (professional development tutorial for all Qld teachers) (authentication required)
   - Queen Margaret University College Library (Scotland)
   - University of Windsor (Canada)
   - University of Wollongong (NSW)
   - Southbank Institute (QLD)
   - Brisbane North Institute of TAFE (QLD)

3. *InfoSkills*
   http://www.newcastle.edu.au/service/library/tutorials/infoskills/.

Produced and hosted by University of Newcastle (NSW), the tutorial incorporates both information literacy and academic integrity. Content is mapped against the Australian and New Zealand Information Literacy Framework (2004).

4. *LILI - Learn Information Literacy Initiative*
http://www.tafe.sa.edu.au/lili/.

Produced and hosted by the LEARN Network of South Australian TAFE Libraries, LILI provides tutorials which will assist users in searching for information using TAFE library catalogues, the World Wide Web, and electronic databases. LILI was the recipient of the inaugural 2002 Training Initiative Award in SA.

5. *LILT*
http://info.library.unsw.edu.au/psl/skills/direct/itet_lilt/intro/enter.htm.

Produced and hosted by University of New South Wales (NSW), this flash-based tutorial has been adapted from TILT (University of Texas Digital Library). This web-based, self-instructional, Information Literacy tutorial, focuses on fundamental research skills, and is designed primarily for undergraduate students. Students are taught three groups of skills related to research: selecting appropriate sources; searching Library databases and the Internet; and evaluating and citing information. Each of these skills is emphasised in a separate module with text, interactions, and an option to link to a quiz in individual WebCT courses.

6. *SmartSearcher*
http://www.deakin.edu.au/library/tutorials/smartsearcher/.

Produced and hosted by Deakin University Library (VIC), this interactive tutorial is designed to help students develop library and information skills, such as learning how to search the Library catalogue, journal databases and the Internet to find material for research or assignments, and referencing. The tutorial uses the Web-ezy software which is designed to deliver interactive, web-based instruction and training.

7. *Monash Information Literacy Online Tutorials*
http://www.lib.monash.edu.au/vl/.

Produced and hosted by Monash University Library, these tutorials are designed by Monash University librarians to teach students the skills and tools needed to find and manage information.

8. *LITE: Online Information Literacy Programme*
http://wwwlib.murdoch.edu.au/lite/aboutlit.html.

LITE was developed as a Web based programme to introduce students to skills which will help students to solve problems, make decisions and think critically - skills essential not only for successful university study, but skills required by all who want to take an active part in an information rich society.skills in an online environment. These include library information and research skills, and skills in searching the World Wide Web. For all new 2006 students the programme is self-paced and based on the five tutorials.

9. *AIRS Online*
   http://airs.library.qut.edu.au/.

   Produced and hosted by Queensland University of Technology (QUT/QLD), AIRS Online is the parallel online study option for the course IFN001:Advanced Information Retrieval (AIRS), a mandatory coursework requirement of doctoral enrolment at QUT. The course aims to assist research students in working toward their literature review through the development of advanced information literacy knowledge and practice. AIRS Online provides a student-focussed learning environment which encourages deep learning and caters for diverse learning styles and needs. It is founded on the principle that the simple transfer of content to an online environment will not deliver equivalent learning outcomes for students. Unlike a web-based tutorial, the course has been designed to actively engage students in teacher-facilitated, self-directed learning. Course content for AIRS Online is authenticated access for enrolled QUT IFN001 students only.

10. *RMIT Postgraduate Information Research Skills Tutorial*
    http://www.lib.rmit.edu.au/tutorials/postgrad/.

    Produced and hosted by RMIT University, this online tutorial is designed to assist postgraduate students to develop a systematic method of searching for information that can be applied to current research, a literature survey, solving laboratory problems and other research needs.

C. Publications

There are a number of key Australian publications, and prominent authors, who have written seminal works in the discipline of information literacy.

1. *Monographs*

a. Bruce, Christine (1997) *The Seven Faces of Information Literacy*, Adelaide: Auslib Press. Seminal research text which examines the varying experience of information literacy as an alternative to the behavioral model that dominates information literacy education and research.

b. Frylinck, John (2001) *Partners in learning and research: Changing roles for Australian Technology Network libraries.* Adelaide: Auslib Press. Second

publication of the Librarians of the ATN which showcases the contribution to teaching, learning and information literacy by the five university libraries of the Australian Technology Network (RMIT, QUT, UniSA, Curtin and UTS).

c. Candy, Phillip (1991) Self-Direction for Lifelong Learning: A Comprehensive Guide to Theory and Practice, San Francisco: Jossey-Bass Publishers. Seminal Australian text which discusses self-directed learning: dimensions; theoretical insights; promotion; and its potential in adult learning.

d. Bruce, Christine, & Candy, Philip (eds.) (2000) Information Literacy Around the World: Advances in Programs and Research, Wagga Wagga: Centre for Information Studies. Contains a number of important and contemporary program initiatives for information literacy from countries such as Australia, South Africa and America.

e. Lupton, Mandy (2004). The Learning Connection. Information literacy and the student experience. Adelaide: Auslib Press. Examines undergraduates' ways of experiencing information literacy in particular disciplinary contexts, in order to inform a model of the relationship between information literacy and learning.

2. Conference Proceedings

a. Proceedings of the National Information Literacy Conferences, Adelaide: University of South Australia Library. Proceedings of five national conferences hosted by the University of South Australia Library between 1992 and 2001 (every 2 years). Details available online:
http://www.library.unisa.edu.au/about/salepubs.as.

b. Proceedings of the International Lifelong Learning Conferences, Rockhampton, Queensland: University of Central Queensland. Proceedings of five national conferences hosted by the University of Central Queensland Library between 2000 and 2006 (every 2 years). Details available online:
http://www.library.cqu.edu.au/services/staff-research/infolit/lllconference/index.htm.

3. Papers/Book Chapters

a. Doskatsch, Irene (2003) "Perceptions and Perplexities of the Faculty-Librarian Partnership: an Australian Perspective." Reference Services Review, Jun, Vol 31/2, pp 111 – 121. Discusses the educative role of and critical reflections on the value librarians contribute to teaching and learning, and strategies and opportunities to promote the educative role of librarians with greater clarity and force. Available online:
http://www.library.unisa.edu.au/about/papers/RSRarticle.pdf.

b. Bundy, Alan (1998) "Information Literacy: The Key Competency for the 21st Century". Proceedings of the IATUL Conference, University Library of Pretoria,

South Africa, 1st June - 5th June, 1998. Critiques the reports and institutional rhetoric and reality in the context of leadership being shown by Australian Librarians to convince educators and administrators that information literacy is essential to effective life long learning, that it is not a 'library' issue, and nor is it synonymous with 'technological' literacy. Available online: http://iatul.org/conference/proceedings/vol08/.

c. Bundy, Alan (1999) "Information Literacy: The 21st Century Educational Smartcard". Australian Academic Research Libraries, December, pp.233-250. Discusses how Australian school, TAFE and university libraries have provided leadership in promoting information literacy as a profound educational issue requiring a fundamental paradigm shift in educational programs, their conduct and outcomes.

d. Bruce, Christine (2000) "Information Literacy Research: Dimensions of the Emerging Collective Consciousness". Australian Academic Research Libraries, June, pp. 90-109. Analyses the information literacy research territory as it is represented by the emerging collective consciousness of information literacy researchers.

e. Peacock, J. (2001) "Teaching Skills for Teaching Librarians: postcards from the edge of the educational paradigm". Australian Academic Research Libraries, Vol 32/1, March 2001 pp. 26-42. Explores the skills required to engineer the metamorphosis from librarian to educator and learning facilitator (the expression 'teaching librarian' is used throughout to designate this 'new breed' of reference librarian). It examines the implications for librarians and library managers in terms of evolving roles and responsibilities, changing expectations and staff development, and highlights potential barriers to ongoing success. Available online:
http://alia.org.au/publishing/aarl/32.1/full.text/jpeacock.html.

4. Key Statements & Standards

a. Bundy, A. [b] ed. (2004) *Australian and New Zealand Information Literacy Framework: principles, standards and practice.* Second edition Adelaide: Australian and New Zealand Institute for Information Literacy. Available online: http://www.anziil.org/resources/Info%20lit%202nd%20edition.pdf.

This second edition of the 2001 *Information Literacy Standards* reflects the ways academics and librarians have used the first edition. It incorporates changes developed at a workshop in Sydney in January 2003, and includes a revised set of IL Standards as well as discussion papers on curriculum alignment, assessment and professional development, exemplars of implementation and a chronology of information literacy establishment, development and implementation in Australia. The concepts and text have been adapted and updated to incorporate recent local and international understandings of information literacy education.

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As with the 1st edition, the new Australian and New Zealand Information Literacy Framework incorporates standards and learning outcomes that consist of the characteristics, attributes, processes, knowledge, skills, attitudes, beliefs and aspirations associated with the information literate person. The standards are grounded in generic skills, information skills and values and beliefs.

The ANZ Information Literacy Framework may be freely used, translated, and adapted for noncommercial purposes, subject to acknowledgment of its US and Australasian provenance. A copy of any such usage is requested to be sent to University of South Australia. Currently, the Standards have been translated into Spanish, Bahasa Indonesian, Japanese and are also being used in Ireland. The Framework may be freely accessed online or packs of bound print copies can be ordered from the University of South Australia.

b. CAUL (2000) Information Literacy Standards. Canberra: Council of Australian University Librarians.

The first edition Australian information literacy standards derives from the US Information literacy standards for higher education approved by the Association of College and Research Libraries in January 2000. The US standards were reviewed at a national workshop initiated and conducted 22-23 September 2000 by the University of South Australia for the Council of Australian University Librarians (CAUL).

In October 2000, the Council of Australian University Librarians approved the revision of the US standards as Information literacy standards. The intended primary application is to higher education, but they may be applied to other educational sectors.

c. CAUL (2004). Best Practice Characteristics for Developing Information Literacy in Australian Universities. Available online:
http://www.caul.edu.au/info-literacy/publications.html#guidelines.

A subgroup of the CAUL Information Literacy Group produced a guiding document to document the characteristics of information literacy that illustrate best practice in learning and teaching in academic institutions. The guidelines provide characteristics, principles and ideas that will support the development of excellence in information literacy within an institution, and across Australia. This document was adapted to the Australian environment (with permission) from a simliar document in the US produced by the Association of College and Research Libraries (ACRL). The guidelines are available as a brochure in both 2-fold and 3-fold format. It is only available online – organisations are welcome to download their preferred format and print off the number of required copies.

d. ALIA Statement on Information Literacy for all Australians

ALIA policies and guidelines reflect the general position of the Association on issues that have an impact on the library and information sector, and provide direction and advice to those who choose to consider the policies and guidelines for their own use. ALIA produced the following national policy statement in 2001 (amended 2003).

e. Australian Library & Information Association (2003) Available online: http://www.alia.org.au/policies/information.literacy.html.

ALIA objects addressed
To promote the free flow of information and ideas in the interest of all Australians and a thriving culture, economy and democracy.

Principle
A thriving national and global culture, economy and democracy will best be advanced by people who recognise their need for information, and can identify, locate, access, evaluate and apply that information.

Statement
Information literacy can contribute to:
- participative citizenship;
- social inclusion;
- acquisition of skills;
- innovation and enterprise;
- the creation of new knowledge;
- personal, vocational, corporate and organisational empowerment; and,
- learning for life.

Library and information services professionals therefore embrace a responsibility to develop the information literacy of their clients. They will support governments at all levels, and the corporate, community, professional, educational and trade union sectors, in promoting and facilitating the development of information literacy for all Australians as a high priority.

f. Australian School Library Association Policy Statement on Information Literacy

ASLA produced a key policy statement for school libraries on information literacy in 1993, in conjunction with ALIA. The policy was adopted in November 1994.

Australian School Library Association and Australian Library and Information Association (1993) Learning for the future: developing information services in Australian schools. Curriculum Corporation.
Available online: http://www.asla.org.au/policy/p_infol.htm.

[Excerpt] "Effective learners are not just those people who are knowledgeable but rather they are people who are able to find and use information as required. We might say that effective learners are those who are information literate. Information literacy is synonymous with knowing how to learn. This means that the ability to process and use information effectively is more than a basic tool for the empowerment of school students: it is in fact the basic survival skill for those who wish to be successful in the 1990s and beyond."

D. Organizations, Associations and Peak Bodies

Governance of information literacy in Australia is wide-reaching, ranging comprehensively across public, school, tertiary, vocational and industry sectors. Depending on their parameters of formal influence, these groups provide significant leadership in, resourcing and support of. and structure for information literacy policy, development and practical implementation. Key associations and peak bodies are:

1. *Australian Library & Information Association (ALIA) Information Literacy Forum* http://alia.org.au/groups/infolit/.

The ALIA Information Literacy Forum fosters a common understanding of and advocates for information literacy within ALIA and the general community.

"The Forum promotes professional development opportunities in information literacy for library and information services personnel. In 2006, it will continue to promote the library's role in developing information literacy, continuing involvement with the National Information Literacy Coalition, strategy planning for integration of information literacy into various sectors, and participation in relevant conferences. Communication includes a quarterly newsletter and the annual online forum. The planning committee meet bi-monthly via teleconference." (ALIA)

2. *Australian and New Zealand Institute (ANZIIL) for Information Literacy* http://www.anziil.org/.

ANZIIL supports organisations, institutions and individuals in the promotion of information literacy and, in particular, the embedding of information literacy within the total educational process.

The Institute identifies, facilitates, fosters and supports best practice in information literacy through:

- Professional Development
- Promotion, Marketing and Advocacy
- Research

Activities and initiatives primarily target vocational and higher education. The Institute works in collaboration with a range of national and international organizations, forums and groups to complement their existing information literacy aims, objectives and initiatives. In particular, ANZIIL works closely with the Council of Australian University Librarians (CAUL), Council of New Zealand University Librarians (CONZUL), Australian Library and Information Association (ALIA), NWGTLS (National Working Group for TAFE Library Services) and Library and Information Association of New Zealand Aotearoa (LIANZA).

Hosting of ANZIIL is rotated between every 3 years. For the period 2006-2008, ANZIIL will be co-hosted by Southbank Insitute of TAFE and Queensland University of Technology (Brisbane, Queensland). It will be hosted by the University of Central Queensland for the period 2009-2011.

3. *Council of Australian University Librarians (CAUL)*
   http://www.caul.edu.au.

CAUL supports the Information Literacy Group (ILG) which provides advice to CAUL on information literacy and related issues in the academic context.

"The objectives of the ILG are to:
(a) assist in the development of an assessment instrument for information literacy;
(b) develop appropriate measures for evaluating information literacy programs within university libraries;
(c) seek opportunities for CAUL to promote the inclusion of information literacy and related generic attributes in teaching and learning; and
(d) liaise on behalf of CAUL with other groups working in the area of information literacy." [http://www.caul.edu.au/info-literacy/]

4. *The Australian School Library Association Inc. (ASLA)*
   http://www.asla.org.au/.

ASLA is a national authority, a peak forum in the field of teacher librarianship and school library resource services. Its aim is to maximise opportunities for students to obtain independent lifelong learning and decision making skills through ASLA's commitment to a number of key areas, including awareness of advances and changes in technology and the competence and ability to teach and use technology and information.

ASLA is a federation of State and Territory Associations. It is administered by a council comprised of representatives from each member association Membership is available through the relevant association, each of which is an independent body with its own administration. Each association organises an on-going program of professional development and leadership training and produces a newsletter and other support material for its members. ASLA conducts a biennial conference and produces a professional journal titled "ACCESS".

5. Queensland University Libraries Office of Cooperation (QULOC)
   http://www.quloc.org.au/.

QULOC is a collaborative organisation which provides a framework for information exchange, best practice development, cooperative activities and the promotion of common interests which support the teaching, learning and research needs of member institutions. Membership comprises twelve university libraries from Queensland, New South Wales and the Northern Territory, plus the State Library of Queensland. QULOC supports a number of working groups on areas relevant to academic libraries, including the QULOC Information Skills and Services Working Party, a sub-group with carriage of information literacy.

QULOC Information Skills and Services Working Party terms of reference:

— To monitor the environment to identify emerging issues, research needs and trends in information skills relevant to QULOC libraries
— To provide a forum for the exchange of information and facilitate professional development in matters relating to information skills.
— To cooperatively develop, disseminate information on and implement where applicable, programs, models and methodologies relating to information skills.
— To communicate with other QULOC Working Parties on matters of shared interest.
— To advise the University Librarians' on information skills issues relevant to QULOC.
— To promote common interests of QULOC Working Parties to outside forums.

6. CAVAL
   http://www.caval.edu.au/.

CAVAL is a consortium of the Victorian University Libraries and the State Library of Victoria with a changed emphasis on Australasia and Asia as well as the Victorian founders. CAVAL is owned jointly by the Vice-Chancellors of the Victorian universities (Australian Catholic University, Deakin University, LaTrobe University, Monash University, RMIT, Swinburne University, University of Ballarat, University of Melbourne and Victoria University) and the State Library of Victoria. The consortium supports a supports a wide range of professional activities for the member libraries, including the CAVAL Reference Interest Group (CRIG) which in turn supports the *Seminar Committee: Information Literacy (SCIL).*

E. Training the Trainers (Professional Development)

For librarians in Australia, professional development has arisen as a major concern and focus. As Bundy[11] notes, "most specialist professions, where requisite knowledge and skill is taught and learned pre practice, expertise in education does not come as an inherent product of either academic pursuit or librarianship education." However, it is these professionals who have undertaken a significant

responsibility to lead their organisations in addressing information literacy education is new ways and to new ends. Thus, the onus has fallen to administrators, faculties, libraries, governance groups and associations and individuals to take an active role in, and share responsibility for, the evolving professional development needs of academic teachers and academic librarians in Australia[12].

Professional development activities and initiatives in this realm focus specifically on developing knowledge and skills in learning and teaching generally, and specifically in areas such as curriculum design, classroom management, assessment, online education, and active and adult learning.

The professional development of the librarian as educator is an issue which is addressed by many of the groups listed above (see Section 2) and via the professional forums (see Section 4/Conferences) at a broad, national level. However, in most instances, responsibility for extensive and directed professional development of librarians in teaching and learning areas is undertaken at an organisational level.

1. *ANZIIL Professional Development Group*
   http://www.anziil.org/groups/pd/pd.htm

At a national level, ANZIIL has a mandate to develop and provide developmental activities for tertiary teaching librarians (higher education and vocational).

ANZIIL recognises that systemic and systematic change is required in the design and delivery of core curricula to allow for the mastery of information literacy concepts and skills in a sequential, hierarchical and developmental manner. ANZIIL also appreciates the fundamental role of libraries and librarians as critical partners in the educational process. In support of this mission, ANZIIL is committed to leading in the development of appropriate pedagogical and strategic knowledge and skills of tertiary librarians (PD-IL).

Aim:

To facilitate, foster, enhance and/or develop professional development opportunities for librarians teaching within the higher education and VET sectors which (i) support the embedding of information literacy within teaching, learning and research to foster the principles of lifelong learning; and (ii) through the provision of such PD opportunities as courses, workshops and a range of print and electronic resources.

2. *QULOC Information Skills and Services Working Party*
   http://www.quloc.org.au/.

At a state level, QULOC and CAVAL provide regular professional development activities for teaching librarians.

3. CAVAL/CRIG Seminar Committee: Information Literacy (SCIL)
   http://www.caval.edu.au/members/wpr/crig/.

The Seminar Committee plans, publicises and conducts the CAVAL Reference Interest Group's annual seminar, held in November each year. The CRIG Information Literacy Seminar (formerly User Education Seminar) has become a significant event in the staff development calendar for librarians engaged in the rapidly evolving user education / information literacy field in Victorian university and TAFE libraries. It aims to promote the development of information literacy services in these libraries by providing relevant training and opportunity for the exchange of ideas on current issues. The seminar complies with the requirements of the ALIA CPD membership program. The Seminar Committee's activities through each year include:

— Developing topics for the seminars in consultation with CRIG, frequently drawing on suggestions and feedback received from participants at previous seminars.
— Seeking guest speakers from within CAVAL member libraries, from other areas of the library profession and the tertiary education sector, and from other relevant fields of expertise.
— Preparing the seminar program and liaising with CAVAL staff in the distribution of publicity and collection of registrations
— Coordinating the running of the seminar

F. Communication

Information literacy professionals in Australia have access to one nationwide discussion list, hosted by ALIA and moderated by the ALIA Information Literacy Forum for members. *aliaINFOLIT* is the ALIAnet e-list affiliated with this group or activity. Details for access: http://www.alia.org.au/alianet/e-lists/. Other organisations and peak bodies support independent and closed only discussion forums.

G. Key players in information literacy

Many of the strategic directions, research and practical initiatives which have governed the Australian information literacy landscape over the last two decades can be directly attributed to a number of strategic leaders, organisations, researchers and practitioners.

Dr Alan Bundy
Library Director, University of South Australia Library (retired 2004); President, Australian Library & Information Association (1988 & 2002); initiator and editorial director of Auslib Press, Australia's largest publisher of library and information science; inducted as a Member of the Order of Australia for services to academic, school and public libraries (2005). Dr Bundy has been instrumental in initiating,

resourcing and driving many of the significant information literacy initiatives in Australia, including the development of a governing set of information literacy standards for Australasia, the establishment of ANZIIL, support of the national information literacy conferences and advocacy in public and teriary executive and legislative sectors. Selected conference papers and presentations 1996-2004 available online: http://www.library.unisa.edu.au/about/papers/abpapers.asp

Irene Doskatsch
Deputy Director: Library Services at the University of South Australia. Irene was also the foundation Executive Director, from 2001 to 2006, of the Australian and New Zealand Institute for Information Literacy. From 1992 to 2001, convened five national information literacy conferences. In 2000, she organised a national workshop to rework the US Information Literacy competency standards for higher education within an Australian context, and to progress the idea of an Australasian Institute for Information Literacy.

Christine Bruce
Christine Bruce is Associate Professor and Director, Teaching and Learning in the Faculty of Information Technology, Queensland University of Technology. She is interested in the generic capabilities agenda in both undergraduate and postgraduate contexts. Her research foci revolve around the perceptual worlds of information and IT users, including information literacy.

H. Conclusions

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3. Catts, Ralph in Bundy, A. *op cit* [p2]

4. Bundy, A. *op cit*

5. Review Committee on Higher Education Financing and Policy/ West, Roderick (1998) *Learning for Life: Final Report (The West Review).* Canberra: Department of Education, Science & Training. [p47]

6. Department of Education, Science & Training [DEST] (2002) *Striving for Quality: Learning, Teaching and Scholarship* Higher Education Review Process Issues Paper, released 21 June 2002, DEST No. 6891HERC02A. Canberra, DEST Commonwealth of Australia 2002 [p12]

7. Bundy, A. (2004) "Beyond information: the academic library as educational change agent" Paper presented at the International Bielefeld Conference Germany 3-5 February 2004 [p11]

8. Bundy, A. *op cit* [p6]

9. Department of Education, Science & Training [DEST] *op cit*

10. Quinn, Robert (2004) *Building the Bridge as you Walk on it.* San Francisco: Jossey-Bass [p 9]

11. Bundy, A. *op cit* [p 31]

12. *ibid*

II. French Speaking Countries:
Belgium, France, Quebec, Switzerland
Information Literacy State-of-the Art Report
November, 2007

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A. Introduction

The State of the art will mainly concern Belgium, France, Quebec, Switzerland. Francophone African countries should be included in the report but it is difficult to obtain some precise information about what they offer in terms of Information Literacy.

The concept of Information Literacy appears in the different countries but

— at different levels
— with different ways of organizing it

In all these places, the most visible part of Information Literacy takes place in the educational field (secondary and college-university levels).
There is some kind of life-long training or Information Literacy offered to citizens but it is not as visible and organized than the previous one.
Information Literacy is not visible at an institutional or State level (no law as there is in other parts of the world, no mention of the term in political statements).

1. Basic concepts of information literacy

There is an agreement on the definition of the concept –although no clear, written, stated definition as the ALA definition- but no term equivalent to Information Literacy is commonly used by the different countries. It is difficult to translate the expression, because "literacy" is used for reading literacy and wouldn't have the

same meaning as it has in English. The term chosen by IFLA to translate IL is "Maitrise de l'information" and it might be the better one.

Other terms that are frequently used are "formation des usagers" (users training) or "competences informationnelles" (Information competencies) .

2. General organisation

These French speaking countries have different ways of organizing Information Literacy depending on their own political and educational structure.

a. Belgium is a bilingual-multicultural country. In the French speaking part of Belgium, the situation is quite different from France since there is no unique national policy, and no institutional funding for developing IL. However, efforts in the field have been made since the late 80's. From this time, some convinced librarians created a working group named initially "Training user group" which was called in 1997 the "Edu*Doc* Group".

From the outset, their objectives have been to reflect on and to observe the IL situation in the French speaking part of Belgium and abroad and to promote IL for librarians, teachers and decisions-makers. The group has developed its activities in multiple directions: meeting and conferences, web site, papers and an Email discussion group about IL on the internet http://www.lists.ulg.ac.be/mailman/listinfo/edudoc.

Each university has its own policy. But last years we observed a positive trend in universities who created some IL courses or training sessions. This was reinforced by the Bologna process who gave a positive sign is the inclusion of Information Literacy in the new definition of ECTS. Various new IL teaching initiatives are being carried out. Another positive sign come from outside the universities: an introductory course in "information retrieval" (15h) is now required for all future school teachers (primary schools and the first three years of secondary school)." Unfortunately, at this moment, this political initiative remains isolated.

b. France is a centralized country where the State plays an important role both by financing activities and controlling them. It is not surprising therefore that Information Literacy in secondary and higher Education is ruled by the State.

IL in France, as in many other countries, started to become a key issue at the end of the 90's. It is a law in 1996 that helped to embed IL courses in the curricula, while the reform of the studies at the European level –known as "Bologna Agreement" introducing 3 levels of diplomas in 1999–emphasized the embedding. [1]

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[1] < http://ec.europa.eu/education/policies/educ/bologna/bologna.pdf >

There is an important financial and institutional support from the State, especially for the publishing of pedagogical resources. Many of these resources are gathered on the French speaking website FORMIST. http://formist.enssib.fr

Formist is a service of the French National LIS School, Enssib which plays a role in keeping a network among teaching librarians, through its annual Conference, the website and the weblog "Formist Information": http://blogformist.enssib.fr.

There are libraries in secondary schools and the librarians there are called "teachers-librarians". They take specific exams, similar to those of disciplinary teachers.

c. Quebec has its specificities, but being so close to the United States and being part of Canada has a strong impact on Information Literacy there. Information literacy started earlier than in Europe. The annual Conference WILU /AAFD started in 1971.

   Two important points:

   — the bilingual situation which leads Quebec to translate in French many English documents (ACRL standards for example)
   — as in many other countries, universities are quite independent in defining their own policies. This is why some of them, such as Montreal University, for example, wrote a statement concerning IL in the University.
   http://www.secgen.umontreal.ca/pdf/reglem/francais/sec_30/ens30_9.pdf

d. Information Literacy doesn't seem to be well organized in French speaking Switzerland. No working groups, no special funding, no list-serv or weblog , but some local initiatives are spreading out.

B. IL Products for users

All these countries propose **tutorials**. The main ones are (see more in the directory):

1. Tutorials

a. Defist (*Développement d'une Formation à l'Information Scientifique et Technique* = Development of scientific and technical information training programs) was issued in 2003 in Belgium. It is a research program whose aim was to create a Web-based adaptive distance learning information literacy system. http://www.bib.fsagx.ac.be/edudoc/defist.htm

b. In France, many libraries are working on tutorials for self training inside their universities. We won't mention all of them but rather talk about CERISE,

Conseils aux Etudiants pour une Recherche d'information Specialisée efficace-which offers a basic step by step method. http://www.ext.upmc.fr/urfist/

c. Infosphere http://www.bib.umontreal.ca/infosphere/. This tutorial offers a methodology for step by step information seeking in Human and Social Sciences or in Sciences. It has been adapted in different universities.

d. En Suisse, CALIS,- Computer Assisted Learning Information Searching a été lance sur le site du campus virtuel Suisse, en 2004. Le projet a été mené par la *Haute Ecole de Gestion, Genève avec la participation d'universités et bibliothèques.*
http://www.hesge.ch/heg/prestations_recherche/projets_recherche/CVS/calis/demo.html

2. Credit courses

Almost all the universities offer courses, library tours or workshops on a facultative basis. But In the different countries, the objective is to embed Information literacy in the curriculum and to have it compulsory and credit given, More and more places fulfil the objective but there are still

— places with only facultative/optional courses or workshops on an individual basis
— places with both credit given courses in the curricula AND optional type of courses

In Belgium, the main universities (Liege, Louvain, Bruxelles, Gembloux…) are offering courses. [2]

In France, a recent survey showed that since the Bologna agreement and mostly since 2003, the trends were to have more and more courses in the curricula. [3]

In Quebec, the main universities and university libraries are more and more involved in the subject of information literacy. We already cited the General Policy at the University of Montreal, but in other universities, Information literacy activities are more and more included in the curricula. TheLibrary of the Unioversity of Laval made a very interesting document for academy, relating the ACRL standards to the

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[2] Pochet, Bernard. (2004) in Chevillotte, Sylvie

[3] Noël, Elisabeth, Cazaux, Marie-Annick. ,« Enquête sur la formation à la méthodologie documentaire », *Bulletin des Bibliothèques de France*, 2005, 50, 6, pp. 24-28 < http://bbf.enssib.fr >

discipline. This document explains to the teachers the information literacy requirements, step by step.[4]

In Switzerland courses are offered both in and outside the curriculum. The universities of Lausanne and Geneve are very active in courses.

No shared evaluation or assessments tools in the different communities. In France there is an ICT test a the university, called Cii (Certificat Informatique et internet / Computer and internet certificate) with an information seeking part. http://c2i.education.fr/

C. Publications

1. Guidelines

The different countries publish general and specific guidelines, for example:

a. In France;
    « Former les etudiants a la maitrise de l'information »
    http://www.sup.adc.education.fr/bib/Publ/Formations.pdf. The target audience is librarians and faculty in charge of IL programs.

b. In Quebec;
    "Apprivoiser l'information pour réussir"
    http://www.bib.umontreal.ca/db/apprivoiser-information-reussir_2004.pdf.   The target audience is faculty. The guidelines introduces them to IL.

c. CREPUQ in Quebec translated the ACRL Standards in French.
    http://www.crepuq.qc.ca/IMG/pdf/normeacrl-web-03-05-v4.pdf.

2. Monographs

Different authors publish on the subject of Information Literacy or on the Methodology of Information seeking. This is not an exhaustive list.

a. Pochet, Bernard.(2005) *Méthodologie documentaire Rechercher, consulter, rédiger à l'heure d'Internet*, 2005, 2e edition, de Boeck Universite

b. Pochet , Bernard. Comment former les usagers ? Réflexions à partir de la diversité des expériences de formation organisées en Belgique. In Chevillotte, Sylvie. *La formation à la maîtrise de l'information à l'heure européenne : problèmes et perspectives*, . Lyon : Presses de l'enssib, 2004, pp. 57-71

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[4] Carrier, Pierre. Le développement des compétences informationnelles à l'université Laval : l'approche par compétences. *Babel - edit -*, Rencontres Formist. ENSSIB - novembre 2005
[en ligne] http://babel.enssib.fr/document.php?id=282

c. Pochet, Bernard and Thirion, Paul. Formation documentaire et projets pédagogiques**. *Bulletin des Bibliothèques de France.* 1999, 44(1). pp. 16-22.

d. Chevillotte, Sylvie (dir) (2003) *La formation à la maîtrise de l'information à l'heure européenne : problèmes et perspectives*. Lyon : Presses de l'enssib, 2004, 232 p.

e. Chevillotte, Sylvie. Bibliothèques et Information Literacy : Un état de l'art. *Bulletin des Bibliothèques de France*, 2005, t.50, 2, pp. 13- 20

f. Bernhard, Paulette.(2002) "Recherche d'information et compétence informationnelle: une préoccupation d'actualité." *Argus*, vol. 31, no 2, p.46-48

g. Bernhard, Paulette.(1998). Apprendre à «maîtriser» l'information: des habiletés indispensables dans une «société du savoir», *Education et francophonie*, Volume XXVI, numéro 1.
   http://www.acelf.ca/c/revue/revuehtml/26-1/09-bernhard.html

h. Mittermeyer, Diane et Sauve Diane (2003). Étude sur les connaissances en recherche documentaire des étudiants entrant au 1er cycle dans les universités québécoises. Groupe de travail sur la formation documentaire, Sous-comité des bibliothèques.
   http://www.crepuq.qc.ca/rubrique.php3?id_rubrique=170&lang=fr

i. The main French journal, Bulletin des Bibliotheques de France published a special issue on Information Literacy : Formation des usagers (2005) *Bulletin des Bibliotheques de France*, 50, n°6

j. Some LIS students write interesting papers about Information Literacy. Some are on the website Formist (type de documents: publications scientifiques; travaux d'etudiants).The themes are compared studies; tools; IL and TIC, but no theses, at least in France.

D. Organizations

As stated in the introduction, these countries have different ways of organizing themselves.

Belgium has the working group EduDOC

In France, there is no specifically related IL associations and no specific working group in the main associations. The national coordinator is Formist.

Quebec has several associations. CREPUQ, association for Universities and colleges presidents from Quebec- Recteurs et principaux- has a working group on libraries and IL: Sous Comite des Bibliotheques groupe de travail sur la Formation Documentaire.

E. Training the Trainers

In Belgium, following an Edu*Doc* meeting on the librarian's professional training on IL, the librarian schools engaged a reflection on IL and some of them created IL courses for future librarians.

Furthermore, a training session was organised in 2004 for higher education teachers.

In France, librarians both in initial and continuous training follow "training the trainers courses", even though these courses could become compulsory in the LIS curricula. Students are mainly instructed at Enssib –National French LIS school- http://www.enssib.fr/. They attend at least 2 days courses on Information Literacy and several of them choose to attend an optional course on training.

Continuous development is offered at the regional level, by the URFIST –regional Units on Information. http://www.sup.adc.education.fr/bib/ and at the national level, at enssib.

In Quebec, EBSI – Ecole des Bibliothèques et Sciences de l'Information- at the University of Montreal - offers an optional course for student in initial training. http://www.ebsi.umontreal.ca/

Continuous development is organized differently and it seems that professionals attend meetings and seminars in order to keep up date.

F. Communication

1. Listservs, weblogs, websites

Belgium and Quebec have specific list serv: Edudoc, available in edudoc@lists.ulg.ac.be; and Formadoc, in FORMADOC@crepuq.qc.ca

In France, the weblog Formist Information http://blogformist.enssib.fr informs French speaking professionals on the developments of IL in French speaking countries and in other parts of the world.

EduDoc and Formist have websites dedicated to IL. Formist website gathers resources about IL –articles, proceedings, students papers- but also methodological courses on different disciplines and tutorials.

EduDOC proposes resources and publications about IL.

The website Form@net (Quebec) http://www.ebsi.umontreal.ca/formanet/culture.html is dedicated to IL at the secondary level. It gives definitions and develops ideas about IL.

2. Conferences on the Subject

All the countries organize conferences or seminar, some on a regular basis.

Edudoc group, in Belgium organizes seminars on specific topics.

The most important French speaking conference is Rencontres Formist, an annual conference, which started in 2001 (France). It gathers about 150 attendants, librarians or academic from France but also Belgium and Switzerland.

There are printed proceedings of the 3rd Rencontres (see publications).
Since 2005, 5th Rencontres, there are electronic proceedings on enssib website: http://babel.enssib.fr/.

— In Canada WILU/AAFD started in 1971. It originally was in English and French but during the last years it is English speaking only.
— But Information Literacy is often the topic of general conferences or specific seminars. For example, very recently

Some conferences were held once:

— Trainers from different French speaking countries participated to these colloquiums or workshops :
— ABCDEF Conference, Université Laval, Quebec, 1995. (Printed Proceedings)
— Les Ateliers francophones pour la formation documentaire, Gembloux, 1997- Proceedings on line
— http://www.cfwb.be/ciuf/bibliotheques/publications/bppd.htm

G. Francophone African Countries

Francophone African countries offer some technical types of instruction. One of their major issues is ICT and digitalisation.   Most of the libraries were until recently using printed catalogues and they often don't have real information systems or OPACS.   When courses exist, they focus on library instruction: bibliography, search on the printed catalogues. Some countries like Ivory Coast, Benin, Congo RD, Senegal, Burkina Faso or Burundi start to train the users and try to make them Information literate. These courses are not yet on digital resources and up to this day, it is not easy to make a State of the Art of the places, organizations and people involved in this new aspect of librarianship.

H. Conclusions

I. References

III. Latin America
Information Literacy State of the Art Report
December, 2006

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A. Introduction

Information literacy is still a scattered activity in the Latin American region. Some schools have IL programs, but they are few, most of them in the private educational sector. Most of the activity carried out in the region is at higher education institutions. The countries that have more solid activity are Argentina, Brazil, Chile and specially Mexico, although information literacy is seldom an official learning activity in the curricula. Some IL conferences and meetings have taken place in the last few years. However, IL topics are also included at general library science conferences. About a dozen books have been published in Latin America by now; and some serial articles are being published each year.

This report mainly covers Mexico, the country that reported more activity at the UNESCO/IFLA International Information Literacy Resources Directory up to now (http://www.uv.mx/usbi_ver/unesco/). The bias of the report towards Mexico has to do with the geographical location of the directory, as well as with the main, if not unique, Latin America library literature database located at UNAM, in Mexico City, that records the library publishing production of the region. The comments and generalizations to other Spanish-speaking countries and Brazil are personal experiences and assumptions-based on country visits of the author to some of the included countries.

1. Basic concepts of information literacy

There is not a unified term to denote information literacy in the Spanish-speaking world. The Spaniards have favored the phrase "Alfabetización informacional" in their recent meetings, a phrase that in Mexico is translated as "Alfabetización informativa". However, the term that has been coined in Mexico and used in some countries of Latin America, is "Desarrollo de habilidades informativas (DHI)", a term that also emphasizes the process rather than the result of user information training.

Another way to denote this information learning activity is simply using "Information Competencies". Some library professionals also use "User Education" and "User Instruction". There is a general reluctance to use information literacy as such, because it denotes "rather basic skills". Information literacy means, for most people, the challenge of not being able to read and write the challenge of being illiterate. Users who are graduates, professors and education administrators reject to attend workshops where they will be "alphabetized".

2. IL for daily life: citizens, workers, business

The development of Information competencies is still confined to the education sector, mainly at higher education institutions. There seems to be no activity yet in public libraries, or the private sector. Information training may occur in companies under other general subject training, such as when doing marketing training or when the staff requires to do research; but no official information literacy has been reported in the literature. Some efforts have been identified, though, such as the different resources (SMU, 2006) on information access that the Uruguayan Medical Union has made available to its members.

B. IL Products for Users

1. Know how materials for community centers, school, public libraries, special, university, and governments

The main libraries have printed materials on how to use general and specific information resources. This is probably one of the areas where there is more activity in the different types of libraries. Institutions, usually, at least those with certain budget, create manuals, flyers and other media to help users to get acquainted with information resources and to learn how to use and benefit from them; i.e., the Facultad Latinoamericana de Ciencias Sociales (FLACSO, 2006) has electronic documents available in their websites, manuals and tutorials on how to use catalogues, databases and other information services. There is also this kind of activity at government institutions; the Mexican statistics agency, INEGI (Instituto Nacional de Estadistica, Geografia e Informatica), has produced good guides to use the information that it produces (www.inegi.org.mx). Ministries from the major countries also have good guiding materials to teach users on how to consult their website and other resources. The Chilean government published a web site development guide called "Guía Web 1.0"; the aim of this document is to make websites more efficient, reliable and user friendly, i.e. it offers five checklists on ease of use, indexation, accessibility, speed of information retrieval and cyberspace presence of the site (Saavedra, 2004). Another Mexican institution, IFAI (Instituto Federal de Acceso a la Información Pública), offers practical guides for the citizen to exercise his or her right to access public information (IFAI, n.d.).

2. Library tours (General, specific library areas/services)

There are some libraries, those with a better technology base, that have produced

multimedia library tours or videos. Examples are the Universidad Autónoma de Ciudad Juárez (Lau, 2001), Universidad Veracruzana (Guadarrama & Longgi, 2006), Universidad del Valle de México (Moreno & Jiménez, 2005) and UNAM (Valdés, 1995; Rovalo, 2004). The hypermedia programs have been produced mainly in CD-ROMs to help new students to get acquainted with library services, but some others are available on the web, where the Universidad de Colima has a good lead (www.ucol.mx).

3. *Tutorials on how to use specific information resources (Electronic resources, printed media, Internet, other)*

Some leading academic libraries have worked in tutorials for their users, again, to show how to use databases, how to navigate in Internet. An example is the work done at Universidad Veracruzana, with a web-based resource to guide users on how to use electronic serials, language translators and the OPAC (Mendoza, 2005). Universidad Autonoma de Ciudad Juarez developed a multimedia program to teach undergraduates on how to benefit from the OPAC. The General Department of Public Libraries in Mexico has also created videos to train. Instituto Latino-americano para la Comunicación Educativa (ILCE), a multimedia education think-tank, has also videos for user information training (ILCE, 2006). The INEGI has produced web-based tutorials to use their cartographic resources too (INEGI, 2006). It is assumed that leading universities with good technology resources from the rest of Latin America have some learning tutorials for their users, such as the Virtual Training for users developed by Gloria Tinjacá and Luz María Cabarcas (2007) at the Pontificia Universidad Javeriana, in Colombia.

4. *Workshop/Hands on experiences (For students, faculty, citizens, other users)*

This kind of information literacy is well developed in major library organizations, like those at UNAM (Valdéz, Solís, & Ramírez. 2006; Rovalo, 2004), UDLA (2006) ITESM (2005), ITESO (Toledano, 2006), Universidad de Antioquia (UDEA, 2005), Pontificia Universidad Católica del Perú (Rengifo, Ada), and Universidad Católica Del Norte (UCN, 2006), among others. Most of them offer workshops for their different types of users. The UACJ was an organization early to offer regular hands on experiences to undergraduates and faculty. The faculty workshop has the catchy name MADRID (Manejo de Recursos Informativos para Docentes), a course offered at least twice a year (Mears, 2002). Professors have the motivation to attend the workshop because it is part of their academic training curricula. The student version was optional in the early start and later on it became compulsory. A special version of the workshops is devoted to graduate students. Chile has a number of similar experiences; a course for faculty at the Universidad de Antofagasta (Peragallo & Cortés, 2004), a course for students and professors at the Universidad de Concepción (González & Muñoz, 2004), and the different projects done at the Universidad Católica del Maule (Alarcón & Rojas, 2004), which seek to develop the IL of students and faculty, to build connections between faculty and librarians and to build learning communities with a focus in the library.

Some of these workshops are multi-level; they deal with the very basics of information literacy up to the more complex ethical considerations on information use. Some others, like that of ITESO, are supplied on professors' request for the students to get acquainted with specific databases or information services. The Universidad de Puerto Rico Bayamon has been offering the Infonexus (Maldonado, 2003) program for three years: an IL workshop array for students, faculty, university staff and extended community (public and private educational institutions).

5. Credit courses

Some universities are beginning to offer information credit literacy courses, in some cases, as full subject; that is the case of Universidad de las Américas in Puebla, where an introductory course on information culture has been attached in the university's curricula (Hermosillo, Méndez & Ostrovskaya, 2004). At the ITESM, all freshmen and new faculty are directed to an introductory course on their library's information services (ITESM, 2005; Arriaga, et. al., 2003). A similar action has been worked at UACJ (Lau, 2001). One of the most widespread experiences is the credit distance course required to first year students at the Clavijero Consortium of Higher Education in Veracruz (Lau, J. 2006); the web-based course has been made a compulsory subject by 29 universities and polytechnics. Despite this progress, there is a great deal of work to be done, so that information literacy becomes part of the curricula at the different levels of education. Librarians have been promoting information literacy at their institutions, but most of them still need to be heard. Despite IL has not become a credit course at the UNAM, the contributions of the Library Direction on IL and lifelong learning, described by María de Lourdes Rovalo (2004), must be mentioned as a token of the efforts being done.

C. Publications

1. Guidelines for information literacy

The only national IL guidelines on information literacy in the Spanish-speaking countries and Brazil are those published in Mexico (Cortés, J., González,. D. & Lau, J., Et al, 2002). The guidelines were drafted and approved by a large group of participants at the Information Literacy Conference organized in Ciudad Juárez, 2002 by the UACJ. They were endorsed by the National Council for Library Affairs of Public Higher Education Institutions (CONPAB-IES), the major academic library association in Mexico. The information literacy standards have been promoted and used to develop training programs, like the distance web-based credit course created in Veracruz, and the regular one offered in Juarez. There is a great need for countries to work on guidelines for the different types of users, especially at the different education levels. Some of this work is already being done at the Universidad Estadual de Campinas, Brazil that recently published the strategy to assess basic education teachers on information literacy (Belluzo, 2004). Other guidelines are published at different sources, i.e. Angulo's work (2003) on

assessing information competencies, which includes a practical example;

2. Information Literacy monographs of international coverage or impact

Nations with books on the subject are Colombia, Brazil, Chile and Mexico. The Universidad do Campinhas published the first book in this field in Brazil (Belluzo, 2005), and there is another one edited by Rosemary Passos and Gildenir Carolino Santos (2005). Edilma Naranjo Vélez (2003) published a book on IL in Colombia. Mexico has, on the other hand, about seven IL books edited; a couple of them by CUIB/UNAM (Hernández, 1998; Palacios & Vega, 2000), four by UACJ (Lau & Cortés. 2000, 2000, 2004; www.jesuslau.com) and one by Universidad de Yucatán. The number of monographs is an indicator of the information literacy activity in these countries. Other nations may have some publications but they were not identified.

3. Theses of international relevance

A wider search has to be done to identify theses on information literacy at library science schools. The countries that submitted theses were Colombia, Brazil, Mexico and Cuba. The subject matter of the works varies from feasibility of information literacy studies to the implementation of IL programs. Some of them are: Cruz, 2006; Duzdiak, 2001; García, 2004; González, 2005; Guzmán, 2003; Hatschbach, 2001; Jiménez, 2006; Martí, 2006; Medina, 2006; Ortíz; 1971; Palacios, 2003; Palacios, 2006; Pérez, 2003; Rodríguez, 2006; Ruíz, 2004; Uribe, 2004; Vazquez, 2000; Vega, 2003; Vélez, 2006; Viera, 2006; Viveros, 2000, López, 2005.

4. Translations of key international documents to different languages

5. Serials (Journals)

There is no specific journal devoted to information literacy in these countries, but the library serials include articles on the subject, some of them with more than one contribution to the field. Federation of Library Associations from Brazil has just released an issue (FEBAB, 2006) of its journal to information literacy. The main library journal of the region, the Centro Universitario de Investigaciones Bibliotecológicas has Published some articles in the field.

D. Organizations

1. Associations and professional bodies

Federation of Library Associations of Brazil recently created an ad-hoc information literacy committee to promote this activity in its membership. Mexico has the binannual Information Skills Development (That is an information literacy Meeting that has a website for national IL resources), www.uacj.mx/dhi. A new non-governmental body is emerging, the Comunidad DHI that aims to promote

information literacy awareness and act as a clearing house for IL materials (www.DHI.com).

2. Research projects / Research centers

Mexico has information competencies as research subject at CUIB, the major library research center in Latin America. This center was one of the early promoters of user education. At least a couple researchers focus their research activity to IL that in turn has published some monographs on the subject. The Escuela Interamericana de Medellin, Colombia, has carried out a Latin American study on the development of information literacy activities, using a survey technique (Naranjo, 2006), as well as studies on virtual education and IT use (Uribe, 2006).

E. Training the Trainers

Courses to train librarians and information professionals

There are no formal studies offered by library schools, but there has been information literacy training as continuing education given by some of the leading IL organizations in the region. The UACJ Libraries from Mexico has facilitated a training the trainers course that has been facilitated to other universities´ library since 1998 (Lau, 2001). There has been collaboration from Mexico to other Latin American countries, offering workshops to other Latin countries, such as one in Brazil, Cuba, Guatemala, and Peru given by the author (Lau, Jesus, 2006) of this report. Mexican library conferences have organized workshops on the subject. This year, two courses were scheduled: one for public library staff and another for educational institutions. The Comunidad DHI and the Universidad Veracruzana will offer one on the pedagogy of information literacy, with the assistance from University of New Mexico in Veracruz, Mexico, later this summer (Lau, 2006). The General Library Direction of UNAM conducts also a course to IL train librarians (UNAM, 2003).

F. Communication

1. Conferences on the subject

The first Spanish-speaking information literacy conference was organized in Juarez, Mexico in 1998, a congress that has regurlarly met every two years. It has been a meeting venue for some information competencies specialists from Latin America and the United States. The fifth conference is due to take palce in October 2006 with the focus on IL evaluation and assessment. A major Latin American conference is under schedule for 2007, with the possible sponsorhip of UNESCO. The proposed location is Valparaiso, Chile, with support from Cuba and Mexico. The Universidad Católica del Maule recently celebrated the first seminar on Information Literacy and information management, with two speakers from Spain, one from México, another from Colombia, and some from Chilean librarians

(UCM, 2006). Proceedings of this conference will be published later. Gabriela Sonntag (See Extended Bibliography) has compiled a list of papers published in Spanish at IL conferences that not only includes Latin America, but also Spain and some from The United States (http://library.csusm.edu/departments/ilp/ALFIN/alfinweb/Ponencias.htm.).

2. Listservs, websites

Mexico has a listserv for information literacy. It is a venue to keep communication and exchange of ideas among those interested in the subject. The main website is sponsored by UACJ (Mears, 2006), some others are kept by independent contributors (Vargas, 2006; Chiesa, 2006) in Argentina; all of them act as repositories of the literature and gateway to other IL websites.

G. Conclusions

H. References

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IV. Nordic countries:
Finland, Denmark, Norway and Sweden
Information Literacy State-of-the Art Report

November, 2006

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A. Introduction

1. Nordic cooperation

The Information Literacy issues have been addressed also at a Nordic level through NordINFOLIT, which is a Nordic collaboration to encourage development, to find common solutions and to document current Nordic and national projects in the field information literacy. This collaboration was formed in 2001 with support from the Nordic Council for Scientific Information, which ceased to function as an organization in 2004. The activities in the still continuing collaboration in information literacy (through NordINFOLIT) focus on summer schools, seminars on standards and guidelines and international conferences. A web forum and network for discussing and documenting Nordic information literacy activities are still functioning due to efforts done among the members. The NordINF0LIT steering committee has members from all Nordic countries.

In the Nordic countries the terms used for information literacy (IL) refer to competencies. In Danish the word used is "informationskompetence", in Norweigian "informasjonskompetanse" and in Swedish "informationskompetens". The Finnish word used is "informaatiolukutaito", which is literally information literacy.

In the Nordic countries the initiatives regarding information literacy started in institutions of higher education and delivering training in all aspects of IL has been on the agenda of several academic libraries. As examples could be mentioned Chalmers University of Technology in Sweden, which from the beginning of 1980 developed comprehensive programs in information literacy and Helsinki University of Technology in Finland, which have got their courses for students in information

retrieval integrated in the curriculum of the university already in the 1970s. Today the Bologna-process or the harmonization of the structure of university education in Europe gives a opportunity to intensify the integration of IL into the university studies in the Nordic countries.

2. National policies and activities

a. *Denmark*

In the Danish university law (Lov nr 403, 28/05/2003) the libraries are mentioned very shortly and the information retrieval skills among the students and their IL capabilities are not at all referred to. In a strategic report for Danish university libraries issued in 2003 by the Board of University Principals (Rektorkollegiet) is the term information literacy not mentioned but the concept information retrieval is mentioned in connection with e-learning. (http://www.rks.dk/sider/publikationer/danske/videntiltiden.pdf).

The aim of the Forum for User education at the Danish Research Library Association is to introduce the information literacy on the agenda in the educational institutions. The information literacy is a growing activity in Danish Libraries and the Danish Electronic Research Library (DEF) initiative has influenced information literacy developments in higher education.

b. *Finland*

The Finnish Ministry of Education has in its development plan "Education and Research 2003 – 2008" stated that" libraries will contribute to the development of teaching and study methods and on their part ensure that students graduating from universities have information literacy competencies" (http://www.minedu.fi/julkaisut/koulutus/2004/opm08/opm08.pdf)

The Finnish Virtual University, which is a state funded project, prepared a study program for information literacy. The central aim of the project, which is coordinated by the University of Helsinki, is to integrate information literacy as part of academic studies. The purpose of the information literacy curriculum is to define the central elements of information literacy and assist in the development of the contents of courses in information skills. The recommendation describes the minimum level of objectives in information literacy. The integration of the recommended curriculum in the study programs of Finnish universities would greatly enhance the comparability of degrees and the transferability of credits from one university to another. (http://www.helsinki.fi/infolukutaito/english/recommendation.pdf)

c. *Norway*

In Norway, in the Kvalitetsreformen, which mean reforming the quality in the Norwegian higher education, the libraries were not much mentioned. But in the

report issued by Universitets- og Hogskoleradet (The council for Norwegian universities and colleges) and based on this "Kvalitetsreformen" is the role of the library determined as an essential part in the learning processes of the students by guiding the students through the information flow and contribute to enhance their competency in information literacy.
(http://www.uhr.no/utvalg/bibliotek/Notatkvalitetsreformen2004.htm)

Regarding the role of school libraries there is an other committee (Kirke-, utdannings- og forskningskomiteen om kultur for laering) indicating that it is natural for these libraries to take a part as a learning arena in the work to develop learning strategies, information literacy and digital competency.
(http://www.stortinget.no/inns/2003/pdf/inns-200304.268.pdf).

d. *Sweden*

In the Swedish Law for Higher Education (Hogskolelagen 2002), Chapter 1 Section 9 is stated that the higher education shall also develop the students' abiblity to seek and evaluate knowledge on a scientific level and to follow the development of knowledge. This is a part of what is today often expressed by the concept "information literacy".

Most of the IL-projects in the library sector is initiated by BIBSAM, a department within the Royal Library (National Library of Sweden), with the main objective to enhance and increase the efficiency of information provision for higher education and research. (http://www.kb.se/BIBSAM)

One of the IL-projects commissioned by BIBSAM is a national survey concerning the implementation of IL.The project was aimed at giving a description of the implementation of the IL as described in the Chapter 1, sect. 9 in the Swedish Law of Higher Education.
http://www.kb.se/BIBSAM/bidrag/projbidr/avslutade/2005/someone_elses_job.pdf

B. IL Products for Users

In all the Nordic countries different kinds of tutorials have been developed. In Denmark, the Metro –project was an example of a project developed as a joint venture between the Library and the Faculty at the Arhus School of Business. The METRO-project was a virtual learning resources centre using a metro map metaphor to guide students to quality information and learning resources.

Another project, which has been very successful, is the SWIM – Streaming Web-based Information Modules – project developed by the Aalborg University Library, which use streaming-server technology, in which the tutorial enables the student to make a number of choices about search strategy and problem solving. SWIM is based on Carol Kuhlthau's (1994) model of the information searching process. The

SWIM modules link together project work, information searching and the student's emotional state while working. (http://www.swiminfo.dk).
The SWIM-program is also used at Chalmers University of Technology in Sweden and adapted and translated to the needs of the Business School in Bergen, Norway. (http://www.ub.uib.no/felles/IK/index.htm)

VIKO is an interactive E-learning tool, developed at the NTNU Library. The VIKO concept is based on information literacy, focusing on problems and solutions. (http://www.ub.ntnu.no/viko/en/start.php)

A catalogue of virtual courses and tutorials in information retrieval and management at Finnish university libraries could be accessed at http://www.helsinki.fi/opiskelijakirjasto/hankkeet/arkisto/tiedonhallinta/oppimateriaal it.html. The catalogue includes also courses, which have been translated in English and it gives a comprehensive picture of what has been done in Finland.

C. Publications

1. Reviews

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b. Virkus, S. 2003. Information literacy in Europe: a literature review. *Information Research 8(4), paper no. 159.* [Available at http://informationr.net/ir/8-4/paper159.html]

c. Sinikara, K. & Jarvelainen, L. 2003. Information literacy development in Finland. *Library Review 52(7) 333-339.*

d. Skov, A & Skaerbak, H. 2003. Fighting an uphill battle: teaching information literacy in Danish institutions of higher education. *Library Review 52(7) 326-332*

2. Other publications:

a. Blaabjerg, N.J- 2005. User centered information literacy education – applications of multimedia in e-learning and blended learning. The 3rd international conference on Education and Information Systems: EISTA 2005. Orlando, Florida, USA [accessed in March 2006 at http://www.swiminfo.dk/pdf/EISTA05_E721YC.pdf)

b. Bang, T., Groenbaek, K. & Steen Hansen, P. Using a metro map metaphor organizing web-based learning resources. Aarhus School of Business [accessed in March 2005 at:
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d. Perselli, Ann-Katrin. 2002. Technology students and information management – a study of information literacy at Linköping Institute of Technology influenced by grounded theory). Uppsats. Borås.(Teknologistudenter och informationshantering – en studie om informationskompetens vid Linköpings Tekniska högskola influerad av grounded theory)
[accessed in March 2006 at http://www.hb.se/bhs/slutversioner/2002/02-25.pdf]

3. Standards

The ACRL information literacy standards have been translated to Finnish and Swedish. The Finnish translation is accessible at:
http://www.helsinki.fi/opiskelijakirjasto/hankkeet/arkisto/infoluku/osaamistavoitte et.htm, and the Swedish preliminary version is available in a printed version.

D. Organizations

All the national library organizations have working groups dealing with information literacy issues. As an example already mentioned in the introduction is the Forum for User education at the Danish Research Library Association is to introduce the information literacy on the agenda in the educational institutions. At the Nordic level the activities is channeled through NordINFOLIT.

E. Training the trainers

The Nordic Summer Schools have been arranged yearly since 2002 by NordINFOLIT and a local working group from the arranging Nordic country, which changes every year.

The aim of the summer schools is to promote the competence and to strengthen the Nordic network of librarians interested in information literacy and learning processes.

Also the national library organizations and their working groups are arranging seminars and training sessions.

F. Communication

Forthcoming conferences

Creating Knowledge IV: Empowering the student through cross-institutional collaboration. International conference in Copenhage, August 16-18, 2006

The conference is organized on the behalf of NordinfoLIT, the Nordic Forum for Collaboration on Information Literacy, by the Forum of User Education, which is an interest group of the Danish Association of Research Libraries. Co-organizers are the Danish Network for University Pedagogy, a grassroot initiative of university teachers with intentions to develop the quality of university education and teaching. This is the fourth conference on Creating Knowledge, the former CK conferences have been in twice in Malmo, Sweden and in Akureyri, Iceland. A link to these former conferences is on the conference homepage. http://www.ck-iv.dk/

All the national library associations have their list serves, which also can be used for IL-issues. In addition to these there are also specific list-serves meant only for IL-discussions. As an example could the Swedish list for librarians responsible for learning issues in the Swedish technical universities. All these list are restricted and could be used only by their members, who would have to be approved by the list operator.

G. Conclusions

H. References

V. Russia
Information Literacy State-of-the Art Report
April, 2007

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a. Introduction

Basic Concepts of Information Literacy: Russian Point of View. Relation to Other Competencies. Information Competencies and Life-Long Learning.

There is a number of widespread terms often used as synonyms both in Russia and many other countries: "information literacy", "information culture", "information knowledge" "information competency", "media literacy", "multimedia literacy", "computer literacy", "media culture", "media awareness", "media competence", etc.

For example, N.I. Gendina, who analyzed various definitions related to information culture, points to this terminological inconsistency: in the modern world, "no unified terms such as 'computer literacy', 'information literacy' or 'information culture', often without clear definitions, increasingly replace such semantically close notions denoting human information knowledge and abilities as 'library and bibliography culture', 'reading culture', 'library and bibliography knowledge', and 'library and bibliography literacy'" [Gendina, 2005, p. 21].

Regarding media literacy as a major component of information literacy, it would be worth referring to a survey conducted among international experts in this field [Fedorov, 2005]. Many of them agreed (and were absolutely right) that media literacy was a result of media education. Yet there are certain discrepancies and confusion between such terms as "media education", "media literacy", and "media studies".

Famous Russian linguist Sergey Ozhegov defines *culture* as (1) the sum total of economic, social, and spiritual achievements of human beings; (2) the state or quality of being *cultured*, i.e., being at a high level of cultural development or corresponding to it; (3) the raising of plants or animals; (4) a high level of something, the development or improvement of an ability [Ozhegov, 1989, p. 314]. Hence it follows that *media culture* (e.g., *audiovisual culture*) is the sum total of material and intellectual values in the sphere of media and a historically defined system of their reproduction and functioning in society. In relation to the audience, it may be a system of personality development levels of a person capable of media text perception, analysis, and appraisal, media creativity, and assimilation of new media knowledge.

According to N.A. Konovalova, *personality media culture* is the dialogue way of interaction with the information society, including the value, technology, and personality-creativity components, and resulting in the development of interaction subjects [Konovalova, 2004, p. 9].

Information culture may also be regarded as a system of personality development levels, a "component of human culture and the sum total of sustained skills and ongoing application of information technologies (IT) in one's professional activity and everyday practice" [Inyakin, Gorsky, 2000, p. 8].

N.I. Gendina believes that "*personal information culture* is a part of human culture, the sum total of information world outlook and system of knowledge and skills ensuring independent purposeful activity to meet individual information needs by using both traditional and new information technologies. This component is a major factor of successful professional and nonprofessional work and social protection of an individual in the information society" [Gendina, 2005, p. 21].
Y.S. Inyakin and V.A. Gorsky point out that the model of shaping information culture includes personality culture components (knowledge, value and goal system, experience of cognitive and creative activity and communication) in relation to IT components (databases, Internet, TV, applications, e-mail, PowerPoint, etc.) [Inyakin, Gorsky, 2000, p. 10].

In our opinion, the notion of *information culture* is broader than *media culture*, because the former pertains to complex relationships between personality and any information, including media and the latter relates to contacts between the individual and media.

Comparing traditional dictionary definitions of the terms "literacy" and "competence" also reveals their similarity and proximity.

For example, S.I. Ozhegov defines the term "**competent**" as (1) knowledgeable and authoritative in a certain area; and (2) possessing competence, and the term "**competence**" as (1) the matters one is knowledgeable of; and (2) one's powers or authorities [Ozhegov, 1989, p. 289]. The same dictionary defines a **literate** person as (1) able to read and write, also able to write correctly, without mistakes; and (2) possessing necessary knowledge or information in a certain area [Ozhegov, 1989, p. 147].

Encyclopedic dictionaries define *literacy* as (1) in a broad sense - the possession of speaking and writing skills in accordance with standard language requirements; (2) in a narrow sense – the ability to read only or to read and write simple texts; and (3) the possession of knowledge in a certain area [*Soviet Encyclopedic Dictionary*, 1984, p. 335]. The term *competency* [*compete(re)* (to) achieve, meet, be fitting] is defined as (1) the powers given by a law, statute or another enactment to a concrete office or an official; and (2) knowledge or experience in a certain area [*Soviet Encyclopedic Dictionary*, 1984, p. 613].

There are many other definitions of literacy and competence (competency), but in general, they only differ stylistically.

Regardless of the similarity of definitions of "competence" and "literacy", we are inclined to agree with N.I. Gendina that in popular understanding, "the word 'literacy' has a connotation of simplicity and primitiveness, reflecting the lowest, elementary, level of education" [Gendina, 2005, p. 21]. At the same time, the term "**competence**" seems to be more articulate and precise in relation to human knowledge and abilities than the general and multivalent term "*culture*".

Such terms as "information literacy", "media literacy", "information culture of personality" or "personality media culture" were used in some writings of past years [Fedorov, 2001; 2005 etc.], but the above terminological analysis leads us to the conclusion that the terms "*information competence*" and "*media competence*" are more accurate in denoting the individual' abilities to use, critically analyze, appraise, and transfer information and media texts in various types, forms, and categories and to analyze complex information processes and media functioning in society. In doing so, *media competence* can be regarded as a component of the more general term "*information competence*".

Naturally, it is assumed that human information competence can and must be improved in the process of life-long learning. This is the case for school and university students, economically active population and retired citizens (e.g., the information literacy development program for retired citizens at the Media Education Center of the South Urals University in Chelyabinsk).

We have developed a classification of information literacy/competence indicators (see Table 1) mindful of the approaches of R. Kubey, J. Potter, and W. Weber and the six basic dimensions of media education, outlined by leading British media educators [Bowker, 1991; Hart, 1997, p. 202; Buckingham and Sefton-Green, 1997, p. 285 etc.]: **media agency** (studying media text authors' work, functions, and goals), **media categories** (studying media/media text typology – forms and genres), **media technologies** (media text creation methods and technologies), **media languages** (i.e., verbal, audiovisual, and editing aspects of media texts), **media representations** (ways of presenting and rethinking reality in media texts, authors' concepts, etc.), and **media audiences** (audience and media perception typologies).

Besides, we outlined the high, medium, and low levels of development for each information literacy/competence indicator. Undoubtedly, this kind of typology is rather tentative. Yet it gives an idea of a differentiated approach to information literacy/competence development when the high level of the communication or creativity indicators may be accompanied by the low level of the appraisal indicator. As for the perception indicator, many people may have one expressed indicator (e.g., "initial identification") while the rest of them may be undeveloped, "dormant". One thing is clear: high-level information literacy/competence is impossible without a developed media perception and ability to analyze and appraise media texts. Neither the frequency of communication with media nor media text creation skills by themselves can make the individual informational literate/competent.

Table 1. Information Literacy/Competence Classification

№	Information Literacy/Competence Indicators	Description of Information Literacy/Competence Indicators
1	Motivation	Motives to contact information flow: genre- or subject-based, emotional, epistemological, hedonistic, psychological, ethical, intellectual, esthetic, therapeutic, etc.
2	Contact (Communication)	Frequency of contact/communication with information flow
3	Content	Knowledge of media terminology, theory, and history
4	Perception	Ability to perceive information flow (including media texts)
5	Interpretation/Appraisal	Ability to analyze critically the functioning of information flows and media in society and media texts of various genres and types, based on perception and critical thinking development levels
6	Activity	Ability to select information and media and to create/distribute one's own information; self-training information skills

7	Creativity	Creative approach to different aspects of information/media activity (perceptive, play, artistic, research, etc.)

Detailed descriptions of the audience's media literacy development levels for each indicator (based on the above classification) are given in Tables 2-8.

Table 2. Motivation Indicator Development Levels

№	Motivation Indicator Development Levels	Description of Motivation Indicator Development Levels
1	High	A wide range of genre- or subject-based, emotional, epistemological, hedonistic, psychological, creative, ethical, intellectual, and esthetic motives to contact information flows, including: • media text genre and subject diversity; • new information; • recreation, compensation, and entertainment (moderate); • identification and empathy; • confirmation of one's own competence in different spheres of life, including information; • search of materials for learning, scientific, and research purposes; • esthetic impressions; • philosophic/intellectual; • ethical or esthetic dispute/dialogue with information message authors and critique of their views; • learning to create one's own information messages.
2	Medium	A range of genre- or subject-based, emotional, epistemological, hedonistic, psychological, ethical, and esthetic motives to contact information flows, including: • information and media text genre and subject diversity; • thrill; • recreation and entertainment; • identification and empathy; • new information; • learning ethical lessons from information messages; • compensation; • psychological "therapy"; • esthetic impressions; • weakly expressed or absent intellectual and creative motives to contact; • information flows.
3	Low	A narrow range of genre- or subject-based, emotional,

		hedonistic, ethical, and psychological motives to contact information flows, including: • entertainment information and media texts <u>only</u>; • thrill; • recreation and entertainment; • compensation; • psychological "therapy"; • absent esthetic, intellectual, and creative motives to contact information flows.

Of course, the above motives largely depend on such factors as the environment (micro and macro), communication conditions, heredity/genetic code, education/upbringing, age, gender, etc.

Table 3. Contact Indicator Development Levels

№	Contact Indicator Development Levels	Description of Contact Indicator Development Levels
1	High	Everyday contacts with various types of information flows and texts.
2	Medium	Contacts with various types of information flows and texts a few times a week.
3	Low	Contacts with various types of information flows and texts a few times a month only.

This indicator is ambivalent. On the one hand, the audience's high level of contacts with various information flows does not automatically mean the high level of information literacy in general (one may watch TV, videos or DVDs for hours every day but be still unable to analyze media texts). On the other hand, low-frequency contacts may mean not only the individual's introvert character but also his high-level selectivity and reluctance to consume bad-quality (in his opinion) information.

Table 4. Content Indicator Development Levels

№	Content Indicator Development Levels	Description of Content Indicator Development Levels
1	High	Knowledge of most of the basic terms, theories, and history of mass communication and information; clear understanding of mass communication processes and information effects in the social and cultural context.
2	Medium	Knowledge of some basic terms, theories and facts of history of mass communication processes and information effects.
3	Low	Lack of knowledge (or minimum knowledge) of basic

		terms, theories and facts of history of mass communication processes and information effects.

Table 5. Perception Indicator Development Levels

№	Perception Indicator Development Levels	Description of Perception Indicator Development Levels
1	High: "comprehensive identification" (with the author of an information message or media text)	Identification with the author of an information message or media text with basic components of primary and secondary identification preserved.
2	Medium: "secondary identification" (with a character (actor) of an information message or media text)	Identification with a character (actor) of an information message or media text, i.e., the ability to empathize with a character of a message or text, to understand his/her mentality, motives, and perception of certain elements of the message or text (details, etc.)
3	Low: "primary identification" (naïve perception of an information message or media text)	Emotional and psychological connection with the environment and story line (sequence of events) of a message, i.e., the ability to perceive the sequence of events of a message (text) and naive identification of reality with the content of any text; assimilation of the message environment.

When analyzing perception indicator development levels, it should be noted that the majority of people remember 40 percent of what they saw and 10 percent of what they heard [Potter, 2001, p. 24], and that the perception of information is both an *active* and *social* process [Buckingham, 1991, p. 22].

The conclusion that follows is that there are many factors contributing to the success of pop culture texts: reliance on folklore and mythology; permanency of metaphors; consistent embodiment of the most sustained story lines; synthesis of the natural and supernatural; addressing the emotional, not the rational, through identification (imaginary transformation into characters and merger with the aura of a work); protagonists' "magic power"; standardization (replication, unification, and adaptation) of ideas, situations, characters, etc.; motley; serialization; compensation (illusion of dreams coming true); happy end; rhythmic organization of movies, TV programs or video clips where the audience is affected not only by the content of images but also their sequence; intuitive guessing at the audience's subconscious strivings; etc.

Table 6. Interpretation/Appraisal Indicator Development Levels

№	Interpretation/Appraisal Indicator Development	Description of Interpretation/Appraisal Indicator Development Levels

	Levels	
1	High	Ability to analyze critically the functioning of information flows and media in society given various factors, based on highly developed critical thinking; analysis of messages and texts, based on the perceptive ability close to comprehensive identification; ability to analyze and synthesize the spatial and temporal form of a text; comprehension and interpretation implying comparison, abstraction, induction, deduction, synthesis, and critical appraisal of the author's views in the historical and cultural context of his work (expressing reasonable agreement or disagreement with the author, critical assessment of the ethical, emotional, esthetic, and social importance of a message, ability to correlate emotional perception with conceptual judgment, extend this judgment to other genres and types of information messages, connect the message with one's own and other people's experience, etc.); this reveals the critical autonomy of a person; his/her critical analysis of the message is based on the high-level content, motivation, and perception indicators.
2	Medium	Ability to analyze critically the functioning of information flows and media in society given some most explicit factors, based on medium-level critical thinking; ability to characterize message characters' behavior and state of mind, based on fragmentary knowledge; ability to explain the logical sequence of events in a text and describe its components; absence of interpretation of the author's views (or their primitive interpretation; in general, critical analysis is based on the medium-level content, motivation, and perception indicators.
3	Low	Inability to analyze critically the functioning of information flows and media in society and to think critically; unstable and confused judgments; low-level insight; susceptibility to external influences; absence (or primitiveness) of interpretation of authors' or characters' views; low-level tolerance for multivalent and complex texts; ability to rehash a story line; generally, analysis is based on the medium-level content, motivation, and perception indicators.

Table 7. Activity Indicator Development Levels

№	Activity Indicator Development Levels	Description of Activity Indicator Development Levels
1	High	Practical ability to choose independently and create/distribute messages or texts (including those

		created personally or collectively) of different types and genres; active information/media self-training ability.
2	Medium	Practical ability to choose and create/distribute messages or media texts (including those created personally or collectively) of different types and genres with the aid of specialists (consultants).
3	Low	Inability (or very weakly expressed ability) to choose and create/distribute messages or texts; inability or reluctance to engage in information/media self-training.

Table 8. Creativity Indicator Development Levels

№	Creativity Indicator Development Levels	Description of Creativity Indicator Development Levels
1	High	Expressed creativity in different types of activity (perceptive, play, esthetic, research, etc.) connected with information flows and media (including computers and Internet).
2	Medium	Creativity is not strongly expressed and manifests itself only in some types of activity connected with information flows and media.
3	Low	Creative abilities are weak, fragmentary or absent at all.

Regretfully, there is a danger of narrowing down information literacy/competence to computer or Internet literacy levels (which is the case with some Russian organizations and associations). In our view, such practices ignore influential mass media (the press, TV, radio, and cinema), which is a discriminatory approach to the problem.

Thus we arrive at the conclusion that *the information literacy/competence of personality is the sum total of the individual's motives, knowledge, skills, and abilities (indicators: motivation, contact, content, perception, interpretation/appraisal, activity, and creativity) to select, use, create, critically analyze, appraise, and transfer information messages and media texts in various forms and genres and to analyze the complex processes of information flows and media functioning.*

Official documents issued by the Russian Government emphasize the importance of information literacy in modern society. In particular, the creation of a New Perspective Russian Youth Information Network is one of the priority areas in the Youth Policy Strategy for 2006-2016, developed by the Russian Ministry of Education and Science. It is aimed to involve young men and women in the process of search, creation, application, and popularization of relevant information and values needed for a higher quality of life in Russian society, and development of mechanisms and forms of access to information for youth audiences. There is also a clear understanding of the e-Government concept in Russia.

The organizations that have played a key part in popularizing the information literacy concept include: IPOS UNESCO IFAP (Russia); the Russian Library Association; the All-Russian School Libraries Association; the UNESCO Institute for IT in Education; the State Research Institute of Information Technologies and Telecommunications; the Russian IFLA Section for Information Literacy; the Russian Communicative Association; and the Intel's "Learning for the Future Programme".

IT is a common core subject in all Russian schools that helps promote information literacy. Many universities and teacher training colleges have IT schools within their structure to train IT specialists and instructors for educational institutions of different levels.

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b. IL Products for Users

Russian higher learning institutions and their research branches contribute considerably to the promotion of information literacy. For example, the Kemerovo State University of Culture and Arts runs a Research Institute for IT in the Social Sphere, a regional branch of the UNESCO "Information for All" Programme in Russia (Director: professor N.I. Gendina; http://nii.art.kemerovonet.ru/index.php). The Institute is a research facility studying information literacy and information culture problems. Its strategy aims to develop a theoretical and methodological foundation to prepare citizens for life in the information society; and technology and methodology of information education.
The Institute conducts tests and experiments to introduce into practice ways and means ensuring a higher level of information literacy for different population categories, conferences and workshops and prepares publications.

It has developed, tested, and applied (not only in Kuzbass but also in other regions) a concept and technology of a personal information culture formation and created a set of teaching and learning materials for a higher efficiency of work in that area at general and specialized secondary and higher education institutions and libraries.

The concept was developed as a result of streamlining information training terms and definitions, identifying the information nature of radical changes in modern education, and understanding the close relationship between education quality and one's information culture development level.

The concept provided for the development of a training course model ("Fundamentals of a Personal Information Culture Formation") that underlay a set of tutorials for different categories of learners: school students from the 1st to the 11th grade, teachers, undergraduates and postgraduates of educational institutions of culture and arts. All those tutorials, regardless of user categories, have the same purpose – helping users in the "information explosion" environment and teaching them rational techniques of information search, analysis, and synthesis and methods of "information self-service". The integrative character of the course helps to achieve this goal, because it results from achievements in many disciplines – IT, library and bibliography science, applied linguistics, functional stylistics, text theory, applied psychology, logics, and reading culture.

The course model is based on general methodological principles of information education: cultural studies approach, systemic approach, integration, activity approach, technology approach, and continuity. The activity approach means that the course is structured mindful of the user's training or professional information needs, not the standpoint of the librarian or IT specialist trying to explain to teachers or learners the structure of the library, information service or PC and details of library, bibliography, information or computer technology.

Each tutorial contains the following main sections: "Information Resources and Information Culture in Society", "Major Types of Information Search Tasks and Solution Algorithms", "Analytical and Synthetical Work with Information Sources", and "Technologies of Preparation and Presentation of Results of Users' Training or Professional Activity (Teaching, Learning, and Research)".

These sections constitute the obligatory invariable part of the course, aimed to accomplish the following objectives: giving learners an idea of world civilization accession to the information society; explaining to them the complexity and diversity of information resources to them; teaching them data search and analysis algorithms, data retrieval, appraisal, and processing, resulting in new data; and the technology of preparation and presentation of results of users' training, research or professional activity.

The variable part of the course "Fundamentals of a Personal Information Culture Formation" is made mindful of such factors as age, type and level of training, character of activity (learning, working), branch specialization, information culture level, information needs, etc.

This is reflected in the selection of both training content and publications included in recommended literature lists. Although the tutorials are strictly profiled (for school learners and teachers, university students and instructors), their application can be extended. Based on the activity approach and the invariable "core" of the course, it is possible to develop diverse training programs on basic aspects of information culture. For example, a tutorial for senior high school students can easily be transformed into a tutorial for specialized secondary education institutions. Likewise, a tutorial for higher learning institutions of culture and arts can be adjusted for students of technology, agriculture, medicine, etc. Tutorials for teachers, researchers, and postgraduates are also adjustable.

The work carried out along this line for many years by the Institute was summarized in the fundamental monograph *Formation of a Personal Information Culture: Theoretical Principles and Modeling of the Syllabus's Content* by N.I. Gendina, N.I. Kolkova, G.A. Starodubova, and Y.V. Ulenko (Moscow, 2006, p. 512).

Russian scholars actively participate in international projects studying citizens' information literacy. In 2006, Professor N.I. Gendina, a member of the Standing Committee of the IFLA Section for Library Theory and Research (LTR), took part in the international project IFLA's Role in Diffusing Professional Norms and Standards in Librarianship, organized by LTR and Division VII: Education and Research. The study was part of preparation for the 72nd IFLA General Conference in Seoul (August 2006).

The study was aimed to assess IFLA's role in promoting citizens' information literacy, to define the notion of information literacy by Russian experts, to identify barriers to a higher level of citizens' information literacy, and to formulate Russian specialists' recommendations to this effect. The IFLA list of questions underlay an information literacy survey conducted among leading Russian librarianship and information experts. Its results were presented in the report in English forwarded to IFLA (see http://www.ifla.org/IV/ifla72/papers/137-Gendina-en.pdf). N.I. Gendina made a report and a presentation (IFLA's Role in Diffusing Professional Norms and Standards in Librarianship: International Project Results in Russia) at the 72nd IFLA General Conference in Seoul (August 2006).

The European Computer Driving License Program (ECDL) for PC users' higher level of information literacy and knowledge standards is being carried out in Russia for the last several years. The ECDL uniform qualification standard was developed under the auspices of the European Commission to modernize public administration, education, and business. Since 1995, largely due to the Commission's official recommendations, ECDL certification has become a global standard of user competence, recognized and practiced by international organizations (UNDP, UNESCO, Red Cross), ministries of education (Australia, Austria, Holland, Hungary, Italy, Jordan, Poland, and Norway), and government e-learning programs (UK, Germany, Estonia, Hungary, Italy, and Norway).
The program is carried out in 70 percent of the world's countries.

In 2005, IPOS UNESCO IFAP (Russia) and ECDL signed a cooperation agreement. The same goals and similar ideological principles made it possible for ECDL and UNESCO to take joint efforts to promote the information society in Russia and ensure citizens' access to global network resources.

Shaping information and knowledge society is an urgent task of social development. To provide public access to information resources and to solve the problem of education for all, the governments of many countries and international organizations develop technical infrastructure, computerize civil service and public administration, and introduce into practice electronic recordkeeping and interactive systems of contacts with citizens. Yet citizens are still unable to take advantage of those opportunities and to understand how ICT can be used for effective self-realization. Investment in ICT has so far been ineffective.

The World Summit on the Information Society (WSIS) and UNESCO flagship programmes' ("Information for All" and "Education for All") conferences pointed to this outstanding problem. In May 2005, the Council of Europe adopted the Declaration of Human Rights and Rule of Law in the Information Society to implement those provisions through multilateral partnership governance in the interests of the State, business, and individual.

Government initiatives in the sphere of information in many countries are aimed to provide citizens, regardless of gender, age, social status or physical ability, with access to information resources, to increase learners' and teachers' mobility, and to involve citizens in interaction with the government through Internet. In view of this, PC users' large-scale training is becoming increasingly important. The e-Citizen program was developed for this purpose.

The program was developed under the auspices of the ECDL Foundation, a leading international organization to create and introduce into practice uniform ICT standards. Its experience of interaction with over 100 IT associations in 166 countries and official support to its efforts by the EU and many national governments made the ECDL Foundation the best candidate to develop such program.

The e-Citizen project is intended for beginners that have never operated a PC but are eager to join the world information community and use the computer in everyday life. Their training performance is confirmed by the independent test at the end of the course. The trainees who pass the test are issued international certificates (ECDL).

The program is being carried out successfully in the UK, Finland, Norway, and other European countries. According to the Price Waterhouse Coopers report of August 2004, prepared for the Chair (the Netherlands), e-Citizen was recognized as the most effective e-learning program for the transition from "access for each" to "knowledge for each". Mr. Pedro Miguel Santos de Sampayo Nunes, Head of Department A, support the program: Information Society Strategy and e-Europe; CTO (Commonwealth); No Child Left Behind (USA); and EQUAL – EU Funding.

The course is created by international working groups under the umbrella of the EU, UNESCO, IFIP (International Federation for Information Processing), and CEPIS (Council of European professional Informatics Societies). The experts are divided into three groups: IT specialists, methodologists, and users. IT specialists make recommendations on the modern IT market, popular software, and ICT development tendencies; methodologists develop the content of the course and test questions; and users test them. The resulting Training Plan is approved by the ECLD-F Director and tested in national computer associations in 66 countries. Thus the training course ideally combines international experience with regional and national specifics.

The reports of the European Union High Level Group for Employment and Social Dimension of the Information Society (ESDIS) of October 5, 2001; the European Union High Level Task Force on Skills and Mobility of December 14, 2001; the i2010 Plan: A European Information Society for Growth and Employment; and the United Nations Global E-Government Readiness Report 2005 – from E-Government to e-Inclusion create prerequisites for including ECDL in the activities of international organizations, educational institutions, and governments.

In 2006, the implementation of the e-Citizen pilot project began in the Khanty-Mansiysk Autonomous District (Russia), a pioneer of Russian e-learning. By that time the district administration (as their European counterparts) had already realized the need for citizens' large-scale training in PC skills in order to build an open knowledge society. The pilot project resulted in localized e-Citizen software and its customization given the Russian "e-reality" of public administration, education, etc., which helped, in keeping with modern European tendencies, to redirect e-learning from the technology-based to the competence-centered principle.

IPOS UNESCO IFAP (Russia) is actively involved in creating and distributing information literacy materials for public libraries, community centers, schools, universities, and government offices and regularly conducts information literacy conferences and workshops.

The idea of citizens' information literacy is also supported by the Institute for IT in Education. The Internet Education Federation promotes information literacy for the younger generation. It has provided financial and tutorship support that has resulted in opening over 70 training and resource centers all over Russia and in the development of a training programs package and a web sites complex.

Some media literacy tutorials have been developed by Russian Association for Film and Media Education in the process of introduction of the new, Media Education University Specialization (official registration number 03.13.30) at the Taganrog State Teachers Training Institute.
Since the 1960s, UNESCO has been supporting and promoting the media education concept throughout the world. Media education is regarded as a personality development process by means of media, intended to form a culture of communication with media and to develop creative and communicative abilities, critical thinking, media texts' adequate perception, interpretation, analysis, and appraisal, and media technology-assisted training in different forms of self-expression. Media literacy, resulting from this process, helps the individual to use actively the opportunities offered by information – the press, TV, radio, cinema, and Internet.

The General Curricular Model for Media Education was developed in 1978 under the aegis of UNESCO. It regularly conducts international conferences on media education: in Grunwald (1982), Tulouse (1990), Paris (1997), Vienna (1999), Sevilla (2002), etc.

The UNESCO efforts evoked a response of leading Russian experts in education. In 1991, Dr. Alexander Sharikov published one of the first Russian media education tutorials for secondary schools. In 1995-1998, a package of media education tutorials was developed under the guidance of Professor Dr. Yuri Usov, Screen Art Lab Director (Russian Academy of Education). In 1998, Professor Dr. Liudmila Zaznobina (Russian Academy of Education) created the first Russian media education standard for secondary schools.

In 2001-2005, scholars of the Taganrog State Pedagogical Institute published a number of monographs, textbooks, and a package of media education tutorials for universities. Media education has become a priority line of work for Russian Association for Film and Media Education (since 2003 headed by professors Alexander Fedorov and Gennady Polichko). During the same period, media education projects were supported by some Russian research foundations: Russian Foundation for Humanities (project directors Dr. Elena Bondarenko, Prof. Dr. Alexander Fedorov, and Dr. Nikolai Khilko), the Universities of Russia Program (project directors Dr. Stal Penzin and Prof. Dr. Alexander Fedorov), the Presidential Program "Support to Leading Scientific Schools of Russia" (a leading Russian scientific school headed by Prof. Dr. Alexander Fedorov).

IPOS UNESCO IFAP (Russia) has also been active in supporting national media education projects, in particular the initiative of Taganrog State Pedagogical Institute to open and register the new, Media Education university specialization, now in effect since 2002.

In 2004, IPOS UNESCO IFAP (Russia) in cooperation with the South Urals Media Education Center conducted the interregional round-table discussion "Media Education: Problems and Prospects" in Chelyabinsk. The participants discussed the concept and notions of media education and educational standards in this area and mapped out the ways of concerted efforts to be made by national and regional mass media in the coverage of media education problems. According to the participants, media education is a way of shaping national information and education policies and promoting information literacy, media culture of personality, and civil society.

The round table final document included proposals to introduce the Media Education specialty with the Media Educator qualification for Russian universities and teachers training institutions; to draw up an implementation plan for media education models in different regions of Russia; to create a databank of forms and methods of media education for experience analysis and summary; to initiate the creation of a Media Culture Encyclopedia by leading media experts and educators; and to organize regular publication of a professional journal.

IPOS UNESCO IFAP (Russia) has done its best to implement these recommendations. In cooperation with the Russian Association for Film and Media Education, it supported the publication of *Media Education*, the first Russian journal on children, youth, and adults media education that started in January 2005.

In September 2005, IPOS UNESCO IFAP (Russia) in cooperation with the Krasnodar Regional Youth Library conducted the conference "Through Libraries to the Future", which was supported by the Federal Agency for Culture and Cinematography, the Federal Agency for Education, the UNICEF Russian Office, the Krasnodar Regional Department for Culture, the National Training Foundation, the Russian School Libraries Association, and the Russian Association for Film and Media Education.

The conference workshop "Media Education, Media Pedagogy, and Media Journalism" presented a CD ("Media Education, Media Pedagogy, and Media Journalism") published by IPOS UNESCO IFAP (Russia) in cooperation with the Khanty-Mansi Autonomous District Governor Administration, the Russian Association for Film and Media Education, and the Taganrog State Pedagogical Institute, that included monographs, textbooks, articles on media education (authors: Alexander Fedorov, Alexei Demidov, Anastasia Novikova, Nadezhda Alvarez, and others), major documents, and materials of media education conferences.

IPOS UNESCO IFAP (Russia) is planning to start working on the first Russian media encyclopedia by leading Russian specialists in mass media and media education theory and history; to continue supporting the *Media Education* journal; and to promote the new university specialty "Media Education", intended to train professional media educators and information literacy specialists for schools and universities.

IPOS UNESCO IFAP (Russia), the *Media Education* Editorial Board, and the Russian Association for Film and Media Education have managed to consolidate the best Russian media educators in the framework of joint projects and to map out the key tasks of development and application of media education and information literacy training courses for the next few years. This work is going on in close contact with the Russian Academy of Education (Screen Arts and Media Education Labs, etc.), the Siberian Media Education Association (Tomsk), the Samara Media Education and Media Studies Center, the Togliatti Media Education Center, the Media Education Center of the South Urals University (Chelyabinsk), and schools and universities of Barnaul, Belgorod, Voronezh, Yekaterinburg, Krasnodar, Kurgan, Moscow, Nizhny Novgorod, Omsk, Perm, Rostov, St. Petersburg, Tambov, Tver, Tomsk, Chelyabinsk, and other Russian cities.

Publications

Major documents and materials on information literacy, including Russian translations of key international documents on IL, are published on the above Russian sites (see especially www.ifap.ru and publications by M.A. Bovtenko, N.I. Gendina, V.A. Minkina, G.B. Parshukova, I.A. Rozina, and others).

The journal worthy of note include *Information Technologies* monthly (published since 1997; http://www.informika.ru/text/magaz/it); *Bulletin of the Russian Communication Association* (published since 2002; http://www.russcomm.ru/rca_biblio/text/vestnik-rca.shtml); *Media Education* (published since 2005; http://www.edu.of.ru/mediaeducation); *School Library*, and *Media Library*.

In the last 15 years, hundreds of information and media literacy monographs, textbooks, and articles have been published in Russia (see the full list at http://www.edu.of.ru/mediaeducation). For selected examples please refer to the Selected Publications section below.

Organizations

The main Russian Federation groups that focus on information literacy are:
- IPOS UNESCO IFAP (Russia) - http://www.ifap.ru
- IFLA Russian IL Section - http://www.rba.ru/ifla/sec/7_42.html
- Russian School Libraries Association - http://schoollibrary.ioso.ru
- UNESCO Institute for IT in Education - http://www.iite.r
- Russian Association for Film and Media Education - http://www.edu.of.ru/mediaeducation
- Russian Communication Association - http://www.russcomm.ru
- ECDL (Russia) - http://www.ecdl.ru

Their activities have already been mentioned above.

Research Project/Research Centers

The research centers (in Chelyabinsk, Kemerovo, Moscow, St. Petersburg, Rostov, Samara, Taganrog and other Russian Federation cities), and their activities have already been mentioned above.

Research into information and media literacy is being carried out at many university departments. Selected examples from 2005-2006 see in Selected Dissertations section.

Training the trainers

The Russian Federation has a system of IL and ML training courses and workshops for librarians, university and school educators and information professionals, including distance certificates. The system of ML training courses and workshops for university and schools educators, and students operates in the South Ural University, Taganrog State Pedagogical Institute (specialization "Media Education" 03.13.30), and others.

The system of Information Literacy training courses and workshops for university and schools educators, school students is functioning at many Russian centers of Internet Education Federation and Intel Programme - Education for Future, Research Institute for IT in the Social Sphere of the Kemerovo State University of Culture and Arts, etc.

Communication

The principal conferences in 2005-2007 are:

1. ICT Competence: Paradoxes of Identification of Fundamental Components and Their Measurement. March 15, 2006, Moscow, Russia
2. International Conference "UNESCO Between Two Phases of the WSIS". May 17-19, 2005, St. Petersburg, Russia
3. International Conference "Access to Government Information in the Public Domain". June 20-22, 2005, Smolensk, Russia
4. International Baikal Information and Culture Forum. June 24 - July 1, 2005, Ulan-Ude, Russia
5. 3rd Conference "Through Libraries to the Future". Sept 12-17, 2005, Anapa, Russia
6. Roundtable "Children Safety on the Internet". Sept. 20, 2005, Moscow, Russia
7. Conference "Library. Information. Civil Society". Oct 24-27, 2005, Perm, Russia
8. 8th All-Russian Conference IST/IMS-2005. Nov 8-11, 2005, St. Petersburg, Russia
9. Eurasian Information and Librarianship Congress "Knowledge Society: Culture, Science, and Education Partnership for Innovative Development". Dec 6-8, 2005, Moscow, Russia
10. E-Citizen Conference. Feb 3, 2006, Moscow, Russia
11. Conference "ECDL Standard: Russian Experience". June 22, 2006, Moscow, Russia
12. 6th Conference "Through Libraries to the Future". Sept 3-10, 2006, Anapa, Russia
13. 4th All-Russian Methodological Symposium. Sept 11-15 2006, Anapa, Russia
14. International Conference for Media Education and Journalism. Sept 25-27, 2006. Belgorod State University, Russia.
15. 8th International Conference "Law and Internet". Oct 19-20, 2006, Moscow, Russia
16. International Conference "Information Culture of Personality: Challenges of the Information Society". Nov 2-3, 2006, Moscow, Russia.
17. 9th All-Russian Conference IMS-2006. Nov 14-16, 2006, St. Petersburg, Russia
18. Round Table "Best Training Systems Promotion and ICT-Literacy Certification". Dec 11, 2006, Moscow, Russia

19. 2nd International Conference "Journalism and Media Education - 2007". Oct 1-3, 2007, Belgorod, Russia
20. 9th International Conference "Law & Internet". Oct 18-19, Moscow, Russia
21. Conference "Media Education for Education, Science, Culture and Communication Development". Nov 20-22, 2007, Tomsk, Russia

Selected Publications (2005-2006)

1. Botwenko M.A. Professional Information and Communicative Competence of Foreign Language Teachers. Novosibirsk, 2005. 244 p.
2. Fedorov A.V. and others. Media Education. Media Pedagogic. Media Journalism. CD-ROM. Moscow: IPOS UNESCO IFAP (Russia), 2005.
3. Fedorov A.V. Media Education and Media Literacy in Knowledge Societies // UNESCO Between Two Rounds of the WSIS. Moscow: Institute for Information Society Development, 2005. P.329-339.
4. Fedorov A.V. Media Education: Creative Lessons for Students and Schoolchildren // Innovations in Education. 2006. No 4. P.175-228.
5. Gendina N.I., Kolkova N.I., editors. UNESCO "Information for All" Programme in Industrial Area: Outcomes of Promotion. Moscow: School Library, 2005. 31 p.
6. Gendina N.I., Kolkova N.I., Starodubova G.A., Ulenko Yu.V. Personal Information Culture Formation: Theoretical Ground and Academic Discipline Modeling. Moscow, 2006, 512 p.
7. Kirillova N.B. Media Culture: From Modern to Post-Modern. Moscow: Academic Project Publishing, 2005. 400 p.
8. Parshukova G.B. Personal Information Competencies: Diagnosis and Shaping. Novosibirsk, 2006. 244 p.
9. Rozina I.N., Pedagogical Computer Assisted Communication. Moscow, 2005, Logos Publishing. 460 p.
10. Sharikov A.V., Fazulianova S.N., Petrushkina E.V. On the Way of Achieving the Harmony Among Media and Society (Media Resources and Media Education in Samara Schools). Samara, 2006. 50 p.
11. Yudina E.N. Media Dimension as Cultural and Social System. Moscow, Prometheus Publishing, 2005. 160 p.

Selected Dissertations (2005-2006)

1. Artiushkin O.V. Organizational and Pedagogical Conditions for Shaping Personal Information Culture
2. Bazaeva A.P. Shaping the Information and Professional Competence of the Future Pedagogs by Library IT Means
3. Vaschuk I.N. Shaping Schoolchildren's IT Literacy in Educational Process
4. Vitt A.M. Information Competence Development of the Technical Institutes' Students

5. Golubin D.V. Shaping Pedagogues' Information Competence During the Refresher Training

6. Grebenshikova A.V. Shaping Future Translators' Professional Competence by ITC Means

7. Gritsenko S.V. Personal Information Culture in Post-Industrial Society

8. Dostovalova E.V. Shaping the Information and Communicative Competence of Social Pedagogue Through Educational and Methodical Kit "Computer Publishing"

9. Zavialov A.N. Shaping the IT Competence of Students by Example of High Professional Education

10. Zalagaev D.V. Development of Media Literacy of Learners During Studying Informatics

11. Kirillova N.B. Media Culture as Integrator for Social Modernization Environment

12. Konushenko S.M. Shaping the Information Culture of Pedagogues in Lifelong Professional Education

13. Kiurshunova V.V. Information Competence Formation of Future Teachers for Basic School

14. Lukina T.N. Pedagogical Determinants for Shaping the Information Competence of Future Teachers of Informatics

15. Morkovina E.F. Development of Information Competence of Students in Education Process

16. Muryukina E.V. Shaping the Media Culture of Upperclassmen

17. Pavlicheva E.D. eMedia Influence on Social Identification of Teenagers

18. Poliakova T.I. Information Culture of Modern Pedagogue as a Factor of His Professional Development

19. Senkevich L.B. Shaping the Information Competence of Future Teacher of Mathematics by ITC Means

20. Sergeeva L.V. Shaping the Information and Technological Competence of Schoolchildren

21. Stolbnikova E.A. Development of Critical Thinking of Pedagogical Institute Students During the Education Process (By Example of Advertisements)

22. Tarasov K.A. Violence in Audiovisual Works: Representation, Influence, Social Regulation (By Example of Film Art)

23. Uruymagova O.V. Modern ITs for Shaping the Communicative Competence of Students

24. Fedosova O.A. Sociopedagogical Aspect of Shaping the Information Culture of Senior Classmen

25. Fedotovskaya E.I. Methodology of Development the Critical Thinking as a Key Factor for Shaping Foreign-Language Communicative Competence in Specialized Institutes

26. Khmara E.V. Shaping the Information Culture of Teacher of a Subject During the Advanced Training

27. Khudiakova A.V. Shaping the Subject Information Literacy and Competence of Learners During Learning Physics

Major Russian information and media literacy websites

1. ECDL (Russia) - http://www.ecdl.ru
2. ICT Technologies in Education - http://ict.edu.ru/
3. IPOS UNESCO IFAP (Russia) - http://www.ifap.ru
4. Media Center (Internet Journal) - http://edu.km.ru/mcenter
5. Media Education Laboratory of Russian Academy of Education (Moscow) - http://www.mediaeducation.ru
6. Media Education on the UNESCO Bureau in Moscow website - http://www.unesco.ru/rus/pages/bythemes/stasya29062005124316.php
7. Intel Media Education Programme - Education for Future - http://www.iteach.ru/forum/pr_design/m_7wpr.html
8. Media Library of School Sector - http://school-sector.relarn.ru/efim/mainframe.html
9. Media Review (Internet Journal of Media Criticism & Media Education) - http://mediareview.by.ru
10. School Media Library Research Group - http://www.ioso.ru/scmedia
11. Russian Association for Film & Media Education - http://edu.of.ru/mediaeducation Mirrors: http://www.medialiteracy.boom.ru and http://www.mediaeducation.boom.ru
12. Russian Communicative Association - http://www.russcomm.ru
13. Russian Federation for Internet Education - http://www.fio.ru
14. Russian School Libraries Association - http://schoollibrary.ioso.ru
15. Russian Section on Information Literacy of IFLA - http://www.rba.ru/ifla/sec/7_42.html
16. Togliatti Media Education Center - http://www.mec.tgl.ru
17. UNESCO Institute on IT in Education - http://www.iite.ru/iite/index
18. YNPRESS Agency (Agency of Young People, Children & Press, Moscow) - http://www.ynpress.ru

Periodicals

1. Media Education Journal - http://www.ifap.ru/eng/projects/mediamag.htm
2. Informatics and Education Journal - http://www.infojournal.ru/journal.htm
3. Journalism and Media Market Journal - http://www.library.cjes.ru/online/?s=4&tp=16&st=1
4. Media Library Journal - http://www.mediagnosis.ru/mshsen/8/4/1/index.htm

VI. Spain
Information Literacy State-of-the Art Report
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A. Introduction

In Spain, the terms, concepts and services relating to information competence have been used in research and practice since the 1990s, but the actual Spanish term and concept for information literacy, *alfabetización informacional* (acronym: ALFIN), has only begun to appear in the LIS literature since about the year 2000 (Gómez Hernández and Pasadas Ureña, 2003).

Information literacy (INFOLIT or IL) is now an important object of attention in Spain's library science milieux. The concept is now invoked to promote the educational dimension of the library and its immense potentialities for user education. Nonetheless, greater attention needs to be paid to the subject by the teaching and research community in the area of Library Sciences and Documentation (*Biblioteconomía y Documentación*) in Spain: a much greater effort is required if Spain is to catch up with countries like Australia, New Zealand, the UK or the US. At the international level, INFOLIT is proving to be a field of work of major potential and importance, in which there is much to be done. It is, besides, a field which gives visibility and recognition to the key role played by Library Sciences and Documentation in all higher education curricula and programs in today's Information and Knowledge Society.

B. IL Products for users

1. Advocacy toolkits

a. <u>Creation and maintenance of electronic dossiers</u>: Electronic dossiers were introduced in the Universitat de Barcelona in 2000, and offer a platform for communication between teacher and students, as well as a space jointly managed by library and faculty. They include: information on the course program; the recommended bibliography appearing in the student guides for each subject, with a link to the catalogue from each entry; spaces with material presented by the teachers in class; and digitized versions of course-specific material. They are collections of digitized material which can be consulted from any point linked to the network, and thus now play an essential complementary role for many teaching staff. The teacher responsible for each electronic dossier provides the content and communicates with the students via email, discussion forums and chatrooms; the library, for its part, is responsible for the management of the space and for checking the bibliography provided by the teacher and digitizing the most frequently consulted documents.

Another higher education institution in Catalonia, the Universitat de Lleida[5], also employs this system in its library, offering electronic dossiers for many of its courses, notably those in its Area of Health Sciences. We may here cite the work done by Carme Torres i Penella, of the Department of Nursing Studies, and the librarian responsible for Health Sciences, Laura Jové, in offering courses in information search skills and management for first-year students on the degree course in nursing.

b. <u>Creation *of thematic guides*</u>: These are guides produced by subject librarians in collaboration with the teachers of the relevant subjects. They have a twofold purpose: 1) the systematic location of links to Web resources of interest to each of the subject fields; and 2) the provision of access to the specialized databases and electronic journals available in the library, selecting relevant documents from the library catalogue. This system is used by the Universitat Pompeu Fabra (Barcelona), the Universitat de Girona[6], the Universitat de Barcelona, the Universitat de Lleida, and the Universidad de Castilla-La Mancha.

c. <u>Teaching *Resources Factory (Factoría de Recursos Docentes)*</u>: This is a resource centre for creating multimedia teaching materials, and a repository for recordings and multimedia material arising from conferences, seminars, etc, organized by university research groups. It is used by the Universitat Politècnica de Catalunya [based in Barcelona] and the Universitat de Girona.

We may here stress the portal known as MOREA (*Múltiples objetos reutilizables para la enseñanza y el aprendizaje* - Multiple reusable objects for

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[5] Lleida in Catalan; In Spanish, Lérida.
[6] Girona in Catalan; in Spanish, Gerona.

teaching and learning - URL: http://www.usc.es/morea/), which is essentially a repository of resources for teachers and a platform with guides to assist teachers in the preparation of electronic materials.

d. <u>Coordination</u> *of the Proyecto Campus/Aula Global (Global Campus/Classroom Project)*: This is a platform for communication (services/users, teachers/students) offering support for the new teaching methods. It offers a range of applications related to such areas as access to information, communication, teaching and learning, and administration. Its objective is to offer a useful complement to the in-class teaching/learning process. Among the most interesting projects here are: the *Campus Global (CG; Global Campus)* of the Universitat Pompeu Fabra; (http://www.upf.es/usice/cg/noucg/cast), the *Campus Virtual (Virtual Campus)* of the Universitat Autònoma de Barcelona (https://ticeu.uab.es); and support initiatives for in-class teaching such as the *Aula Global (Global Classroom)*, an academic portal of the Universidad Carlos III (Madrid) (http://www.uc3m.es), and the *'subject intranet' ('Intranet de la asignatura')* of the Universitat Politècnica de Catalunya. The last-named is a multidisciplinary resource aimed at helping resolve problems related to curricula or academic paths with the intention of encouraging training in and use of library resources. It combines the presentation of teaching materials (local or external) with information and communication systems (Selective Dissemination of Information (SDI), forums, chatrooms), and in addition, self-assessment systems with instant answers, databases allowing students to monitor their own continuous assessment ratings, and virtual spaces for the students themselves, in which they can store their work or share it with their peers.

2. Library tours (General and specific library areas/services)

a. «Formación *de usuarios en la biblioteca central*» ('User training for the central library'). Biblioteca Central de la Universidad de Extremadura en Badajoz. In http://biblioteca.unex.es/CentralBadajoz/formacion.html#presen

b. «Formación *de usuarios*» ('User training'). Biblioteca Universitaria de Santiago de Compostela (Galicia). In
 http://busc.usc.es/Servizos/formacion.asp

c. «*Guía de la biblioteca Universitaria*» ('Guide to the University Library'). Universidad Carlos III de Madrid. In http://www.uc3m.es/uc3m/serv/BIB/guiabib/indice.html

d. *Gómez* Hernández, J. A. «*La formación de los usuarios en la biblioteca escolar*» ('User training in the school library). Universidad de Murcia. In http://gti1.edu.um.es:8080/jgomez/bibedu/pautasorg/intro/formacion.htm

3. *Tutorials and portals for citizens*

a. *Initiatives* from the libraries:

Training in the telematic environment is becoming ever more important, bringing to websites library user guides as well as manuals explaining documentary resources and search strategies, together with replies to students' FAQs. This testifies to the libraries' efforts to transfer to the digital library one of the basic services, i.e. teaching regarding accessing and using information.

We may here stress the user training courses, both introductory and *à la carte*, organized by universities in order to promote familiarity on the part of the academic community with their libraries, resources and services, and cooperate within the new teaching/learning model. Such courses are offered by numerous university libraries, an example being that of the Universitat Autònoma de Barcelona: *Conèixer les Biblioteques ('Getting to know the libraries)* (http://www.bib.uab.es/formacio/curs.htm). Also relevant here are the courses of the library of the Universitat Politècnica de Catalunya, «Com trobar i gestionar informació científico-técnica» ('How to find and manage scientific and technical information'), which offer general, specific and specialized training and guidelines for carrying out end-of-course projects (http://escher.upc.es/STS/formacio/inici.htm). We may also mention:

— «*Tutorial de recursos electrónicos*» ('Electronic Resources Tutorial'). Spain: Red de Bibliotecas del CSIC (Library Network of the CSIC – Consejo Superior de Investigaciones Científicas - Higher Scientific Research Council) - http://www.csic.es/cbic/formacion/eerecursos.htm.

— A significant initiative is that constituted by the tutorial *Sirio Multimedia*, of the library of the Universidad Politécnica de Valencia (available in CD-Rom format). This program is aimed essentially at all libraries and documentation centers where access to databases is a matter for the users themselves, a circumstance necessitating instruction in basic techniques of information retrieval. *Sirio* offers a tutorial conceived as a means of improving libraries' didactic activity, releasing the library from routine tasks and broadening users' instructional base. Its objectives aim that the user should:
   - Understand and employ the standard information retrieval terminology.
   - Be aware of the potentialities and limitations of bibliographical and factual databases.
   - Be familiar with the syntactic resources of information retrieval systems (IRSs).
   - Learn methods of consulting such databases.
   - Acquire the ability to use any IRS fully and precisely.

b. *Initiatives* from higher education:

e-COMS. URL: http://www.mariapinto.es/e-coms

e-COMS is the most important e-learning educational portal in Spain for instruction in information literacy, especially digital, aimed at university students and staff and young researchers. Its objective is to encourage autonomous learning in the areas of the management, analysis, organization, evaluation and dissemination of electronic content, with stress on the mastery of skills and competencies of a technological, documentary, procedural and research-oriented nature. It also offers a carefully-selected range of up-to-date electronic resources.

All in all, the *e-COMS* portal is generic and transversal, and is valid for all university students who need to acquire skills and training in information literacy, particularly in relation to the management of e-learning content. This initiative is a pioneer project in the field of library science and documentation in Spain, and is aligned with the commitment of the Spanish University Library Network (*Red Española de Bibliotecas Universitarias*) (REBIUN 2002) to promote the creation and integration of useful teaching materials, to promote information literacy in students, and to participate in autonomous learning.

The generic aim of the portal is to provide a conceptual and procedural tutorial focusing on the knowledge and handling of tools for electronic content management and on providing information literacy instruction for students, equipping them with a set of skills and abilities that will prepare them to handle the transformations of the information and knowledge society. The general aims of the portal are to provide instruction in the following key competencies:

— Cognitive competency: the development of strategies to analyze, synthesize, interpret and process information.
— Technological competency: based on autonomous learning about computer tools.
— Documental competency: based on managing information by determining needs, planning searches, using strategies to locate and obtain information, filtering and evaluating information in order to make decisions, etc.
— Research competency: initiation in basic research techniques and problem-solving methods.

— Communicative competency: the development of skills for the communication, sharing and dissemination of information. The use of synchronous communication tools, forums and other resources is proposed, and should incorporate values such as innovation, creativity, quality awareness, etc.

These general aims are reflected in the following specific goals:

— To construct an interactive portal for «learning to learn», and to instruct students in information literacy
— To be a training and information reference portal for students of library science and documentation and of educational psychology, even though the portal was piloted in other specialist areas.
— To educate students in developing their analytic and synthetic capacities.
— To provide basic techniques in searching for, retrieving and evaluating information: learning how to do.
— To teach how to organize and represent information.
— To teach how to use synchronous and asynchronous communication systems in the process of creating and exchanging knowledge.

Thus, *e-COMS* is an educational portal designed to provide global learning for university students whatever their specialist area. It represents a systemic approach to instruction in and acquisition of generic skills, competencies and abilities related to all major aspects of the management, accessing and use of information, providing students with the autonomy needed to handle information and acquire new cognitive skills within the context of today's knowledge economy.

ALFIN-EEES. URL: http://www.mariapinto.es/alfineees/AlfinEEES.htm

Alfin-EEES is a pilot initiative proposing contents for the main generic skills linked to INFOLIT, conceived as valid for all university students needing to seek, manage, organize and evaluate information from a wide range of sources. The aim of Alfin-

EEES is to boost the information literacy of those who consult it, multiplying the opportunities for self-directed electronic learning and stimulating such values as innovation, creativity, ethical behavior and teamwork capacity.

Alfin-EEES is an educational portal targeted on students' global learning processes. It is centered on the reinforcement and acquisition of skills, competencies and know-how of a generic nature, related to all key aspects of the management, accessing and use of information, the aim being to equip the students with autonomy in information handling and in acquiring new cognitive skills in today's knowledge economy.

The knowledge leading to the competencies set out in Alfin-EEES is meant to be assimilated by the students using the possibilities offered by the new technologies for e-learning and teaching: hyperlinks; schemes and maps; interactive examples with problem-solving; FAQs, which will give solutions to the most problematic questions; email, which will facilitate permanent and personalized tutoring; and forums, which will provide a space for virtually debating specific subjects and sharing knowledge.

Because of their relation to information management, six blocks of transversal content have been established in the configuration of the portal's content:

— Learning to learn: the concept of learning to learn is explained - how to learn to learn, and how to be autonomous and in charge of our own learning process
— Learning to seek and assess information
— Learning to analyze, synthesize, and communicate: how to read better, how to segment the information in order to subsequently reorganize it using the techniques of outlining, graphic representation and summary, and how to communicate the new knowledge in writing, using graphic presentations while respecting the contribution of the authors whose ideas have been used.
— Learning to generate knowledge: in-depth study of the processes of creation and innovation, the principles of scientific thought and the techniques for organizing projects, in order to familiarize the student with the principal phases of knowledge generation: creation, research and development.
— Learning to work with others: the ethical bases for coexistence and teamwork are posed, as well as how to recognize and approach conflict using negotiation techniques.
— Using technology to learn: operating systems, IT office applications, communication tools and the e-learning environments most often used in universities are introduced.

Each competency and sub-competency uses the same structure for presenting the information, although the more specific level, that of the sub-competency, is more complete. For each competency, a general chart presents the contents and procedures for learning. The chart for sub-competencies, which is more specific, is

very detailed and includes the development of knowledge and specific skills for the training in question, facilitating numerous activities, recommendations and resources. The basic chart is based on the theory of meaningful learning and, in general, on the constructivist paradigm, as well as on the more general consensus on efficacy and efficiency in learning processes.

It is assumed that the learning process also starts with a correct motivation and by meshing the new concepts, skills and attitudes with previous ones. For this reason, each chart begins with a section on motivation, which, within the context of the materials offered on the Internet and in print publications, is expressed simply with the subtitle or label: «What for?» This is a straightforward way of showing what the competency is good for and why the student should develop it; in short, it is a means of explaining its use. The motivation section systematically resorts to illustration by using a selected quotation from a famous author or a popular saying, by way of an introductory slogan. Next, clear and concise language is used to indicate the principal reasons why the student should work through the module, in a section entitled «Values». Finally, the objectives sought by studying the unit are stated in a simple form.

For its part, knowledge is divided into declarative and procedural knowledge. Hence, different sections are included for conceptual or declarative knowledge (knowing how to say) and procedural knowledge (knowing how to do). In the material offered to the students, these are expressed simply with the labels «What» and «How». The aim is to treat both aspects equally and to clearly communicate to the student the importance of balancing both types of knowledge. This is why it was decided to distinguish them graphically and clearly by including them in different tabs.

Here, knowledge is not only expressed in words but shown graphically in the section «Conceptual Maps». The objectives are to express the information in another language, to map the concepts, and to provide instruments for visual argumentation.

The «Activities» section always contains a sample problem with the solution, and a range of activities proposed to the student in order to develop the competency, sub-competency or specific aspect in question. The examples and activities proposed are intended to be general in nature or to approach different areas of knowledge, in order to show the students models close to their field of experience that they can generalize or specify according to their needs. At least one of the activities has already been solved.

Following this, there is a section entitled «Resources», which is aimed at giving the students the possibility of broadening their knowledge of the course contents by offering complementary materials: a very select bibliography, electronic documents - tutorials, educational portals, etc - and other useful resources, particularly computer applications.

Finally, an «Advice» section is offered, for both lecturers and students, to help them avoid some of the most important pitfalls that the authors experienced when dealing with instruction in these topics.

4. *Tutorials on how to use specific information resources (electronic resources, print media, Internet, other)*

a. Initiatives from higher education:

ALFAMEDIA. URL: http://www.mariapinto.es/alfamedia/index.htm
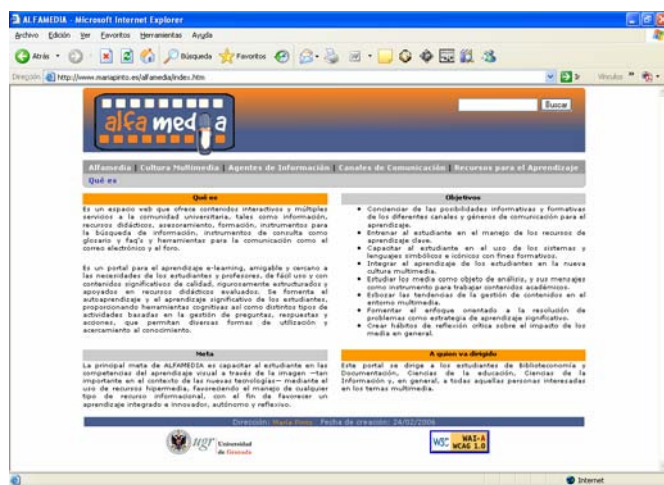
ALFAMEDIA is a portal for instruction in multimedia literacy, encompassing the different forms of literacy and the different types of content (conceptual, procedural and attitudinal) which have been considered to be fundamental and essential for the communication and representation of messages using different languages and media.

Its content, both conceptual and procedural, is targeted on instruction in generic skills linked to the management of information and electronic content, organized into various categories of content of a nature that is transversal, necessary, and, therefore, important for all students:

— Learning how to learn: explanation of the concept of learning how to learn and how to learn how to learn - how to be autonomous and to achieve the mastery of one's own learning process;
— Learning how to seek information: explanation of the nature of an information need, how to express it, and how to define the search criteria and formulate the correct strategies (as in e-coms and alfin-eees).
— This is the skill most closely related to the individual capacity to express and communicate an information need. Students putting this skill into practice will be able to:

- Organize their ideas clearly and formulate questions on the object of search.
- Associate the object of search with hierarchically structured words and concepts corresponding to the subject of the research.
- Specify the search objectives in order to decide what resources to use and how much time to invest.
- Be aware of the logic and structure of the main information sources in the area concerned: indexes, library catalogs, digital portals, institutional archives, etc.
- Use appropriate language, knowledge and skills in order to consult resources and retrieve information correctly.

— Learning analytic, synthetic and communicative skills: explanation of how to read more effectively, how to segment information with a view to its subsequent reorganization using the techniques of schematizing, graphic representation and abstracting, and how to communicate new knowledge in writing and via graphic representations, respecting the contributions of the authors whose ideas have been used (as in e-coms and alfin-eees). Students should be able to acquire the following skills:
- Incorporate the information obtained into previously existing knowledge, in such a way as to relate it to the scientific and social context of the various subject fields.
- Master a technique for the organized handling of the ideas and positions acquired from their reading, integrating them with their own ideas.
- Summarize selected information so as to present it in integrated fashion and be able to communicate it.
- Identify the generally-used writing style in their area of knowledge and know how to apply the appropriate conventions for the presentation of information.

— Learning how to evaluate information: explanation of the ease and freedom with which users can publish content on the Internet and of the need for students to have criteria that can help them filter electronic content and gauge the veracity, credibility, reliability and, all in all, the quality of the information found. Here, students should be able to develop, inter alia, the following skills:
- Recognize the degree of authoritativeness, veracity and objectivity of the information found.
- Distinguish information based on evidence and objective data from mere opinions.
- Be aware that the elements which confer value on a resource are related primarily to its content, and not necessarily to the format in which it appears.
- Learn how to generate knowledge: the aim here is to go deeper into the processes of creation and innovation, the principles of scientific thought, the processes of understanding of the structure of knowledge, and the techniques of project organization, so as to

educate the student in the main stages of knowledge generation, i.e.: creation, research and development (as in alfin-eees and e-coms). We believe that under this heading students will acquire skills enabling them to comprehend the information cycle, comprising the generation, processing, organization, dissemination and use of information.

- Learn how to work together: this concerns the ethical bases of collective living and work, the principles and techniques of group work, and respect for intellectual property and copyright.
- Use technology to learn: this involves an introduction to operating systems, IT office applications, communications tools, and the e-learning environments most used in Spanish universities.

● IMATEC. URL: http://www.mariapinto.es/imatec/
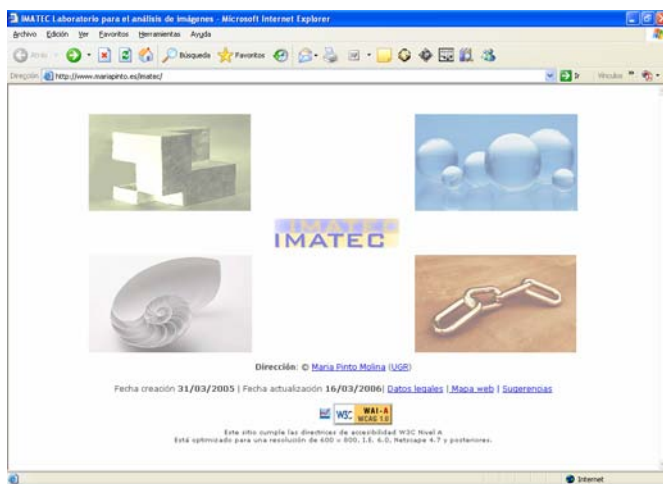
IMATEC is an e-learning portal for autonomous learning by students, and by all who wish to go deeper into the issues raised by the documentary analysis of images. We here stress the crucial role played by images around us, and, especially, on the Internet, as well as the difficulties surrounding their proper systematization and use: the plethora of content and the diverse nature of the sources necessitate professional intermediation based on the careful selection of representative material via the use of indexing terms and content summaries.

IMATEC is, at its present pilot stage, centered on the documentary analysis of the content of photographs, offering a set of descriptions based on content attributes for the representation and retrieval of information.

The conception and development of this e-learning resource are based on organized and systematic autonomous learning, with the aim of collaborating in an independent and progressive process of lifelong acquisition of skills, in both declarative and procedural terms. What is proposed is a documentary methodology

which has been very little explored in the working environment of librarians and documentalists, grounded in the expressive power of conceptual maps as a visual graphic resource for the representation of the significant content of new documents, especially in the web environment.

The portal is divided into four sections:

— About IMATEC: philosophy, mission, work team, conditions of use and users.
— Content: organized into six categories:

- Multimedia culture: characteristics of multimedia culture and specificities of its communication paradigm.
- New documents: classification of new documents, specifying their properties and the main elements for their analysis. Study of images and audiovisual, digital and multimedia documents.
- Analysis of new documents. Characteristics and elements of analysis particular to each document, with specific types of formal and content analysis.
- Methodology for the analysis of still images. The different phases for analyzing still images, stressing denotative analysis and visualizing web examples for a number of significant aspects that need considering.
- Techniques of analysis. Study of the main analytic operations, such as indexing and summarizing of new documents, with respect to both still images and audiovisual documents (television, cinema, electronic resources)
- Retrieval of new documents. Identification of procedures for retrieving images and presentation of a selection of image search engines.

For each category, information is offered concerning:

- Objectives: main elements for learning, especially as regards competencies and skills
- Concepts: schematic expression of the principal learning objects
- Maps: visual and graphic representation of the main learning concepts and their semantic relations
- Resources: complementary and support elements for curricular learning:
  - Bibliographical and electronic resources for each category of study, with important links and a brief content note
  - Glossary defining the fundamental concepts
  - FAQs

- Laboratory: this is the portal's practical section, consisting of:

- Methodology
- Web form for image analysis, with an information section on how to go about it, defining the different fields
- Image bank: a careful selection of images with cases handled by expert analysts and particular stress on content analysis.
- Identified access: this is in order to evaluate the performance of students taking the subject 'Advanced indexing techniques and abstracting for special documents', as taught by the Faculty of Library Science and Documentation of the Universidad de Granada.

5. *Workshop/Hands-on experience (for students, faculty and the general public)*

a. Information literacy in schools

Francisco Javier Bernal was a pioneer in developing information literacy in schools in Spain. In 1985 he proposed a 'pedagogy of information' within the first National Program for Scientific and Technological Information and Documentation, and in 1992 a transversal topic - *educación documental (documentary education)* in the curriculum for compulsory education. As a result, several special optional courses on information literacy were developed, and a number of pilot projects in schools came to include user education. In some Spanish regions, coordination centers now support school libraries in distributing materials and sharing experiences to foster information literacy. For example, the *Dirección Provincial de Málaga* (Málaga provincial administration) provides specific materials to support information literacy on its website for school pupils. Another good example is the *Instituto Fray Luis de León, a high school/secondary school* in Salamanca, where teachers across different disciplines use the library to support their pupils' learning processes. There are also several ICT literacy projects under development for primary and secondary school pupils, in which school library, digital library and learning resource portals are interlinked. However, a common problem for most ICT literacy programs lies in the widespread assumption that mastering ICT tools is the same thing as mastering information access and use.

b. Information literacy in higher education

Several Spanish universities offer optional credit courses within the curriculum for most degrees, free configuration credit courses for specialized documentation skills, and specific tutorial support for final-year students preparing their end-of-course dissertation. Examples of free-choice credit courses include those offered by the universities of Barcelona, Granada and the Polytechnic of Catalonia. The websites of numerous university libraries include tutorials and user guides to support information literacy, for example, at the Universidad Carlos III de Madrid, the Universitat Politècnica de Catalunya and the Universitat Oberta de Catalunya (Open University of Catalonia). More and more higher education institutions include specific user education and

information skills courses within their curricula for specific disciplines and degrees. An example is the course 'Information Skills and Strategies' offered by the Universidad de Murcia.

Regarding the instruction offered at university level in INFOLIT, we may refer in the first place to extracurricular support by teaching staff or information professionals, which is of special interest for developing students' information skills, starting out from familiarity with the INFOLIT paradigm. In this connection, the courses held have included the following:

— Course in on-line information literacy for psychology students of the Universidad de Granada, organized by Cristóbal Pasadas.

— Seminar on «Alfabetización informacional en la biblioteca» (Information literacy in the library), organized by María Pinto as part of the course: *Bibliotecas y Archivos privados en el norte de Marruecos (Libraries and private archives in northern Morocco)*, Universidad Internacional de Andalucía and University of Tetuán (Morocco), 2003.

— *I Seminario de formación continua en Alfabetización Informativa y Digital. Refuerzo para el alumnado de Traducción e Interpretación (First Seminar in Continuing Education in Information and Digital Literacy. Reinforcement for Translation and Interpreting Students).* Held on 4 and 5 April 2006 by the Department of Translation and Communication, Universidad Jaume I de Castellón (Comunidad Valenciana). Organized by Dora Sales.

6. *Credit courses*

The following doctoral courses have been given:

— *Doctoral course, Universidad de Jaén. «Habilidades y competencias para la gestión de la información científica en el campo de los estudios de la mujer y estudios culturales» ('Skills and competences for the management of academic information in the area of women's studies and cultural studies'). María Pinto, 2005-2006*
— *Doctoral course: «Alfabetización informacional para la mediación intercultural y la traducción/interpretación en los servicios públicos» ('Information literacy for intercultural mediation and translation/interpretation in public services'). Dora Sales, 2006-07. Inter-university program: Traducción, Sociedad y Comunicación (Translation, Society and Communication), Universidad Jaume I de Castellón and Universidad de Granada. Quality mention from the Ministerio de Educación y Ciencia (Ministry of Education and Science).*
— *Doctoral course: «Tendencias en alfabetización informacional» ('Trends in information literacy'). José A. Gómez Hernández. Doctoral program, Universidad Carlos III de Madrid, 2003-2004.*

At undergraduate level, a number of courses are also given as options within various first-degree programs. These include areas related to information and digital literacy, in the form of applied documentation subjects relating to various degrees which require a basic training in information literacy, developed on a more or less systematic basis by the teaching staff responsible for the area. Here, we may mention the following courses: «Producción y Recuperación Científica», at the Universidad de Alicante (Comunidad Valenciana), «Specialized Information in Audiovisual Media and Reference Texts for Historical Work', at the Universitat de Barcelona, 'Navigation Systems for Information' at the Universidad Carlos III de Madrid, 'Documentation for Advertising and Public Relations' and 'Introduction to Information and Documentation in Science and Technology' at the Universidad Complutense de Madrid, 'Clinical Documentation' at the Universidad de Granada, 'Specialized Sources in Legal and Administrative Documentation' and 'Medical Documentation' at the Universidad de Murcia, and 'Documentary Methods and Techniques for Scientific Work', for Nursing Studies, and 'Documentation' for Medicine and Odontology, at the Universidad de Valencia.

We may also mention a number of free-choice subjects and documentation courses taught by faculty of the area of Library Sciences and Documentation as part of other qualifications, such as those of the Universidad de Extremadura (Documentation Services for Business), the Universidad de Granada (Applied Documentation for Psychology and Information Sources in Health Sciences), the Universidad de Zaragoza (Scientific Documentation in Agronomy), the Universidad de Murcia (Administrative and Legal Documentation), and the Universidad Politécnica de Valencia (Methodology for Research Projects) .

Also, as compulsory subjects, applied documentation components are taught on the following first-degree courses: Journalism, Audiovisual Communication, Advertising and Public Relations, Medicine, Translation and Interpretation, Political Sciences, and Management and Public Administration.

C. Publications

In general terms, we may affirm that there is still a relative lack of studies in the world of Spanish professional bibliography approaching user training from the standpoint of information literacy.

In no way is the Spanish bibliography comparable to what we find in relation to INFOLIT in the international bibliography, in which the subject is already fully developed, especially among professionals in the US, the UK and Australia.

Nonetheless, things are gradually moving forward, and, both in the professional library environment and in the university context, INFOLIT as an area of research is certainly acquiring a tangible presence.

1. Theses of international relevance

Some doctoral dissertations awarded in Spain have also concerned information literacy. A dissertation by C. Urbano Salido in 1999 used a citation analysis technique to focus on the level of awareness and use of information sources by computing researchers at the Universitat de Barcelona. Eva Ortoll Espinet's dissertation of 2003, on *Information competency in the health sciences: proposal for a training model*, examines information literacy models developed for instruction in that field, especially in the healthcare sector. Her study analyses the approach to INFOLIT issues in the Spanish higher education context, in the area of biomedical sciences. It proposes an integrated model to be used as a reference framework for the design and implementation of information literacy programs aimed at the development of information competencies among healthcare professionals.

2. Translations of key international documents into different languages

It should be noted that the Information Literacy Competency Standards for Higher Education approved by the ACRL are being translated and used in several countries. This is the case in Spain, which does not have its own set of INFOLIT standards.

We may here note the work being done by the university libraries grouped in the Asociación Andaluza de Bibliotecarios (Andalusian Librarians' Association), which is pioneering the translation into Spanish of the main INFOLIT standards, under the direction of Cristóbal Pasadas (Universidad de Granada).

In addition, the journal *Anales de Documentación*, of the Universidad de Murcia, has published (in Spanish translation) a number of international articles relating to INFOLIT research.

The group ALFINCAT has produced translations into all the official languages of the Spanish state (Spanish, Catalan, Basque and Galician) of the texts of the Alexandria and Prague Declarations (URL: http://www.cobdc.org/grups/alfincat/documents.html).

LIST OF PUBLICATIONS (as at August 2006 - NB: Nos. 12, 20, 24, 30 and 42 are in Catalan):

1. Merino, A. and Rufi, J. (2000) «Un nuevo reto para las bibliotecas universitarias: la colaboración con la docencia y la investigación: El caso de la Universitat de Girona». *Rebiun Seminario Barcelona. La biblioteca al servicio de la docencia y la investigación.* http://biblio.uoc.es/cas/rebiun/jornada.htm [Know-how materials]

2. Núñez, L. *Dossieres electrónicos en la biblioteca de la Universitat de Barcelona. Rebiun Seminario Barcelona. La biblioteca al servicio de la docencia y la investigación.* http://biblio.uoc.es/cas/rebiun/jornada.htm [Know-how materials]

3. "*Estudio de Evaluación de Necesidades y Requerimientos de los Usuarios de la Biblioteca de la UAM, con especial incidencia en los factores de cambio asociados al uso de las publicaciones y la información en soporte electrónico*» Madrid: Universidad Autónoma de Madrid (UAM), Biblioteca UAM. Estudio de evaluación. In http://biblioteca.uam.es/documentos/Calidad/2.-Informe%20Final.pdf. 2001. 79 pp. [Know-how materials]

4. "*Formación de usuarios InFormar IX*». Fundación Germán Sánchez R. 2001. 7pp. [Guidelines for information literacy]

5. «*La formación de usuarios y el uso de la información: Una experiencia didáctica en la biblioteca del Colegio Público de Falces*». Biblioteca del Colegio Público de Falces (Navarra). In http://www.pnte.cfnavarra.es/publicaciones/pdf/falces.pdf. [Guidelines for information literacy]

6. Acebes J. Ricardo. «*Planificación de un Sistema Integral de Servicios de Información en una Biblioteca Universitaria*» Madrid: Universidad Complutense de Madrid.
7. In http://www.ucm.es/BUCM/documentosBUC/2000/DT%202000%2003.pdf. 2000. 44 pp. [Other publications of international relevance]

8. Benito Morales, Félix (1996) *Del dominio de la información a la mejora de la inteligencia. Diseño, aplicación y evaluación del programa HEBORI (habilidades y estrategias para buscar, organizar y razonar la información).* Murcia: Universidad de Murcia. Doctoral thesis. (Thesis of international relevance)

9. Carpallo Bautista, Antonio. «*La Formación de Usuarios en la Bibliotecas Escolares*». Madrid: Universidad Complutense de Madrid. *In* http://www.cesdonbosco.com/revista/congreso/03-Antonio%20Carpallo%20Bautista. 11 pp. [Other publications of international relevance]

10. Catharina F., Martina Gunnarsson: Tina H.; Eva Becker, Lisbeth Hundborg; C. «*Training of library users in a New Europe*». Spain: TUNE*. In* http://www.tune.eu.com/pdf/The_Tune_Model_spa.pdf. [Other publications of international relevance; Spanish versión of the TUNE model for library user training]

11. Esparó, R. (2000) «Biblioteca e innovación docente: la participación de la biblioteca de la Universitat Pompeu Fabra en el proyecto Campus Global». *Rebiun Seminario Barcelona. La biblioteca al servicio de la docencia y la investigación.* http://biblio.uoc.es/cas/rebiun/jornada.htm [Know-how materials]

12. García Gómez, F.J. and Díaz Grau, A. «*La formación de usuarios en las bibliotecas públicas españolas: análisis de las principales experiencias*

desarrolladas» E-prints in Library and Information Science. In http://eprints.rclis.org/archive/00003191/ [Other publications of international relevance]

13. García López, Gemma López, Marta Roca Lefler, Anna Rovira i Fernández and Josep Vives i Gràcia (2004). «Disseny d'un programa d'aprenentatge de competències en l´ús i accés de la informació». In: *Actas del 1er Congreso Internacional Docencia Universitaria e Innovación.* Girona: Universitat de Girona, Universitat Autònoma de Barcelona, Universitat de Barcelona, Universitat Politècnica de Catalunya, IDES. CD-Rom, not paginated. [Guidelines for information literacy]

14. Gómez Hernández, J. A. and Benito Morales, F. «*De la formación de usuarios a la alfabetización informacional: Propuestas para enseñar las habilidades de información*». *Scire*, 2001, 7-1, pp. 53-83. URL: http://www.um.es/gtiweb/jgomez/publicaciones/alfabinforzaragoza2.PDF. [Guidelines for information literacy].

15. Gómez Hernández, José Antonio (ed.) (2000) *Estrategias y modelos para enseñar a usar la información.* Murcia: KR. (Information Literacy monographs of international coverage or impact)

16. Gómez Hernández, José Antonio «Espacio Europeo de Educación Superior y alfabetización informacional en bibliotecas universitarias». In: *Entre la realidad y el deseo. XIII Jornadas Bibliotecarias de Andalucía*, Alcalá la Real, 22 October 2004. Málaga: AAB, 2005. pp. 152-160. URL: http://www.um.es/gtiweb/jgomez/publicaciones/gomezalfinyeeesjaab2004.pdf [Other publications of international relevance]

17. Gómez Hernández, José Antonio and Cristóbal Pasadas Ureña (2003) «Information Literacy developments and issues in Spain». *Library Review*, vol. 57, no. 7, pp. 340-348. [Other publications of international relevance]

18. Gómez Hernández, José Antonio and Judith Licea de Arenas (2005) «El compromiso de las bibliotecas con el aprendizaje permanente. La Alfabetización Informacional». In: López López, Pedro and Gimeno Perelló, Javier (eds.) *Información, conocimiento y bibliotecas en el marco de la globalización neoliberal.* Gijón: Trea, pp. 145-179. [Other publications of international relevance]

19. Gómez Hernández, José Antonio and Licea de Arenas, Judith. «La alfabetización en información en las universidades». *Revista Investigación Educativa*. 20, 2, (2002) pp. 469-486. URL: http://www.um.es/gtiweb/jgomez/publicaciones/alfinrie2002.PDF [Other publications of international relevance]

20. Illescas, María Jesús. *Estudiar e investigar en la biblioteca escolar. La formación de usuarios*. Navarra: Gobierno de Navarra, 2003. [Guidelines for information literacy].

21. Jornet, N. and Rey, C., Rodríguez, C and Rubió, A. «El uso de los «dossiers electrònics» en la Facultat de Biblioteconomia i Documentació de la Universitat de Barcelona». In: Actas de las III Jornadas de Bibliotecas Digitales El Escorial, Universitat de Barcelona, Madrid. http://mariachi.dsic.upv.es/jbidi/jbidi2002/Camera-ready/Demos2/D2-1.pdf [Know-how materials]

22. Malo de Molina, T. (2000) «El Web como instrumento de apoyo a la Docencia en la Universidad Carlos III de Madrid». *Rebiun Seminario Barcelona. La biblioteca al servicio de la docencia y la investigación*. http://biblio.uoc.es/cas/rebiun/jornada.htm [Know-how materials]

23. Marzal, M.A., Cuevas, A., Colmenero, M.J. and Calzada, F.J. «Alfabetización en la información y bibliotecas escolares: una experiencia en la comunidad de Madrid». In: *World Library and Information Congress: 70th IFLA General Conference and Council, «Libraries: Tools for Education and Development». 22 - 27 August 2004*, Buenos Aires, Argentina [Other publications of international relevance]

24. Matus S. Gladys. *Los Recursos Humanos de las Bibliotecas Universitarias: Exigencias, conflictos y necesidades de Formación*. Lleida: Universitat de Lleida. In http://www.tdx.cesca.es/TESIS_UdL/AVAILABLE/TDX-0220106-101916//Tgms1de1.pdf. [Thesis of international relevance]

25. Mercè Muntada, Sandra Núñez, Marta Perpiñán, Blanca Virós i Josep Vives. «Competència en el maneig d'informació: punt d'arribada o punt de sortida de la formació d'usuaris?» Ítem: Revista de Biblioteconomia i Documentació, 35 (2003), pp. 55-72. [Other publications of international relevance]

26. Ortoll Espinet, Eva (2003a) *Competencia informacional en las ciencias de la salud. Propuesta de un modelo de formación.* Doctoral thesis. Zaragoza: Universidad de Zaragoza. [Thesis of international relevance]

27. Ortoll Espinet, Eva (2003b) «Gestión del conocimiento y competencia informacional en el puesto de trabajo». UOC. URL: http://www.uoc.edu/dt/20343/index.html (consulted: 14 August 2005). [Other publications of international relevance]

28. Ortoll Espinet, Eva (2003c) «Competencia informacional para la actividad traductora». *Revista Tradumàtica: Traducció i Tecnologies de la Informació i la Comunicació*, No. 2: La documentació. Available at: http://www.fti.uab.es/tradumatica/revista/ (consulted: 8 February 2005). [Specific guidelines for key programs at different IL settings]

29. Ortoll Espinet, Eva (2004) «Competencia informacional en el contexto de las Ciencias de la Salud». In: Lau, Jesús y Cortés, Jesús (compilers) (2004) *Normas de Alfabetización Informativa para el aprendizaje.* Ciudad Juárez, Mexico: Universidad Autónoma de Ciudad Juárez, pp. 45-56. [Specific guidelines for key programs at different IL settings]

30. Pasadas Ureña, Cristóbal (2001) *Materiales en castellano sobre alfabetización en información: Primeros resultados de un proyecto del Comité Permanente de Bibliotecas Universitarias y otras Bibliotecas Generales de Investigación de la IFLA.* Available at: http://www.ifla.org/IV/ifla67/papers/115-194s.pdf [Other publications of international relevance]

31. Pasadas Ureña, Cristóbal and Gómez Hernández, José Antonio «Alfabetització informacional i biblioteca pública. Bases i tasques per a una agenda de desenvolupament». In Bibliodoc 2005, pp. 91-114. URL: http://www.um.es/gtiweb/jgomez/publicaciones/ALFINBPbibliodoc2005castellan o.pdf [Specific guidelines for key programs at different IL settings]

32. Pinto, M. «Competencia documental y requisitos formativos del traductor literario.» In Garcia Yebra, V. and Gonzalo, C., *Manual de documentación para la documentación literaria.* Madrid: Arco/Libros, pp. 117-127. [Specific guidelines for key programs at different IL settings]

33. Pinto, M. and Doucet, AV. *A pilot initiative for information literacy in spanish higher education: the e-COMS learning portal.* (forthcoming). [Know-how materials]

34. Pinto, M. and Doucet, AV. *An Educational Resource for Information Literacy in Higher Education: Visibility and Usability of the e-COMS Academic Portal. (*forthcoming*).* [Other publications of international relevance]

35. Pinto, M. and Garcia, F.J. *Developing Information Competencies for Higher Education through e-learning: the Spanish Academic Portal Alfin-EEES* (forthcoming) [Know-how materials]

36. Pinto, M. and Sales, D. *Information Literacy from the University Library: Analysis and Diagnosis of Proposals in Spain* (forthcoming) [Other publications of international relevance]

37. Pinto, M. and Sales, D. *Knowledge Transfer and Information Skills for the Management of Student-centered Learning at University level: Analysis of some Academic Experiences in Spain* (forthcoming) [Other publications of international relevance]

38. Pinto, María (2005) «Alfabetización en información para traductores: Propuesta del modelo ALFINTRA». In: Sales-Salvador, Dora (ed.) *La Biblioteca de Babel:*

Documentarse para traducir. Granada: Comares, pp. 19-32. [Specific guidelines for key programs at different IL settings]

39. Sales-Salvador, Dora (2005) «Didáctica de la Documentación Aplicada a la Traducción: Alfabetización Informativa para la realidad profesional». En: Campos Plaza, Nicolás A.; García Peinado, Miguel A; Ortega Arjonilla, Emilio and Vilvandre de Sousa, Cécile (eds.) *El español, lengua de cultura, lengua de traducción. Aspectos teóricos, metodológicos y profesionales.* Granada/Cuenca: Atrio/Universidad de Castilla-La Mancha, pp. 599-608. [Specific guidelines for key programs at different IL settings]

40. Sales-Salvador, Dora (2005) «Teaching Documentation for Translation Studies. The Key Discipline of Information Literacy». *Translation Today*, vol. 2, no. 1, March 2005, pp. 280-283. [Specific guidelines for key programs at different IL settings]

41. Sales-Salvador, Dora. *Information behavior of translation and interpreting students in Spain: A focus group study.* (forthcoming) [Other publications of international relevance]

42. Soler, N. and Maniega, D. (2000) «La integración de la Biblioteca en el aula: la Estantería Virtual en las asignaturas de la Universitat Oberta de Catalunya». *Rebiun Seminario Barcelona. La biblioteca al servicio de la docencia y la investigación.* http://biblio.uoc.es/cas/rebiun/jornada.htm [Know-how materials]

43. Torres, Carme and Jové, Laura. «Formació en habilitats de cerca I gestió de la informació als alumnes de primer curs d'enfermeria como a eina per a integrar l'aprenentatge de competencies professionals». 4º Congreso Internacional de Docencia Universitaria e Innovación, Barcelona, 5-7 July 2006 [Specific guidelines for key programs at different IL settings]

44. Urbano Salido, C. «*El análisis de citas en publicaciones de usuarios de bibliotecas universitarias: estudio de las tesis doctorales en informática de la Universidad Politécnica de Cataluña, 1996-1998*» Barcelona: Universitat de Barcelona. *In* http://www.tesisenred.net/TESIS_UB/AVAILABLE/TDX-0614102-113014//urbano-tesis1.PDF. [Thesis of international relevance]

45. Vives i Gràcia, Josep. «La investigación sobre alfabetización en información en España: El grupo de trabajo «AlfinCat» del Col·legi Oficial de Bibliotecaris Documentalistes de Catalunya». Murcia: Foro Biblioteca y Sociedad: experiencias de innovación y mejora (2004). [Other publications of international relevance]

Other publications of relevance

We may also mention the publication in Spanish translation of a number of monographs on the subject of multiliteracy (within which INFOLIT should be

considered a crucial component), as evidence of the scientific interest in this field of work and study. Of especial note here is the launch of the AULAE series, published by Aljibe (Málaga), which, so far, includes translations of major titles such as Ilana Snyder's *Silicon literacies: Communication, innovation and education in the electronic age* (Spanish Translation: *Alfabetismos digitales. Comunicación, Innovación y Educación en la Era Electrónica*), or Gunther Kress' *Literacy in the New Media Age* (Spanish translation: *El alfabetismo en la era de los nuevos medios de comunicación*).

D. Organizations

1. Associations and professional bodies

A working group on information literacy issues was set up in Catalonia in October 2003 under the name (in Catalan) «Grup de Treball ALFINCAT» (URL: http://www.cobdc.org/grups/alfincat). It also has a wide membership from other parts of the Spanish state. The aim is to exchange ideas, approaches and good practice, as well as the advancement and promotion of the information literacy agenda.

The ALFINCAT group arose thanks to the previously existing contacts with a number of professions throughout Spain whose members are interested in the subject and are aware of the need to unite the research efforts that have been carried out so far, in both theoretical and practical terms. It brings together professionals from multiple fields (public libraries, school libraries, university libraries, companies, etc.). Its diversity, both geographical and professional, now makes it possible to acquire a global overview of INFOLIT in Spain.

More recently, March 2006 saw the creation of the Asociación Valenciana de Alfabetización Informacional (Valencian Association for Information Literacy - AVALFIN), founded in the Comunidad Valenciana (Valencia region). It is promoted by Félix Benito and Ana Caro and includes members from elsewhere in Spain who are interested in INFOLIT. In principle, it is a regional platform existing for the development of research, development and innovation programs in the Comunidad Valenciana. Its website is currently under construction (http://www.avalfin.org/), but an address exists (avalfin@gmail.com) for those seeking information or wishing to collaborate. Work is also being done on designing a pilot program for integral experimentation with INFOLIT content with pupils of compulsory school age in a number of localities in the region.

Despite the prior existence in Catalonia of the above-mentioned ALFINCAT group for the promotion and diffusion of INFOLIT, we may consider this Valencian association to be the first to have been formally constituted in the INFOLIT field anywhere in Spain.

2. Research projects / Research centers

Here we may mention the *Alfin-EEES* project, coordinated by Professor María Pinto. *Alfin-EEES* is an acronym in Spanish for *Information Literacy in the European Higher Education Area*. The project received funding in 2005 from the Program for Studies and Analysis of the Spanish Ministry of Education and Science. The outcome was the design and implementation of an e-learning training portal for transversal competencies in information for higher education, publicly available at http://www.mariapinto.es/alfineees (see, in the present report, section b.3: *Tutorials and portals for citizens*).

E. Training the trainers

1. Courses to train librarians and information professionals

As things stand, only a small number of courses have been developed in Spain on the INFOLIT paradigm for information professionals or library staff. Fortunately, despite this initiatives have been implemented such as the following:

a. «*Formació d'usuaris en la recerca i ús de la informació*» (Training Users in Research and Information Use). Barcelona: Biblioteques de Catalunya. URL: http://bibliotecnica.upc.es/sesfor_2004/

a. «De la formación de usuarios a la alfabetización informacional en unidades de información: talleres prácticos» ('From User Training to Information Literacy in Information Units: Practical Workshops'). Course held in April 2006 in Gijón and organized by the *Asociación Profesional de Especialistas en Información de Asturias* (*Professional Association of Information Specialists of Asturias* - APEI)

b. SEDIC (*Sociedad Española de Documentación e Información Científica* - the *Spanish Society for Documentation and Scientific Information*), one of the most important Spanish organizations in the information studies field, has, since its foundation, had as one of its key objectives the training of specialists in information management and documentation. It has thus organized more than twenty specialized courses, held during the academic year and aimed at those involved in the area of the conception, organization and administration of information services and resources: documentalists, librarians, archivists, content managers, and others.

c. Aware of the learning potential offered by the new technologies, SEDIC also includes in its training catalog a distance learning program, employing the Internet and audiovisual media. It is, besides, precisely in this area of on-line education that a number of recent training programs in INFOLIT have been established. These include:

  — The course «*Alfabetizar en información desde la biblioteca universitaria en la era del conocimiento y en el marco de la convergencia europea.*

Diseño de herramientas para el aprendizaje virtual» ('The information literacy process seen from the university library in the knowledge era and in the framework of European convergence: design of tools for virtual learning') - organizer: María Pinto. Tutors: Dora Sales and Pilar Martínez-Osorio. Held by SEDIC, 8-31 March 2006.

— The first edition of this course was very warmly received, and as a result there will be five more editions, from September to December 2006. These have been requested by the Universidad del País Vasco, the Universidad de Cádiz, and REBIUN.

— The course «Alfabetización múltiple desde la biblioteca pública» ('Multiliteracy seen from the public library') - organizer: María Pinto. Tutors: Dora Sales and Pilar Martínez-Osorio. Associated experts: Gloria Pérez-Salmerón and José Antonio Merlo. Held by SEDIC. 22 November - 22 December 2006.

2. Workshops/hands-.on experience (for librarians, educators, library administrators and others)

We may note here the seminar held by REBIUN under the title *«La biblioteca al servicio de la docencia y la investigación» ('The library in the service of documentation and research'*), Barcelona, 28-29 March 2000. This seminar was attended by some 100 professionals in the field of Library Sciences and Documentation, mostly from Spanish university libraries. The papers given at this event of interest to INFOLIT include:

Núria Soler and David Maniega (Virtual Library of the Universitat Oberta de Catalunya): «La integración de la Biblioteca en el aula: la Estantería Virtual en las asignaturas de la Universitat Oberta de Catalunya». This concerns an interesting facility aimed at giving students access to all the materials need to successfully acquire a given course credit.

Roger Esparó (Librarian of the Universitat Pompeu Fabra, Barcelona): «Biblioteca e innovación docente: la participación de la biblioteca de la Universitat Pompeu Fabra en el proyecto Campus Global». This paper outlined his library's participation in the UPF's *Campus Global* project (previously mentioned).

Lluïsa Núñez (Library of the Universitat de Barcelona): «Dossieres electrónicos en la Biblioteca de la Universitat de Barcelona». This paper described the content of a web resource designed to facilitate student learning.

José Luis González, Gema Duarte and Mariantònia Aloguin (Library of the Universitat Rovira i Virgili, Tarragona, Catalonia): 'Docencia/investigación, tecnología y biblioteca: la convergencia en la gestión del conocimiento'. Thiis paper proposed a theoretical approach to the important issue of the relationship between libraries and knowledge management.

F. Communication

1. INFOLIT in conference papers

INFOLIT has been presented and discussed in a number of conference papers in recent years. Since the early 1990s, presentations on user education have been a frequent feature in professional conferences and meetings in Spain. In 2000, REBIUN held a workshop on the role of the library in teaching and research, one of whose key topics concerned new developments and focuses in student learning. At the REBIUN meeting on 'Learning and research resource centers' roles in innovative teaching processes' held in Palma (Majorca, Balearic Islands) in May 2003, the stress was on new learning models for the information society and new roles for the university library, with information literacy strongly present on the agenda.

FESABID (*Federación Española de Sociedades de Archívistica, Biblioteconomía y Documentación - the Spanish Federation of Archive and Library Science and Documentation Societies*) regularly organizes the *Jornadas Españolas de Documentación (Spanish Documentation Seminars)*, which have for some time now been highlighting INFOLIT, as in the following sessions:

— Round table: «La alfabetización informacional como servicio de las instituciones documentales» ('Information literacy as a service of documentation institutions'), 8th Spanish Documentation Seminar, Barcelona, 2003. URL:
  http://www.fesabid.org/barcelona2003/textos.html.

— a number of papers on information literacy at the 9th Spanish Documentation Seminar, Madrid, 2005. URL:
  http://www.fesabid.org/federacion/jornadas.htm

It is gratifying to see how professional and scientific meetings in the area of Information and Documentation are now featuring INFOLIT-related material. This is also the case with the IBERSID (http://www.ibersid.net/) conferences held each November in Zaragoza and organized by Francisco Javier García Marco. Since the 2003 edition, these conferences have included a number of papers on INFOLIT. We may cite the following (some of them from other Spanish-speaking countries or, indeed, from Brazil):

IBERSID 2003 - the panel on *Education and training in information and documentation systems* included the paper «Modelo de intervención para la formación de usuarios en instituciones de educación superior», by María Guadalupe Vega Díaz (Librarian, Biblioteca Daniel Cosio Villegas, Colegio de México, Mexico City).

IBERSID 2004 - this conference included the paper «Gestión del aprendizaje en una biblioteca universitaria», by Carmen Varela Prado (Librarian, Escuela de Magisterio, Lugo (Galicia) - college of education attached to the Universidade de Santiago de Compostela).

IBERSID 2005 - this conference was marked by a stronger INFOLIT presence, including a whole panel on the subject. The contributions included:

— Paper: «Diseño y desarrollo de portales de contenido sobre alfabetización en información en el marco de la convergencia europea», María Pinto Molina (Universidad de Granada; also panel chair)

— Communication: «Aprendiendo a aprender: Una propuesta de trabajo colaborativo en el nuevo marco de la enseñanza universitaria», Carmen Varela Prado (Librarian, Escuela de Magisterio, Lugo / Universidade de Santiago de Compostela)

— Paper: «Análisis de los servicios de información que suscribe la UNAM: una propuesta para los talleres de desarrollo de habilidades informativas», María del Pilar Ladrón de Guevara Solís (Librarian, Department of Specialized Services, Faculty of Sciences, Universidad Nacional Autónoma de México [UNAM], Mexico City) and Sergio Márquez Rangel (Librarian, Electronic Journals Service, Directorate-General for Libraries, UNAM)

— Paper: «El uso de la de la biblioteca y de la tecnología de la información y comunicación (TIC) para la investigación entre los estudiantes universitarios de Rio de Janeiro: diferencias de género y socio-culturales», Dr Cládice Nóbile Diniz (Faculty of Administration, Centro Universitário UNIABEU, (Brazil).

The eleventh edition of IBERSID in 2006 saw the further consolidation of the INFOLIT section, with a panel including the following contributions:

— Paper: «La transferencia de habilidades y competencias en la gestión y uso de la información para el aprendizaje autónomo del estudiante en el marco del Espacio Europeo de Enseñanza Superior», María Pinto (Universidad de Granada)
— Paper: «Blended learning para un programa de desarrollo de habilidades informativas en la biblioteca de la Escuela Universitaria de Formación de profesorado de Lugo», Carmen Varela (Librarian, Escuela de Magisterio, Lugo / Universidade de Santiago de Compostela)
— Paper: «Diseño de programas de animación a la lectura: una metodología interdisciplinar desde la Biblioteconomía y las Ciencias de la Educación», María del Carmen Agustín Lacruz and Agustín Yubero (both Universidad de Zaragoza)
— Paper: «Alfabetización informacional aplicada a comunidades de práctica», Dora Sales (Universidad Jaume de Castellón)

— Paper: «Herramientas y estrategias de aprendizaje en línea para la formación de postgrado en gestión de la información digital en los medios de comunicación», Judith Prat (Municipal Archive, Salou, Catalonia)
— Communication: «La biblioteca educativa: principal actor en la adquisición de habilidades y competencias en el uso de la información (la Alfabetización Informacional)», Joan Isidre Badell (Universitat de Vic, Catalonia)

Also recently, INFOLIT had a high-profile presence at the *IV Jornadas CRAI de las Bibliotecas Universitarias Españolas (Fourth CRAI Seminar of the Spanish University Libraries)* (REBIUN, Burgos, 10-12 May 2006). The acronym CRAI stands for *Centro de recursos para la enseñanza y la investigación* (Resource Centre for Teaching and Research), and this seminar on the role of the university library in that context provided an opportunity for more detailed work on numerous aspects of the education/library relationship within the new higher education framework. A number of the contributions stressed the key role of INFOLIT for education in the Knowledge Society.

In addition, members of the ALFINCAT Group (q.v.) have presented their work on INFOLIT at a number of documentation conferences in Catalonia:

— Mercè Muntada, Sandra Núñez, Marta Perpiñán, Blanca Virós and Josep Vives. «Alfabetisme informacional: punt d'arribada o de sortida de la formació d'usuaris?», VIII Jornades Catalanes de Documentació (Eighth Catalan Documentation Seminar) (2001)

— Josep Mumbrú and Josep Vives. «Com ensenyar als estudiants d'enginyeria a aprendre a usar la informació científica i tècnica?», XI Congreso Universitario de Innovación Educativa en las Enseñanzas Técnicas (Eleventh University Conference on Teaching Innovation in Technical Education) - Vilanova i la Geltrú (2003)

— Mercè Mestre, Pilar Nieto, Marta Roca and Josep Vives. «La Formació en l'ús de la informació a l'ensenyament superior». Proceedings of the Jornada de Reflexió i Debat sobre el model docent de la UPC en l'Espai Europeu d'Educació Superior (Reflection and Debate Seminar on the UPC's Teaching Model within the European Higher Education Area), Barcelona (2004)

— Recently, in the *XI Jornadas Nacionales de Información y Documentación en Ciencias de la Salud (Eleventh National Health Sciences Information and Documentation Seminar)* held in Terrasa (Catalonia) in 2005, one of the papers presented was on INFOLIT - namely, that of María Teresa García Ballesteros, «Alfabetización informacional en el ámbito sanitario», a contribution based on her interesting experiences in the hospital context in Málaga.

Also, at the *IV Simposio de Bibliotecas Digitales* (*Fourth Digital Library Symposium),* held in Malaga in June 2006, a number of communications highlighted the theoretical and practical advances being made in INFOLIT. On the practical plane, the authors presented various experiences of INFOLIT courses using e-learning platforms such as Moodle or WebCT, offered to students by the university libraries of Seville, Málaga and La Laguna (Canary Islands) and testifying to the libraries' desire to be integrated into virtual campuses and curricular instruction, as well as their pedagogic capacity and mastery of the relevant tools. These presentations included:

— "Experiencia de un curso sobre competencias impartido por la biblioteca con plataforma de e-learning», by Nieves González Fernández-Villavicencio, Paz Sánchez Baillo and Victoria Tejada Enríquez.
— "Un espacio para la biblioteca en el Campus Virtual de la Universidad de Málaga», by Gracia Guardeño Navarro and Maribel Enríquez Borja.
— "La adquisición de competencias informacionales a través de la formación en línea», by Carmen Julia Hernández and José Manuel Erbez Rodríguez.

Equally, the theoretical part of the symposium included the following communications, presented by members of the ALFAINFOR group of the Universidad Carlos III de Madrid:

— "Documentación y tecnologías de la información para Educación: herramientas para la alfabetización informacional y la organización de recursos didácticos (DOTEINE): estado del proyecto»; and
— "La Alfabetización en Información en la formación universitaria: instrumentos para la evaluación y diagnóstico de competencias informacionales sobre contenidos educativos virtuales»

There was also a presentation by Maria Teresa García Ballesteros relating INFOLIT to evidence-based medicine, embodying her work at the library of the University Hospital in Málaga; while Jesús Lau explained how a full INFOLIT training is offered to all teaching staff via the library at Mexico's Universidad Veracruzana, as part of his participation in the round table on 'Teaching, research and the digital library'.

July 2006 saw, in Barcelona, the *4º Congreso Internacional sobre Docencia Universitaria e Innovación* (Fourth International Conference on University Teaching and Innovation), aimed at contributing to the spread of best practices in the area of teaching innovation. Among those giving plenary addresses were Sybille Reichert and Eric Froment, European specialists in educational innovation in the context of the EHEA. Of particular interest for our subject was the discussion at this conference on the learning context (strategies, resources and technologies), from the vantage point of creating the most suitable context for encouraging student learning. Here, we may stress the role of the services and structures provided by universities which facilitate the development of a new form of teaching and learning

in higher education. This is an area where training in information management (as a part of INFOLIT) takes on particular interest.

2. Specialized seminars on INFOLIT

With a more specialized intent, a number of seminars were held in 2006 which strongly drew attention to the growing interest in INFOLIT in Spain:

— A seminar on «Las nuevas alfabetizaciones. La alfabetización digital a debate político y social» (The new literacies: Digital literacy and the political and social debate) was held in February 2006, under the auspices of the Observatorio de la Sociedad de la Información y del Conocimiento(Monitoring Unit for the Information and Knowledge Society), of the FIAP («Foro de investigación y acción participativa para el desarrollo de la sociedad del conocimiento» - Forum for Research and Participatory Action for the Development of the Knowledge Society), as well as of a number of other foundations and monitoring centres, including the Fundación Telefónica. This seminar, while prioritizing digital literacy, also pointed up the importance of examining the significance of the new literacies in general, as well as analyzing their best practices, their relationship with knowledge processes (i.e. not conceiving them as merely a means of promoting consumption of technology), the strategies to be applied, the social repercussions, etc.

— February 2006 also saw the seminar «Biblioteca, aprendizaje y ciudadanía: la Alfabetización Informacional (ALFIN)» ('Libraries, learning and citizenship: Information Literacy (INFOLIT)'), held by the Biblioteca de Castilla-La Mancha in Toledo, with the support of the Subdirectorate-General for Library Coordination and the Junta de Comunidades of the Castilla-La Mancha region. The aim was to examine INFOLIT from the conceptual viewpoint, as well as looking at didactic methods and their practical application, the criteria for assessing the results and learning outcomes of INFOLIT programs, and policies for the social extension of INFOLIT on the part of educational, cultural and documentational institutions. Material relating to this seminar may be found at: Travesía. Portal de las Bibliotecas Públicas Españolas (Portal for the Public Libraries of Spain) - URL: http://travesia.mcu.es/alfin.htm). Already available in this context is the Toledo Declaration (at present by means of guest access to the e-learning platform of CITA). Also to be found at the Travesía site is the logo designed by the Subdirectorate-General for Library Coordination. Concerning this, it is stated that it is a 'visual embodiment of the concept of INFOLIT, that is, the set of capacities, skills, behaviors and attitudes which enable the individual to seek, access, assess and use, in effective fashion, the most useful information existing in whatever medium for the purposes of decision-making, problem-solving, personal and social development, democratic participation, etc'. This portal also offers a number of downloadable files with the logo, in .eps and .pdf format.

— A professional seminar was held at the Biblioteca Nacional (National Library. Madrid) in June 2006, under the title: 'Bibliotecas y educación: Una relación a debate' ('Libraries and Education: A Relationship under Debate'. This seminar, organized by SEDIC and the Fundación Germán Sánchez Ruipérez, was aimed at examining the education/ library relationship, starting from two communications:

— «La alfabetización informacional: bases y modelos», by Félix Benito Morales;

— «Bibliotecas, educación y lectura: el encuentro esperado», by José Antonio Merlo.

The seminar also included the following two round tables:

— «El profesional de las bibliotecas de centros de enseñanza: perfil, formación y competencias» ('Library professionals in educational institutions: profile, training and skills')
— «La biblioteca como centro de recursos: nuevos modelos para realidades cambiantes» ('The library as resource centre: new models for changing realities')

3. International actions and meetings

The spring meeting of the European Council of Information Associations, held on 25 and 26 March 2001 in Madrid with representatives from Finland, Sweden, Germany, Spain, Portugal, the UK, France, Italy and Belgium, highlighted information literacy as a must in the information society, and it could also be seen as the first step in promoting the profession. Carla Basili, from Italy, expressed willingness to coordinate a work group that would define the term and monitor initiatives taken in different countries. Therefore, she has initiated a project under the name 'EnIL: European thematic network on information literacy' (URL: http://www.ceris.to.cnr.it/basili/enil/index.html), the idea being to form a European network of information literacy experts. Currently, among other actions, EnIL is

developing the European Observatory on IL Policies and Research (EgIL), which is an online gateway to European policies, research projects and initiatives related to information literacy, with special focus on higher education developments. This gateway is organized on a country basis and has so far been released for Austria, Denmark, Finland, Germany, Italy and Poland. Work for other European countries (including Spain) is still in progress.

In addition, several projects in information literacy have been initiated at European level and funded by the EU, with the involvement of Spain. Among the best-known are the *End User Courses in Information Access through Communication Technology (EDUCATE)* and the *Distance Education Information Courses with Access Through Networks (DEDICATE)* projects. *EDUCATE* (1994-1997) was developed under the EU Telematics for Libraries Third Framework project, and concerned subject-related aspects of information literacy for scientists and engineers, aiming to develop an on-line course in the selection and use of information tools which could be used in a number of settings, for self-directed learning or as part of a formal course in information literacy. It led to two 'Into Info' subject modules, respectively for physics and for electrical and electronic engineering, which were tested for the training of undergraduate students and researchers at ten universities. The programs were produced in seven subject areas: architecture, chemistry, energy, electrical and electronic engineering, environmental information sources, medicine and physics. Later, the production of modules followed for other subjects: history of science and technology, and civil engineering. These programs, which were produced in English, French and Spanish, may be used by librarians and information specialists in courses on information literacy. The project involved universities from Ireland, Sweden, France, Spain and the UK.

4. Listservs/discussion lists

There are two listservs related to information literacy in Spain:

— Listserv of the ALFINCAT Group (information at: http://groups.yahoo.com/group/alfincat/).

— Listserv ALFAINFOR: Alfabetización en Información, Documentación en Educación (Information Literacy and Documentation for Education) (information at: http://www.rediris.es/list/info/alfainfor.es.html)

5. Weblogs

— Weblog ALFIN: Alfabetización Informacional: Recursos e ideas sobre cultura de la información y nuevas alfabetizaciones (INFOLIT - Information Literacy: Resources and Ideas on Information Culture and New Literacies) URL: http://alfin.blogspirit.com

— This blog, coordinated by José Antonio Gómez Hernández, is aimed at disseminating INFOLIT in the Spanish-speaking community and promoting it as a service in the library and educational context and as part of information society policy. It is an open-access blog, containing information structured by categories related to the application of INFOLIT to different contexts, INFOLIT models, application criteria, teaching experiences, relevant texts, etc. It is updated continually and carefully. It was the first, and remains the most complete, INFOLIT blog in Spain.

— Weblog Alfabetización informacional (ALFIN) en la educación secundaria (Information Literacy (INFOLIT) in Secondary Education)
URL: http://alfinsecundaria.blogspirit.com/

— This blog, run by a secondary school teacher, Jordi Fernández, is bilingual in Catalan and Spanish.

6. Websites devoted to information literacy

There are no specific websites devoted to information literacy in Spain (cf. point b.3 of this report: Tutorials and portals for citizens).

G. Conclusions

Participation in the information literacy movement at global level and further views for recommended actions

UNESCO has strongly entered the information literacy arena. Thus, UNESCO, the US National Commission on Libraries and Information Science, and the National Forum on Information Literacy decided to arrange a 'Meeting of Experts', to be held in early 2002 in Prague, for undertaking and planning a larger and more ambitious worldwide 'International Leadership Conference on Information Literacy'. Spain was there, along with the representatives of the other European countries invited to the meeting, including Finland, France, Latvia, Portugal, Romania, Slovenia, the Czech Republic and the UK.

Spain also participated in the European project «TUNE: Training of Library Users in a New Europe» (http://www.tune.eu.com), which brought together the Municipal Library of Helsingborg (Sweden), the Municipal Library of Randers (Denmark) and the Regional Library of Castilla-La Mancha (Toledo, Spain). The project also included the Regional Public Library 'Oton Zupancic' (Ljubljana, Slovenia). It received funding from the European Commission's 'Culture 2000» program. For more information, see:

Carrato Mena, M. A. «*Proyecto TUNE: La Biblioteca de Castilla-La Mancha se une a bibliotecas de Suecia y Dinamarca en un proyecto europeo*» Subdirección General de Coordinación Bibliotecaria. In:

http://www.bcl.jcyl.es/correo/plantilla_seccion.php?id_articulo=1186&id_seccion=1
&RsCorreoNum=80. [Workshop/Hands-on experience]

All in all, libraries in Spain, both at university and secondary school level, have registered considerable advances in their user training services. We may already speak of a palpable growth in the dissemination and awareness of the INFOLIT paradigm in the Spanish library sciences community. At the same time, this positive trend is also visible in the higher education arena, among teachers and researchers in the area of Information Sciences and Documentation. What is now needed is to seek out forms of cooperation between librarians and faculty with a view to offering quality didactic paths in INFOLIT for the university student community, bearing in mind that INFOLIT embodies a transversal competence that is vital to the education of all aspiring professionals and all citizens of the Information and Knowledge Society. Hands-on cooperation between library staff and faculty expert in information sciences is a crucial element in this process. For this, it is essential to ensure the proper organization of activities, setting learning objectives and identifying the user groups' needs (on the basis of awareness of the different communities of practice), and carefully planning the aspects of timing, structuring of content and creation of teaching resources. In conclusion, in countries like Spain there is still much more to be done in terms of developing INFOLIT initiatives, via the designing of tools, programs and implementing measures - such as e-learning portals, tutorials, thematic dossiers, educational platforms, repositories, learning laboratories, etc – with particular emphasis on those which bring together the academy and the library. The work to be done to strengthen this approach, on the basis of interdisciplinary teams, represents a challenge that is now wide open.

H. References

VII. Sub-Saharan Africa
Information Literacy State-of-the Art Report
November, 2006

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A. Introduction

This overview on development of Information Literacy (IL) in English speaking Sub-Saharan Africa countries is based on literature review. Tools for literature search included international databases such as EBSCO Host, Library and Information Science Abstracts (LISA) and Information Science Plus. An assessment of web presence of issues on information literacy in institutional web pages was carried out.

The concept of Information Literacy

The literature reveals that the concept of Information literacy appears in the different African countries. The developments are at different levels within countries and between countries. The more visible developments are at university level. These started in the 80's with developments of user education programs which covered library orientation and bibliographic instruction to new university students. These students come from secondary schools where there were no libraries or where the library systems which existed were poorly developed Anwar (1981), Idiodi (2005). The rapid growth in computer networking and the use of computerized data bases to access information in African Universities Rosenberg (1997) necessitated more formalized information literacy programs to avoid as John Naisbitt put it "drowning in information but starved for knowledge".p24 due to the explosion of information brought about by the new information technologies.

The case studies on developments of information literacy programs in the Southern, Central and Southern African Countries covering eight countries Botswana, Kenya, Lesotho, Namibia, South Africa, Tanzania, Zambia and Zimbabwe(Kiondo & Msuya) (2005) indicate institutional efforts on the developments of IL programs in different countries. This is also the case with Nigeria, Idiodi (2005).

The definition of IL widely adopted by these institutions is "having the ability to recognize when information is needed, then to be able to locate and evaluate the appropriate information and use it effectively that of the American Library Association (ALA) (1996). The ALA and the Australian standards have both been adapted by African University libraries in developing their IL programs. It is evident from the literature that the African countries reviewed did not re-invent the wheel but rather tap from existing well established IL programs.

These IL case studies revealed that"there is a general awareness about the meaning of information literacy and how it differs from library orientation and bibliographic instruction." Diana Rosenberg pxi. The relationship of Information literacy to the concepts of information skills and information technology literacy is also understood as evidenced from the topics covered in different IL programs. Information skills acquisition is an aspect of information literacy and may be seen as the process of gaining the tools that assist the development of information literacy, in the same way that study skills aid the learning process this is evident in the different programs where information skills are taught as modules in an examinable Communication and study skills course or information skills modules as part of the Computer and Information skills.

B. IL Products for users

The literature shows that IL takes a variety of forms that differ from institution to Institution and from country to country. The types of IL programs offered in different sub Saharan African countries can be put into three categories

— Formalized credit bearing or examinable courses
— User education programs structured for different user groups
— Courses integrated instructions

1. Credit courses

IL forms part of an accredited Communication Skills Course at the University of Nairobi Kenya, while at the University of Botswana the IL component is offered as part of the Computing and Information Skills Course, which is compulsory for all first year students.

2. User Education Programs

The user education programs cover similar topics as those offered in examinable courses above. However they are offered at different levels in those countries where they are practiced. The programs range from one off sessions on the use of the library and its resources to structured sessions offered throughout the year. These instruction lessons are not compulsory. They are offered to those who register for them.

3. Course Integrated Instruction

In some institutions Librarians are continuously forging partnership with faculties to develop course integrated approach in which Information skills and problem solving skills are integrated into the teaching and learning of one of the core courses of the program of study.

C. Organizations

Efforts are being made by library associations to provide a platform for discussion and developments in IL at both national and regional levels. The Standing Conference of African National and University Libraries of Eastern, Central and Southern Africa (SCANUL-ECS) held a conference on Information Literacy in 2004 in Kampala. One of its recommendations was for SCANUL-ECS members to provide case studies of IL developments in their institutions. The case studies were aimed at getting all participating institutions to provide valuable information on how they run their IL programs if they have programs in place and identify challenges which could be addressed collectively at either national or regional level.

The national library Associations have not yet established Bodies or committees to deal specifically with IL issues at national or regional level. I

The resource sharing by institutions and organizations is in terms of capacity building activities through workshops and training of librarians on areas which would better equip them for the information literacy skills programs. The International Network for the Availability of Scientific Publicans (INASP) http://www.inasp.info/training/   is one organization which has made significant contributions through its INTERNET traveling workshops in the region which aimed at training librarians for effective use of the Librarians in the effective use of the INERNET for teaching learning and research purposes thus making a positive contribution to both African universities Libraries and Public libraries towards equipping those to take responsibility in IL programs. Materials on all training programs are available for downloading from the INASP website.

In 1995, the INFOLIT program was initiated in South Africa to promote information literacy education on a regional approach within South Africa. Its objectives were to:

— Promote the concept, value and importance of information literacy in the context of globalization and redress to key players in the region
— Launch a series of pilot projects which explore and establish various means of spreading information literacy education in the region
— Investigate information literacy models, programs and initiative in other countries that could be adapted to local conditions

This South African INFLOLIT initiative has achieved a number of its objectives Underwood (2002) as evidenced from the development of IL in South African Universities as compared to other countries in the region.

D. Communication

An assessment of 26 Sub- Saharan Africa library webpages indicates that IL programs also extend to the on-line environment. In cases where there are no compulsory IL programs, library webpages of libraries are used to market IL programs which are on offer by those institutions to users.
The on-line tutorials range from those developed at institutional level within countries to those where links are provided to tutorials developed elsewhere.

An example of linked tutorials are those of **Ashesi University** College, **Ghana** - A private, accredited, non-sectarian college associated with Swarthmore, Berkeley and Microsoft links are provided to;

— Texas Information Literacy tutorial
— Information Tutorials from Albany
— University of South Caroline Beaufort Library

The University of Cape Town South Africa has an example of an interactive tutorial on Information skills which is referred to as the "Info Skills corner.
http://www.lib.uct.ac.za/Training/Infolit/infolit/InfoLit.html
http://www.lib.uct.ac.za/llc/

Library guides

Another regular feature on library web pages to provide IL in different countries is the provision of library guides on how to use the library services and its information resources.

E. Conclusions

This paper notes that the level of IL awareness in the Sub-Saharan Africa region is fairly high in institutions of higher education. The main challenge in all countries is the development of policies at national and institutional levels which would guide and facilitate the intergration of IL programs from primary schools through to Institutions of higher learning.

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VIII. United Kingdom and Ireland
Information Literacy State-of-the Art Report
June 7 2006

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A. Introduction

This section gives a brief overview of the situation in the UK and Ireland at the start of 2006. Earlier reviews of the UK can be found in Webber and Johnston (2002) and Webber and Johnston (2003). A similar review of the Irish situation can be found in McGuinness (2003) and specifically a review of information literacy in the Irish tertiary education sector in CONUL (2004). Virkus (2003) has provided a good literature review of information literacy in Europe.

Information Literacy has not been recognised as such at the highest political level in the UK and Ireland. In both countries there is concern that there should be active participation and success in the global information society. However, this has tended to translate into a focus on information technology rather than information literacy. In the UK, media literacy is receiving attention from the Government (Ofcom, 2006), primarily driven by concerns about use of the internet and other digital media. Similarly, both countries have supported initiatives in the area of lifelong learning, but again information literacy has not necessarily been foregrounded. Perhaps the most encouraging development in this area is in

Scotland, where John Crawford and Chris Milnes took advantage of the more advanced e-Government options to petition the Scottish Parliament on information literacy (some aspects of Government are devolved to home-nation parliament or assembly in the UK). There is a verbatim account of the presentation following the petition at:
http://www.scottish.parliament.uk/business/committees/petitions/or-05/pu05-1902.htm.

Amongst library and information professionals there has been a real explosion of interest in information literacy over the last few years, and a growing tendency to use the term "information literacy". The first UK national model to be developed was the Society for College, National and University Libraries (SCONUL) "7 pillars model of information literacy (SCONUL Task Force, 1999). There is information about this on the SCONUL website: (http://www.sconul.ac.uk/activities/inf_lit/) including graphics of the model which can be downloaded. This model has been taken up in a number of universities in the UK and also by some in Ireland. The credit bearing course MOSAIC (described in the next section) also uses the SCONUL model as a framework, and was developed with SCONUL.
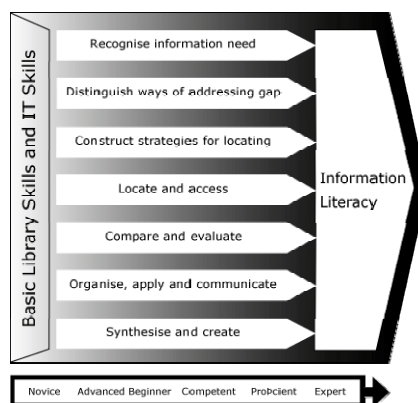
The SCONUL Working Group on Information Literacy has promoted and developed information literacy in a number of ways, including through events and though the publication of a book with case studies of information literacy programmes (Peters, 2004). SCONUL also prompted the Higher Education Academy to fund a research review on the impact of information literacy and libraries in 2006.

In 2004 this model was joined by a definition of information literacy developed by a working Group of the Chartered Institute of Library and Information Professionals (CILIP) (Armstrong et al, 2005) which is the main professional association in the UK. This definition is:

"Information literacy is knowing when and why you need information, where to find it, and how to evaluate, use and communicate it in an ethical manner." (http://www.cilip.org.uk/professionalguidance/informationliteracy/definition/).

Also in 2004 a CILIP Information Literacy Group was founded, as part of CILIP's Community Services Group. This group covers all library sectors and has been very active since its inception e.g. running the LILAC conference (see below) and sponsoring some case studies of best practice in 2006.

In Ireland, the recently established LAI (Library Association of Ireland) Working Group on Information Literacy is charged with the task of recommending strategies for the development of information skills at both a theoretical and practical level in the Library and Information Services sector in Ireland. Consisting of representatives from all of the major LIS sectors, the aims of the group include the promotion and strategic positioning of IL on the national government agenda, and suggesting further development opportunities for research and action on information skills in Ireland.

Other library groups active in the information literacy area include the School Library Association, which, for example, has often made information literacy a focus of events. A number of different models are used by school librarians in developing students' information literacy. An article which is on the web and is frequently cited as good practice in schools is Barrett and Banks (2003) description of information literacy at Dixons City Technology College. Professor Dorothy Williams and colleagues at Robert Gordon University (2006) have carried out a number of research studies concerning schools and information literacy and also on the impact of school libraries.

In the higher and further education sector, as well as use of the SCONUL model, there are other frameworks which have been developed, some drawing on the US' ACRL standards, and some also on the work on in the Big Blue project (Manchester Metropolitan University Library and Leeds University Library, 2002). Examples include Manchester Metropolitan University's Infoskills (http://www.library.mmu.ac.uk/info/infoskills.html). In Dublin City University (DCU), a 3-level Information Literacy Framework was developed by librarians in 2003, consisting of an indicative set of information literacy learning objectives and outcomes for each level. This framework has been used as a basis for the design and development of information literacy sessions for a variety of programmes, delivered in collaboration with academics (Breen & Fallon, 2005).

The situation varies between universities, with some having an institutional framework for information literacy and active collaboration between librarians and faculty to develop students' information literacy, and others having a less advanced situation. Further Education colleges usually face more of a challenge in achieving a well developed institutional information literacy strategy, for various reasons, including lack of resources.

Administrators and managers in higher education are being targetted by an initiative funded via the Joint Information Systems Committee (JISC): "i-skills" Workshops were run around the UK in the first half of 2006 to raise awareness of the types of information skills needed, and to help staff identify how their skills could be improved.

Also in Ireland, the Consortium of National and University Libraries (CONUL) reviewed the situation in tertiary education in 2004, and also identified examples of good developments in information literacy, but a similar patchy picture to the UK. They continue to work in this area, including discussions about a national information literacy framework. Again as in the UK, there continues to be progress in developing information literacy strategies: one example of a more developed approach to information literacy is at Waterford College of Technology. (see http://www.wit.ie/library/learningsupport/).

In the corporate sector, TFPL has identified information literacy as key to effective knowledge management (TFPL, 1999) and has done some information literacy work with organisations. In some corporate sectors and government agencies, information literacy has been taken seriously, although sometimes names other than "information literacy" are preferred. Donnelly and Craddock (2002) describe information literacy initiatives at the multinational company Unilever, and other sectors which tend to value information literacy (by whatever name) are ones where knowledge is part of the core business (e.g. legal sector).

The health sector, with its emphasis on evidence based practice, has a definite interest in information literacy. The UK and Ireland have nationalised healthcare services. There is an area for librarians on the UK National Health Service's National Library for Health site (http://www.library.nhs.uk/forLibrarians/?) and library and information professionals in the medical and healthcare sectors have been leaders in the evidence-based librarianship movement (Booth and Brice, 2004). The *Standards for Irish healthcare library and information services* (2nd ed 2005) identify "structured education and training programmes to its users" as part of the standard for the library service. In 2002, the National Adult Literacy Agency in Ireland (NALA) launched its Health Literacy Policy & Strategy Report, which found that low literacy levels are a barrier to accessing health services in Ireland. The document makes a number of recommendations for improving the accessibility of health services for adults with low literacy levels. (http://www.nala.ie/download/pdf/health_lit_policy.pdf).

Public libraries have not been encouraged by the UK Government to put information literacy at the top of their agenda, with there being more focus on issues such as social inclusion, lifelong learning etc. However, with the completion of the People's Network project (putting internet connections in public libraries and tarining librarians to support internet use) there is more of a focus and interest on information literacy. Public libraries have been taking on a more educational role, often housing learning resources (e.g. computer assisted learning) for citizens and are obviously already carrying out information literacy activities in training citizens

to use the internet, carry out research for school, work or leisure interests etc. O'Beirne (2006) briefly sums up the situation and highlights some coming initiatives. In Ireland, the Wexford Public Library Service has developed an online Library Research Skills module, aimed at supporting students who wish to undertake e-learning courses. The module consists of 4 sequential units, along with exercises and downloads, that are designed to equip learners with the information skills required to function effectively within an electronic environment. (http://www.wexford.ie/Library/researchSkills/).

At the moment collaborations between different library sectors on information literacy are not so common, but one developing example in Wales is Newlis (Newport Libraries and Information Service http://newlis.newport.ac.uk/) which was launched in 2005 and includes collaboration on information literacy in its plans.

B. IL Products for users

The UK's Open University (OU) has an advanced information literacy programme, with its Information Literacy unit (http://library.open.ac.uk/help/infolitunit.html) coordinating its programmes. There is encouragement for course leaders to embed information literacy into their modules and the OU library has been developing an assessment tool. Additionally, Information Literacy is identified one of the key skills for students (http://www.open.ac.uk/keyskills/assessment-literacy.htm), there is an online tutorial which anyone can access (SAFARI) and also a credit-bearing one-semester module (MOSAIC) which can be taken by Open University students as part of their degree (Parker, 2003). MOSAIC is, like all the OU's modules, distance-learning, and it is based around the SCONUL 7 Pillar model, with a portfolio assessment. Over a thousand people have taken and passed the module. The MOSAIC module has also been run on a smaller scale in some other universities, as part of further development with SCONUL.

In Scotland, students may study for a Scottish Qualification Authority unit qualification at Intermediate Level 2 called "Information Handling Skills" (http://www.sqa.org.uk/files/nu/DF9J_11.pdf), which involves 40 hours of learning.

Looking at material with no qualification or credit attached, many resources and tutorials have been developed for people learning about information literacy, in particular tertiary level students. Some are freely available on the web. Some examples are listed below. In particular there are:

— The RDN *Virtual Training Suite* of tutorials in many different subject areas, developed for use in further and higher education. Note that the RDN is being renamed "Intute" in 2006, and the website address may also change, but the Training Suite will be maintained.

— The detailed Netskills tutorial, TONIC, that has been developed in several versions over a number of years. It covers a number of aspects of information literacy, including a quiz element.

— The new material developed for Learning and Teaching Scotland by CTAD, which has material aimed at three different age groups: 9-11 years; 12-14; 15-19. There is a series of mini-tutorials for each age group, and information for teachers and parents. This is freely available. There is also another Scottish resource, Information Handling Skills material that can be bought.

A number of universities and colleges have used the INFORMS software to develop tutorials (see http://informs.hud.ac.uk/cgi-bin/informs.pl). Obviously, some of these tutorials (and other material) will be used within institutions as part of credit-bearing courses in other subjects.

There are some tutorials developed by agencies for specific purposes e.g. the *Judge: web sites for health* tutorial.

Details

1. CTAD for Learning and Teaching Scotland. *Information Literacy.* http://staging.ltscotland.org.uk/lts/external/ctad/informationliteracy/index.asp

2. Contact a Family and Information Society Research and Consultancy Group. *Judge: web sites for health*. http://www.judgehealth.org.uk/index.htm

3. Netskills. *TONIC.* http://www.netskills.ac.uk/onlinecourses/tonic

4. Open University Information Literacy Unit:
5. http://library.open.ac.uk/help/infolitunit.html

6. Open University: *SAFARI: Skills in Accessing, Finding, and Reviewing Information*. http://ltssolweb1.open.ac.uk/safari/signpostframe.htm

7. Open University: *MOSAIC: Making Sense of Information in the Connected Age* http://www.open.ac.uk/mosaic/index.cfm

8. RDN *Virtual Training Suite* (tutorials in many subject areas) http://www.vts.rdn.ac.uk/

9. South Bank University, England. *Information Quest.* http://www.lisa.lsbu.ac.uk/quest/index.html

10. University of Aberdeen, Scotland. *E-Resources.*(Tutorial) http://www.abdn.ac.uk/cgi-bin/cgiwrap/lib262/e-resources/start

11. University of Leeds, England. *Workbooks* and *tutorials* in different subject areas (not all are available outside the university). http://www.leeds.ac.uk/library/training/index.htm

12. University of Limerick, Ireland. *Library Resources Guide: Quickstart.* (Click on Finding information on a subject; Finding information on the web.) http://www.ul.ie/libraryquickstart/

13. Waterford Institute of Technology Libraries, Ireland. *OLAS – Information Literacy Online.* http://library.wit.ie/library/olas/index.html

C. Publications

The document which launched the SCONUL "7 pillars of Information Literacy" (SCONUL Task Force on Information Skills, 1999) is still much cited. As has been mentioned already, SCONUL and the HEA have also published a booklet on information literacy and learning outcomes (Peters, 2004) and the proceedings of a conference organised by SCONUL is available (Corrall and Hathaway, 2000). Books published by UK authors include Andretta (2005), Webb and Powis (2004). These are both aimed at librarians who teach information literacy. The published proceedings of the IT and Information Literacy conference were also notable (Martin and Rader, 2003): this has now become the eLit conference, mentioned below.

The *Journal of e-literacy (JELIT)* (http://www.jelit.org/index.html) is a free refereed online journal that now includes papers from eLit conferences. The *Journal of Information Literacy* will commence in October 2006 as part of the new *Information Literacy website* (http://www.informationliteracy.co.uk/). Similarly it will have refereed articles and also a non-refreed section for shorter articles, review and opinion pieces. Articles about information literacy are published in numerous journals: notable are special issues devoted to information literacy in *Library and information update* and *Italics. Library review* is also a UK-based periodical which has a regular focus on information literacy.
Books, articles and special issues mentioned here are cited in the bibliography at the end of this report.

D. Organizations

1. Associations and professional bodies

The two main UK groups that focus on information literacy are:

a. SCONUL Working Group on Information Literacy. http://www.sconul.ac.uk/activities/inf_lit/.

b. CILIP Community Services Group Information Literacy Group. http://www.cilip.org.uk/specialinterestgroups/bysubject/informationliteracy .

Their activities have already been mentioned above.

2. Research centers / Research projects

Research into information literacy is being carried out in some information and library departments. Examples are:

a. Robert Gordon University. Information Management Department. Research theme: Information literacy.
   http://www.rgu.ac.uk/abs/research/page.cfm?pge=5843.

b. University of Sheffield. UK academics' conceptions of, and pedagogy for, information literacy. 3 year project funded by the arts and Humanities Research Council.
   http://dis.shef.ac.uk/literacy/project/.

c. University College Dublin (School of Information & Library Studies). Information Behaviour Research Group, includes research on Information Literacy.
   http://www.ucd.ie/sils/index.html.

There are also examples of institutional research. An example of one project involving information literacy is the Learning Support Unit project at University College Dublin (http://www.ucd.ie/lsu/index.html).

Masters students in the UK and Ireland have to produce a dissertation, and this has resulted in many small scale pieces of research. Some of these get reported in the literature or are published on university websites e.g. Weetman (2005). There are also a small, but increasing, numbers of PhD students concentrating on aspects of information literacy.

Some research has been funded by public agencies, for example, JISC funded the Big Blue project (Manchester Metropolitan University Library and Leeds University Library, 2002)

E. Training the trainers

In a recent European project Virkus et al (2005) described curriculum areas for European LIS students in information literacy and teaching of information literacy. One characteristic of the UK education system is that Masters programmes last only one year, which means there is less time for specialism. Undergraduate courses now tend to be in *Information Management* rather than library studies. There are a range of Masters level courses, ranging from general courses labelled for example *Information and Library Studies* to specialised courses in *Chemoinformatics* or *Digital Libraries*.

In library and information science (LIS) departments in the UK, it has become more common for modules which teach LIS students information literacy (e.g.

information seeking and evaluation) to have that phrase in the module title e.g. the module *Information Literacy* at the University of Wales, Aberystwyth (http://www.aber.ac.uk/modules/current/IL34020.html). There are other modules which incorporate information literacy with other learning e.g. the *Applied Information Research (AIR)* module at London Metropolitan University (http://www.ilit.org/air05/index.htm).

There are a few more specialised modules, for example:

a. The Information Literacy Instruction module offered at University College Dublin (the only LIS school in Ireland) which covers both definitions and theories of information and education in how to teach information literacy.

b. The Information Literacy research module at the University of Sheffield which focuses on areas such as the research agenda for information literacy, research methods for information literacy, notable research in information literacy.

Outside the LIS schools there is a good deal of Continuing Professional Development activity, with events relating to information literacy organised by professional groups and associations. Examples can be found by going to the *Information Literacy Website* or *Information Literacy Weblog* mentioned below. In Ireland, the Academic and National Library Training Cooperative (ANLTC) offers occasional one-day seminars on Information Skills Training. (http://www.anltc.ie/index.htm http://www.anltc.ie/index.htm).

Also, in recent years in Ireland, librarians at a number of institutions have been encouraged to enroll on one of three postgraduate programmes in Third Level Learning & Teaching which are offered at the Dublin Institute of Technology (DIT). Available at Masters, Diploma and Certificate level, these programmes are aimed at novice and experienced third-level instructors from all disciplines, who wish to attain a relevant teaching qualification. (http://www.dit.ie/DIT/study/graduate/courses/ltc.html).

F. Communication

1. Conferences

The two principal conferences are:

a. LILAC Librarians' Information Literacy Annual Conference at http://www.cilip.org.uk/specialinterestgroups/bysubject/informationliteracy/lilac/lilac2006

   This started in 2005, and has many of the papers available online on the conference website.

b. eLit at http://www.lboro.ac.uk/library/eLit2006/.

    This started as the IT&IL conference in 2002. Again, many papers are available on the conference website.

Another notable conference in 2006, *Recognising the information need*, resulted in Walton and Pope (2006) and the conference presentations and breakout reports are on the website at http://www.staffs.ac.uk/infolitconf/

2. Weblogs and websites

The main weblog is the *Information Literacy weblog* maintained by Sheila Webber and Stuart Boon at http://information-literacy.blogspot.com/ which is updated several times each week.

Important websites devoted to information literacy include:

a. *The information literacy website* http://www.informationliteracy.co.uk/.
    A website which aims to be the UK portal for information literacy, supported by a number of professional associations in the UK. It was launched 28th March 2006. It has section on Events, Research, different sectors etc.

b. Robinson, A. (2005) *Strongest links: website for school librarians*
    http://www.strongest-links.org.uk/infolit.htm.
    Susie Andretta's *ITIL* website with various resources, teaching material and links at http://www.ilit.org/

c. Chris Powis' wiki *Infoteach* which "is intended to be a dynamic information base on teaching and learning in a library or information context" (i.e. it is about teaching information literacy, rather than information literacy itself) at http://www.infoteach.org/wiki/index.php/Main_Page.

d. Ofcom (Office of Communications) *Media Literacy* website at
    http://www.ofcom.org.uk/advice/media_literacy/

The main information literacy discussion list is: *Lis-infoliteracy* at: http://www.jiscmail.ac.uk/lists/lis-infoliteracy.html.

G. Conclusions

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IX. United States and Canada
Information Literacy State-of-the Art Report
March 30 2006

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A. Introduction

The Information Literacy movements in both the United States and in Canada have been built on a foundation of library instruction programs and initiatives that developed in the early 1970s, but had much earlier roots. The establishment of Project LOEX, (Library Orientation Exchange), a clearinghouse for instructional materials, at Eastern Michigan University in 1970/71 and the related LOEX conference, was a seminal event which led to a similar group being formed in Canada in 1972: the Workshop on Instruction in Library Use (WILU). Librarians attending these early workshops on instruction were successful in lobbying for the establishment of LI interest groups within their professional organizations and in 1977 the Library Instruction Round Table (LIRT) was established within the American Library Association and the Association of College and Research Libraries (ACRL) formed the Bibliographic Instruction Section (BIS), now known as the Instruction Section, (IS) that same year. The field of Library Instruction became an established area of concentration within the profession and by the 1980s many academic libraries created positions dedicated to building their instruction program.

In the past decade, Information Literacy, sometimes called Information Competence or Information Fluency, has become a well-established educational goal throughout the United States and Canada. Associations and institutions have defined it, written tutorials to teach it, developed standards, rubrics and tests to assess it and librarians have devoted entire careers to helping their users achieve these competencies. By the early 1990s some universities and colleges were beginning to incorporate IL into their learning goals and curriculum. Yet, despite all

these efforts many students are still unaware of the value that mastery of Information Literacy will provide for their lives and careers.

Information Literacy programs can be found from elementary schools through graduate schools and some public libraries also provide forms of IL instruction. Despite all this activity, Information Literacy is still viewed by some in the educational community as solely the domain of librarians.

The term Information Literacy (IL) became part of many American academic librarians' vocabulary in the late 1980s with the creation of the American Library Association Presidential Committee on Information Literacy. According to their *Final Report*, Information Literacy is a set of abilities requiring individuals to, "recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information." This *Final Report* was also a rallying cry, articulating the "Importance of Information Literacy to Individuals, Business, and Citizenship," (ALA, 1989). The National Forum on Information Literacy (NFIL) was created in 1989 as a response to this report. Even earlier, school librarians were actively engaged in defining the need for Information Literacy in schools and in 1987 the American Association of School Librarians (AASL) joined with the Association for Educational Communications and Technology (AECT) to produced *Information Power* which was a call to action for school librarians.

Canada and the United States are among the top three producers of articles in English about IL. A citation analysis in the *Social Science Citation Index* covering 1956 through April 19, 2007, found 387 citations for the term "Information Literacy". Of these 230 or 59.3% were published in the U.S. and 24 or 6.2% were published in Canada. A similar search in the much more specialized *Library, Information Science & Technology Abstracts* database with coverage back to the 1960s, found 2,529 records under the same keywords. When limited to the geographic term "United States," the result was 251 records. The search resulted in 41 when limited to the geographic term "Canada". This is indicative of the relative number of libraries and librarians in the two countries.

B. Key Players

There are several names that leap out as leaders in the IL movement in the United States and some key publications that were influential in the development of Information Literacy. Chief among these are:

Carolyn Kuhlthau's *Information Skills for an Information Society* (Kuhlthau, 1987). Patricia Senn Breivik's *Information Literacy: Revolution in the Library* (Breivik & Gee, 1989) and *Information Literacy: educating children for the 21st century* (Breivik, 1994).

Hannelore Rader is iconic in her connection with instruction and IL. She edited many of the papers from the early LOEX conferences when working as the Instruction Librarian at Eastern Michigan State University, Ypsilanti, home of LOEX. Her annual bibliographies on "Library Orientation and Instruction" in *Reference Services Review* identified the best articles in the field and have been tremendously influential in advancing the Information Literacy agenda. She has played a major role nationally and internationally and was pivotal in the establishment of the Information Literacy Section within IFLA.

C. Significant Organizations

In 1998 the American Association of School Libraries (AASL) and the Association of Educational Communications and Technology (AECT) expanded on their work in *Information Power* and produced *Information Literacy Standards for Student Learning* (AASL, 1998). These standards detail competencies for students in kindergarten through high school.

In 1990, the National Forum on Information Literacy (NFIL) was founded as a response to the recommendations of the *ALA Presidential Committee on Information Literacy Final Report*. According to its web site, NFIL is a "coalition of over 75 education, business, and governmental organizations working to promote international and national awareness of the need for Information Literacy and encouraging activities leading to its acquisition. Forum members promote Information Literacy nationally, internationally, and within their own programs." http://www.infolit.org/index.html In March, 1998, NFIL issued *A Progress Report on Information Literacy: an Update on the American Library Association Presidential Committee on Information Literacy: Final Report*. http://www.infolit.org/documents/progress.html

In 1993 the California State University System (CSU) added Information Literacy to its strategic planning document, *Transforming CSU Libraries for the 21st Century: a Strategic Plan of the CSU Council of Library Directors*, (CSU, 1993) and thus began the effort that led to the CSU Information Competence Initiative. The impact of the largest public university system in the United States adopting Information Literacy as a graduation requirement made many others in higher education take note. State-wide meetings were held and many small grants were awarded to CSU library faculty to develop Information Literacy resources with deliverables that could be shared with other campuses within the system. In 1995 the Information Competence Tutorials were developed at California Polytechnic State University, San Luis Obispo. They were the basis for tutorials which are still in use on several CSU campuses. Similar cooperative projects were developed by other university systems. Noteworthy among these are *TILT – Texas Information Literacy Tutorial* (University of Texas) and *Project SAILS* (Kent State University and the Association of Research Libraries). These tutorials can be licensed and adapted by other organizations.

Building on all these early efforts, *Information Literacy Standards for Higher Education* were adopted by the Association of College and Research Libraries (ACRL, 2000) and were jointly endorsed by American Library Association (ALA) and the American Association for Higher Education (AAHE). These standards are freely available from the ACRL web site. Links from this page lead to both historic IL documents as well as to current standards.
http://www.ala.org/ala/acrl/acrlstandards/informationliteracycompetency.htm

Another organization of critical value in IL is the Institute for Information Literacy Immersion. Librarians who have gone through the intensive week of training that the immersion program provides have returned to their jobs with the tools to develop or improve their programs and inspired with a new zeal to accomplish the job. (Scamman, C., Kinder, R., & Coulter, P. 2005).

D. Information Literacy in Canada

Many Canadian academic institutions rely on the ACRL standards however there appear to be some efforts to develop their own national standards and resources. Several universities integrate Information Literacy into credit courses, especially at the University of Alberta, Augustana. There is also evidence of Information Literacy appearing in mission statements in Canadian schools and universities and of Information Literacy and a major theme in library association programs and activities in Canada. (Willingham, 2006).

An excellent academic site is the *Canadian University Information Literacy Initiatives* page: http://apps.medialab.uwindsor.ca/crlil/wiki/UniversityInitiatives/ The *Canadian Research Libraries Information Literacy Portal* now exists as a wiki and will be maintained by Information Literacy librarians at academic institutions across Canada.

School libraries in Canada have also adopted Information Literacy goals however there is evidence that support and funding for school libraries are lacking and there is a movement to reform and reinvest in school libraries. (Julien, H. & Breu, 2004)

A federal government policy initiative, "Connecting Canadians" from 2003-2006, focused on providing Internet access and related Information Literacy instruction in public libraries. This function is now provided by the Community Access Program, (CAP) http://cap.ic.gc.ca/pub/index.html?iin.lang=en

E. Current Trends and Issues

Librarians cheered when the *Information Literacy as a Liberal Art Enlightenment proposals for a new curriculum* came out in an issue of **Educom Review**. Finally faculty members were joining the IL movement. (Shapiro & Hughes, 1996).

> "Partnership" has become the catchword of the current decade. Many academic library IL programs partnered with faculty from Freshman Seminar or First Year Experience programs. Course integration was another model followed by many campuses.

Concurrent with the growth of IL programs was the growth of the assessment movement in higher education. "Student Outcomes" became the watchword by which programs were assessed and librarians focused their attention on identifying the impact of the various instruction programs on students.

National reports and studies focusing on the need for information and technology literate students abounded.

International efforts to expand the literacies to include technology and communication coalesced at the World Summit on the Information Society (WSIS) and resulted in the formation of the International ICT Literacy Panel, chaired by Dr. Barbara O'Connor, from CSU Sacramento. Their report, *Digital transformation: A framework for ICT literacy* (ICT Literacy Panel, 2001) and subsequent ETS report *Succeeding in the 21st Century, What Higher Education Must Do to Address the Gap in Information and Communication Technology Proficiencies, (*National Higher Education ICT Initiative*, 2003*) brought together educators, librarians, policy makers and with the Educational Testing Service united in their desire to teach and assess student learning related to both IL and IT skills.

This set the stage for them to partner with several large university systems to develop the National Higher Education ICT Initiative. These institutions were:

California Community College System
California State University
University of California, Los Angeles
University of Louisville
University of North Alabama
University of Texas System
University of Washington

As a result of this partnership, ETS developed a web-based assessment instrument that gives students various scenarios to solve which involved Information Literacy skills but also add the use of appropriate technologies. The test is the *Information and Communication Technology Literacy Assessment* instrument (ETS/ICT). Initial Beta testing began in the spring and summer of 2004.

In the spring of 2005 there was and intense effort mounted to provide ETS with enough data to validate the test.
CSU system alone committed 3,000 students to test the test.

For additional information about ETS's ICT Literacy Assessment, please visit:
 www.ets.org/ictliteracy.

Beginning in the 2006/2007 academic year, the ETS/ICT test was made available to institutions for purchase and administration to individual students to measure both information and technology skills. Participating universities are encouraged to determine how best to incorporate this online instrument into their planning and assessment of student skills a various levels or student progress, such as upon entering college in the first-year, upon transferring from a junior college or upon graduation.

National Forum on Information Literacy (NFIL) announced in 2006 the formation of a policy council of education and business leaders whose goal is to determine national standards for information and communication technology (ICT) literacy. According to their web site:

> The announcement comes on the heels of the first Information Literacy Summit, which drew over 100 attendees to Washington, D.C., on Oct. 16. Summit panelists shared their perspectives on Information Literacy and its impact on the global society, workforce readiness, and public policy in the United States. For the full press release, go to:
> http://www.infolit.org/policycouncil.doc

School libraries have been more successful at measuring their impact on student outcomes than academic libraries. In the web publication *School Libraries Work!* the Scholastic Research Foundation has identified programs in a 16 states that actually show a correlation between school library programs and student achievement:

> "A substantial body of research since 1990 shows a positive relationship between school libraries and student achievement. The research studies show that school libraries can have a positive impact on student achievement— whether such achievement is measured in terms of reading scores, literacy, or learning more generally. A school library program that is adequately staffed, resourced, and funded can lead to higher student achievement regardless of the socio-economic or educational levels of the community."
> http://librarypublishing.scholastic.com/content/stores/LibraryStore/pages/images/slw_06.pdf

With the publication of Teresa Neely's book *Information Literacy Assessment Standards-Based Tools and Assignments*, (Neely, 2006) we now have a sourcebook for 70 Information Literacy survey instruments, and perhaps librarians

can do a better job at quantifying and qualifying the impact of Information Literacy programs on student outcomes.

F. Conclusion

Librarians and educators have long championed the need for students to demonstrate critical thinking skills when using and evaluating information. They know that those who have the ability to locate, critically evaluate and then apply that information will do better academically as well as in their daily lives. After two decades of concerted effort, this truth is more broadly recognized.

Accrediting agencies recognize Information Literacy as a core learning ability and now require that educators demonstrate how students are expected to achieve these information competencies. In the wider world, business and government leaders are seeing how efforts at instilling Information Literacy can impact the broader society.

To be a truly educated person, one must *learn how to learn* so that when the world changes you can change with it. One of the goals of Higher Education is to produce an informed citizenry, those who have the capability for Lifelong Learning. Librarians who teach Information Literacies can have a significant impact to help achieve this goal. Randy Hensley's states in his chapter in *Student Engagement and Information Literacy:*

> Teaching research properly formulated and understood, to first-year undergraduate students can foster in them the desire to learn because research is an invitation to become someone most students want to be: thoughtful, aware, curious, effective and flexible. (Hensley, 2006).

Hannelore Rader states in the Foreword to Neely's book that

> Information Literacy has been an important factor in the development of librarian-faculty partnerships to improve students' learning outcomes.

These relationships are the key to achieving success in implementing IL throughout the curriculum.

The current decade will be an exciting one for librarians committed to achieving Information Literacy goals and implementing IL standards. The heavens seem to have aligned correctly to bring many stake holders together to work to integrate IL into school and college curricula. Teachers, professors, administrators and public leaders are acknowledging the value of Information Literacy. Librarians are no longer alone.

The conclusion of the *Alexandria Proclamation on Information Literacy and Lifelong Learning Beacons of the Information Society*, states:

> We affirm that vigorous investment in Information Literacy and lifelong learning strategies creates public value and is essential to the development of the Information Society. http://www.ifla.org/III/wsis/BeaconInfSoc.html

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G. Resource List – United States and Canada

1. Online learning tools (IL Products for Users)
2. Standards, Rubrics and Accreditation
3. Publications
4. Organizations, Associations
5. Training the Trainers (Professional Development)
6. Assessment Projects and Research Articles
7. Communication Listservs and Blogs
8. References

With 50 diverse United States and 10 Canadian provinces, it is not possible for this list to be comprehensive. According to the 2006/2007 edition of the *American Library Directory* there are 30,241 libraries in the United States and 3,736 libraries in Canada. Please submit any Information Literacy program or resource that is noteworthy to the *International Information Literacy Resources Directory*, http://www.uv.mx/usbi_ver/unesco/.

The following resources have been identified as representative examples of the wide variety of Information Literacy /Competency resources and institutions in the United States and Canada. Descriptions in quotation are taken directly from the various website. These items will be described more fully in the *International Information Literacy Resources Directory*.

1. Online Learning Tools IL Products for Users (Tutorials)

ANTS: Animated Tutorial Sharing project*
http://www.brandonu.ca/library/COPPUL/
ANTS "goal is to create a critical mass of Open Source Tutorials for online resources used by libraries everywhere." This project was an outgrowth of an initiative started by the COPPUL (Council of Prairie and Pacific University Libraries) Distance Education Information Literacy Working Group.

The Big6™ Information Literacy for the Information Age.
http://www.big6.com/
"Developed by educators Mike Eisenberg and Bob Berkowitz, the Big6 is the most widely-known and widely-used approach to teaching information and technology skills in the world. The Big6 is an information and technology literacy model and curriculum, implemented in thousands of schools - K through higher education. Some people call the Big6 an information problem-solving strategy because with the Big6, students are able to handle any problem, assignment, decision or task."

Bruin Success with Less Stress. **University of California Los Angeles**.
"Designed as an introduction to academic integrity and intellectual property, Carlos and Eddie's Guide to Bruin Success with Less Stress aims to help educate UCLA students about their role in the academic community and to help them make informed choices." This site is available as part of the Creative Commons. Non-profit entities can share or remix the project, with proper attribution: http://www.library.ucla.edu/bruinsuccess/

Building Information Literacy Strategies for Developing Informed Decision-Makers and Independent Lifelong Learners.
This site was developed by the Department of Education of the Province of Prince Edward Island. http://www.edu.pe.ca/bil/

California State University Information Competence Initiative.
http://www.calstate.edu/ls/infocomp.shtml
This site is incredibly rich. It gathers all the IL activities of the CSU system in one place, with grant proposals and all the programs developed since 1995. Among these are:
Resources for Teaching and Learning.
http://www.calstate.edu/ls/Resources.shtml
California State University (CSU) Information Competence Tutorials
http://www.lib.calpoly.edu/infocomp/modules/index.html
Created in 1995 and last updated in 1999, this tutorial is the basis on which many later CSU tutorials were based, such as **Oasis (Online Advancement of Student Information Skills)** at San Francisco State University, http://oasis.sfsu.edu/chapters/ and the **Information Competence Assignment** at California State University, Sacramento which uses a variation of this tutorial within WebCT programming with added pre-test and post-test: http://library.csus.edu/content2.asp?pageID=205.

Dalhousie University Libraries Information Literacy Tutorials
http://www.library.dal.ca/How/Tutorials/

Library Instruction Round Table Library Instruction Tutorials
http://www3.baylor.edu/LIRT/lirtproj.html
Created in 1991 this is one of the better early sites listing tutorials, but it has not been updated since then.

Library Research Roadmap. York University Library
http://www.library.yorku.ca/roadmap/
Interactive tutorial using a board game and player motif. Students select a player and are led into a role-playing assignment.

Killam Quest. Killam Library Virtual Tour. An interactive tour of the KillamLibrary, Dalhousie University, Halifax, Nova Scotia, Canada. http://infolit.library.dal.ca/Killam%20Quest/

Multimedia Educational Resources for Learning and Teaching Online.
http://www.merlot.org/merlot/index.htm
"MERLOT is a leading edge, user-centered, searchable collection of peer reviewed, higher education, online learning materials created by registered members, and a set of faculty development support services. MERLOT's vision is to be a premiere online community where faculty, staff, and students from around the world share their learning materials and pedagogy."

PRIMO: Peer-Reviewed Instruction Materials Online (formerly the InternetEducation Project). Sponsored by the ACRL Instruction Section Emerging Technologies in Instruction Committee, this searchable database of 145 top notch instructional tutorials contains the PRIMO "site of the month" choices with detailed descriptions.
http://www.ala.org/ala/acrlbucket/is/iscommittees/webpages/emergingtech/primo/index.htm

Project SAILS **- Kent State University and the Association of Research Libraries (ARL)** https://www.projectsails.org/
"Project SAILS is a standardized test of Information Literacy skills, based on ACRL Information Literacy Competency Standards for Higher Education. This Web-based tool allows libraries to document Information Literacy skill levels for groups of students and to pinpoint areas for improvement."

"Throughout a three-year research and development phase, more than 80 higher education institutions participated in Project SAILS, including 2- and 4-year schools. SAILS also expanded to include Canadian institutions by adapting test items for Canadian students and institutions."

TILT - Texas Information Literacy Tutorial.
http://tilt.lib.utsystem.edu/
TILT was "created as a self-paced online tutorial designed to teach first-year students about selecting appropriate sources, searching library databases and the Internet, and evaluating and citing print and electronic information for academic research. Each module includes interactivity and personalization, concluding with a quiz that gives immediate feedback." Like Project SAILS, TILT has been made available to other libraries to adapt.

University of Washington Information Literacy Learning
http://www.lib.washington.edu/uwill/ "UWill tutorials are Web page templates that contain essential baseline instruction related to information production, distribution, retrieval, and evaluation."

A WebQuest to Information Literacy– Manitoba Information Literacy Group
http://www.mla.mb.ca/infolit/webquest/ "The purpose of A WebQuest to Information Literacy is to introduce librarians to the format of the WebQuest for creating Information Literacy learning environments. At the same time the WebQuest is also about the various tools and standards that are available describing Information Literacy learning outcomes and programs."

2 Standards, Rubrics, Best Practices and Accreditation

American Library Association /ACRL/STS Task Force on Information Literacy forScience and Technology. (2006). *Information Literacy Standards for Science and Engineering/Technology.*
http://www.ala.org/ala/acrl/acrlstandards/infolitscitech.htm

American Library Association*. (2000) Information Literacy Standards for HigherEducation.* (Adopted on January 18, 2000 and jointly endorsed by American Library Association and the American Association for Higher Education).
http://www.ala.org/ala/acrl/acrlstandards/standards.pdf
http://www.ala.org/ala/acrl/acrlstandards/informationliteracycompetency.htm

American Association of School Libraries (AASL) and the Association ofEducational Communications and Technology (AECT). *Information Literacy Standards for Student Learning.* The AASL/AECT standards detail competencies for students in K-12.
http://www.ala.org/ala/aasl/aaslproftools/informationpower/InformationLiteracyStandards_final.pdf

Best Practices Initiative Institute for Information Literacy . (2003) *Characteristicsof Programs of Information Literacy that Illustrate Best Practices: A Guideline.*
http://www.ala.org/ala/acrl/acrlstandards/characteristics.htm
"The characteristics are primarily intended to help those who are interested in developing, assessing, and improving Information Literacy programs. This audience includes faculty, librarians, administrators, and technology professionals, as well as others involved in Information Literacy programming at a particular institution."

Canadian Association for School Libraries. (2003*) Achieving Information Literacy: Standards for School Libraries in Canada.* http://www.cla.ca/casl/ailbook.html
Retrieved Monday, April 9, 2007.
 "It outlines standards for today's Canadian School Libraries seeking to develop

Information Literacy skills with their students. It is a practical publication geared towards ensuring that all Canadian children and youth have equal access to well-equipped school libraries and trained professionals from kindergarten to their graduation year. It is recommended for anyone seeking guidance on developing school library programs focussed on supporting students as they take their place in today's learning society."

Checklist of Information Competencies for College Students was developed jointly by California State University and California Community College librarians. *http://www.calstate.edu/ls/Checklist_may_05.doc*

Information Competency in the California Community Colleges.
http://www.academicsenate.cc.ca.us/Publications/Papers/Info_competency.html

Information Literacy in Canada. http://blog.uwinnipeg.ca/ilig/archives/standards/
Lisa Sloniowski blog Provides link to Ontario Council of Academic Vice Presidents (OCAV) *Guidelines for University Undergraduate Degree Level Expectations.*

Ontario Council of Academic Vice Presidents.(2005*).   Guidelines for University Undergraduate Degree Level Expectations.*
http://blog.uwinnipeg.ca/ilig/archives/Degree%20Level%20Expectations.OCAV.%20Jan30.06.doc

Ontario School Library Association.(1999)   *Information Studies: Kindergarten to grade 12.* Toronto, Ontario
"A framework for learning Information Literacy at each level at school, including suggested achievement levels and ways in which Information Literacy education could be linked into other subjects in the curriculum. Three key areas are identified: inquiry and research; information technologies; information society."
http://www.accessola.org/action/positions/info_studies/

Inter-segmental Committee of the Academic Senates of the California CommunityColleges, the California State University, and the University of California. *(2002) Academic Literacy: A Statement of Competencies Expected of Students Entering California's Public Colleges and Universities.*
http://www.asccc.org/Publications/Papers/AcademicLiteracy/AcademicLiteracy.pdf
"This document reports what faculty from all three segments of California's system of higher education think about their students' ability to read, write, and think critically."

Rubrics for Assessing Information Competence in the California State UniversityPrepared by the CSU Information Competence Initiative.
http://www.calstate.edu/ls/1_rubric.doc

What Do Accreditation Agencies Say About Information Literacy?
http://www.calstate.edu/LS/Accreditation1.doc   This document compiled by Dr. Ilene Rockman, Manager of the Information Competence Initiative, The California State University System, Office of the Chancellor, summarizes and excerpts pertinent materials from regional and professional accreditation standards, November, 2003.

3. Publications

1. American Library Association. (1989). *American Library Association Presidential Committee on Information Literacy: final report.* Chicago: American Library Association.
   http://www.ala.org/ala/acrl/acrlpubs/whitepapers/presidential.htm
2. American Library Association. (1998). *A progress report on Information Literacy: an update on the American Library Association Presidential Committee on Information Literacy: final report.* Chicago: Association of College and Research Libraries.
   http://www.ala.org/ala/acrl/acrlpubs/whitepapers/progressreport.htm
3. American Library Association. (1998) *Task Force on Academic Library Outcomes Assessment Report.*
   http://www.ala.org/ala/acrl/acrlpubs/whitepapers/taskforceacademic.htm
4. American Association of School Librarians. (1998). *Information power: building partnerships for learning.* Chicago: American Library Association.
   http://www.ala.org/ala/aasl/aaslproftools/informationpower/informationpower.htm
5. Asselin, M., Branch, J. L., & Oberg, D. (2003). *Achieving Information Literacy: standards for school library programs in Canada.* Ottawa: Canadian School Library Association.
   http://www.caslibraries.ca/publications/pub_standards.aspx
6. ICT Literacy Panel. (2001). *Digital transformation: a framework for ICT literacy, a report of the International ICT Literacy Panel.* Princeton, NJ: Educational Testing Service.
   Produced by the International ICT Literacy Panel, a multinational group of experts from education, government, non-governmental organizations, labor, and the private sector that was convened in 2001 by Educational Testing Service. This 2002 report provided a comprehensive analysis of what we do and do not know about ICT literacy, and offered recommendations for research and policy.
   http://www.ets.org/Media/Research/pdf/ICTREPORT.pdf
7. Lahert, J. (*2000) Promoting* Information Literacy for Science Education Programs: Correlating the National Science Education Content Standards with the Association of College and Research Libraries Information Competency Standards for Higher Education*. Issues in Science and Technology Librarianship.* Fall, 2000. Retrieved April 2, 2007*.*
   http://www.library.ucsb.edu/istl/00-fall/article3.html

8. Ontario Ministry of Education. (1995) *Information Literacy and equitable access: A framework for change.*
   http://www.accessola.com/osla/site/content/curriculum/pdf/ilea.pdf
9. Ontario School Library Association. (1998-99). Information *Studies Kindergarten to Grade 12.*
   http://www.accessola.com/action/positions/info_studies/
10. River East Transcona School Division, Winnipeg Manitoba, Canada. *Information Literacy Skill Kindergarten-12.*
    http://www.retsd.mb.ca/site/lrc/resources/literacy_doc.pdf
11. Julien, H. & Breu (2004) The Role of the Public Library in Developing Canadians' Information Literacy Skills. *CAIS Conference Proceedings.*
    http://www.cais-acsi.ca/proceedings/2004/julien_2004.pdf

This is a report of a survey which analyzes the role of the public library, as a nonprofit institution and primary stakeholder, in advancing federal government information policy.

4. Organizations

American Association for Higher Education (AAHE) http://www.aahe.org
Founded in 1870, the 7,000 AAHE members represent all segments of postsecondary education.

American Library Association (ALA) www.ala.org
"The American Library Association is the oldest and largest library association in the world, with more than 64,000 members. Its mission is to promote the highest quality library and information services and public access to information." ALA has divisions, chapters and round tables. Those within ALA that are particularly focused on Information Literacy include:
American Association of School Librarians (AASL)
 http://www.ala.org/ala/aasl/aaslindex.htm
Association of College and Research Libraries (ACRL) www.ala.org/acrl/
ACRL Instruction Section (IS)
http://www.ala.org/ala/acrl/aboutacrl/acrlsections/instruction/homepage.htm
ACRL Institute for Information Literacy (IIL)
http://www.ala.org/ala/acrl/acrlissues/acrlinfolit/professactivity/iil/welcome.htm
Library Instruction Round Table (LIRT) http://www3.baylor.edu/LIRT/

Association for Educational Communication and Technology (AECT)http://www.aect.org/default.asp "The mission of the Association for Educational Communications and Technology is to provide international leadership by promoting scholarship and best practices in the creation, use, and management of technologies for effective teaching and learning in a wide range of settings."

California Academic and Research Libraries (CARL) - Southern California Instruction Librarians (SCIL) http://clics.ucsd.edu/scil/ "The Interest Group is dedicated to providing professional development and discussion opportunities focused on Information Literacy and instruction-related activities for library professionals from all types of institutions."

California Clearinghouse on Library Instruction (CCLI)
http://ic.arc.losrios.edu/~ccli/
The group was formed in 1973 as a forum for California librarians interested in library instruction with both a northern and southern California units, serving as a repository for handouts and other instruction-related materials. The southern unit became SCIL (above) while the northern unit continue the same tradition of providing California-based professional programs and networking for library instruction and Information Literacy.

Canadian Association for Information Science/L'Association canadienne dessciences de l'information. (CAIS/ACSI) http://www.cais-acsi.ca/index.htm
"CAIS was incorporated in 1970 to promote the advancement of information science in Canada, and encourage and facilitate the exchange of information relating to the use, access, retrieval, organization, management, and dissemination of information."

Canadian Association of Research Libraries (CARL)
http://www.carl-abrc.ca/new/new-e.html "CARL provides leadership to the Canadian academic research library community through enhancing scholarly communication and assisting members to provide full support for postgraduate study and research."

Canadian Academic Research Libraries - Information Literacy Portal
http://www.carl-abrc.ca/projects/information_literacy/information_literacy-e.html

Canadian Coalition for School Libraries
http://www.peopleforeducation.com/librarycoalition/
"The coalition's mission is to draw together a wide range of stakeholders -- including, but not limited to, parents, teacher-librarians, writers, educators, publishers, library wholesalers and literacy advocates -- in order to sponsor original research; provide policy analysis to decision-makers at all levels of government; develop new partnerships and approaches for fostering dynamic school libraries; and communicate the issues to the broader Canadian public."

Canadian Library Association (CLA)
CARL Information Literacy Interest Group. http://cybrary.uwinnipeg.ca/ilig/
Canadian Association for School Librarians CASL
 http://www.caslibraries.ca/
Canadian University Information Literacy Initiatives
http://www.carl-abrc.ca/projects/information_literacy/Canadian_university_IL-e.html

Cooperative Online Repository for Information Literacy(CORIL)
https://ospace.scholarsportal.info/handle/1873/6 and
https://ospace.scholarsportal.info/policies/coril-eng2006.pdf
"CORIL is an initiative to support Information Literacy instruction among Canadian universities."

EDUCAUSE http://www.educause.edu/
Educause – Information Literacy and Fluency. "EDUCAUSE is a nonprofit association whose mission is to advance higher education by promoting the intelligent use of information technology."
 http://www.educause.edu/Browse/645?PARENT_ID=390

LOEX (Library Orientation Exchange) Clearinghouse for Library Instructionhttp://www.emich.edu/public/loex/loex.html

LOEX of the West (2006) http://www.hawaii.edu/loex/index.htm
Based on the format established by the original LOEX, LOEX of the West holds a workshop every two years, hosted at different institutions each time. 2006 was in Hawaii. The next conference will be in at University of Nevada, Los Vegas, in 2008.

National Forum on Information Literacyhttp://www.infolit.org/
"The National Forum on Information Literacy was created in 1989 as a response to the recommendations of the American Library Association's Presidential Committee on Information Literacy. These education, library, and business leaders stated that no other change in American society has offered greater challenges than the emergence of the Information Age. Information is expanding at an unprecedented rate, and enormously rapid strides are being made in technology for storing, organizing, and accessing the ever-growing tidal wave of information."

Teacher Librarians Supporting Student Learning
http://www.saskschools.ca/curr_content/teachlib/info_lit/infomain.htm
Based in Saskatchewan, Canada.

WILU - Workshop on Instruction in Library Use
Inspired by the original LOEX conferences, this Canadian counterpart meets annually and is hosted by different institutions each year. These links are to the most recent conferences (WILU35) http://library.acadiau.ca/wilu/ and WILU36 http://www.yorku.ca/wilu2007/.

5. Training the Trainers

Institute for Information Literacy Immersion.
http://www.ala.org/ala/acrl/acrlissues/acrlinfolit/professactivity/iil/immersion/immersionprograms.htm
"ACRL Institute for Information Literacy Immersion Program provides instruction librarians with the opportunity to work intensively for four-and-a-half days on all

aspects of Information Literacy. Whether your institution is just beginning to think about implementing an Information Literacy component or whether you have a program well under way, the Immersion Program will provide your instruction librarian with the intellectual tools and practical techniques to help your institution build or enhance its instruction program."

Association for Teacher-librarianship in Canada and the Canadian School Library Association. 1997. Students' Information Literacy needs: Competencies for teacher-librarians in the twenty-first century. http://www.atlc.ca/Publications/competen.htm
Professional and personal competencies are specified, with examples, based on research and national response panels.

Best Practices in Information Literacy in Undergraduate Education - AnACRL/TLT Group Online Seminar, February 7-21, 2007. http://www.ala.org/ala/acrl/acrlproftools/bestpractices.htm

TLT Group (Teaching, Learning and Technology)http://www.tltgroup.org
TLT Group is a non-profit organization established in 1998, originally as part of AAHE, with a commitment to improving teaching and learning especially in higher education. It frequently partners with ACRL for workshops (see above).

6. Assessment Projects and Research Articles

Bay Area Community Colleges Information Competency Assessment Projec.
http://www.topsy.org/ICAP/ICAProject.html
http://www.topsy.org/InfoLitAssess.html

California State University Information Competence Assessment Task Force.
http://www.csupomona.edu/~kkdunn/Icassess/ictaskforce.html

Information and Communication Technology Literacy Assessment ((ICT/ETS)
The Educational Testing Service (ETS) has partnered with 7 major university systems in the United States to develop a commercial web-based instrument that goes beyond Information Literacy to include Technology Literacy and Communication. http://www.ets.org/portal/site/ets

Scholastic Research Foundation (2006) School Libraries Work!
http://librarypublishing.scholastic.com/content/stores/LibraryStore/pages/images/slw_06.pdf

7. Communication – Listservs and Blogs

In addition to the standard professional journals dealing with instructional issues, those most interested in Information Literacy issues communicate daily through email listservs and/or blogs.

The Big6™ Skills Electronic Discussion Group.
"Started in January 1995, the Big6™ Electronic Discussion Group now has over 1,500 subscribers with interests across the educational spectrum." To subscribe: listserv@listserv.syr.edu. To post: Big6@listserv.syr.edu

CORIL Listserv (Cooperative Online Repository for Information Literacy)
CORIL is an initiative to support Information Literacy instruction among Canadian universities and "has been established to encourage communication and sharing of ideas among instruction librarians at Canadian universities and colleges."
https://ospace.scholarsportal.info/policies/CORILLISTSERV.doc and
To subscribe: Majordomo@list.library.utoronto.ca

ILI-L the Information Literacy Instruction Discussion List
"Created in May 2002 as a new iteration of the online community that Martin Raish created with the BI-L discussion list in 1990. ILI-L is hosted on the American Library Association server, sponsored by the Instruction Section of the Association of College and Research Libraries, and moderated by the ILI-L List Administrator. With ILI-L, the Instruction Section hopes to sustain the thriving exchange on instruction and Information Literacy that made BI-L such an important venue for communication among librarians from a variety of settings and backgrounds." Although based in the US, this listserv has international participation.   To join: listproc@ala.org To post: ili-l@ala.org

Information Literacy in Canada - a place to discuss Information Literacy inCanada.   http://blog.uwinnipeg.ca/ilig/
http://blog.uwinnipeg.ca/ilig/archives/sharing/

Information Literacy Land of Confusion. http://www.information-literacy.net/

Information Literacy Round Table (Michigan Library Assn)
http://ilrt.blogspot.com/

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A. Introduction

Introduction and roadmap

This report is divided into sections reflecting three library sectors (university, public and school) and describing their information literacy (IL) initiatives, and noting their online tools, training courses and publicly available material. This is followed by a section on organisations, training the trainers, and a comprehensive bibliography of publications.

Methodology

The information for this report was collected using the following methods:
- A literature search for relevant published papers and websites
- An electronic survey of directors of higher education libraries, the most active sector in the field of information literacy
- A commissioned report on school libraries from Sandy Zinn

Background

To understand the direction that policy-making around information literacy has taken it is first necessary briefly to consider the effects of uncertainties in the governance and form of educational institutions during a period of profound political change. The starting-point is the first South African democratic elections in 1994. The inauguration of a Government of National Unity resulted in the immediate implementation of new structures and dismantling of the oppressive structures of the previous apartheid state, but it had little immediate effect on libraries and information services. However, many years of lobbying by the profession resulted in the establishment of a National Council for Library and Information Services (NCLIS) in 2001, and the commencement of its operations in 2004. For the first time, South Africa has a statutory body to coordinate and develop its library services, with one of its objects being to "provide optimal access to relevant information to every person in an economic and cost-effective manner" (South Africa, Department of Arts, Culture, Science and Technology 2001: 1) and to inform and advise the Minister of Education on the effectiveness of education and training for library and information services. By mid-2005 there were 11,373 libraries in South Africa (South Africa, Government Communication and Information System 2005: 159). Of these, 9,416 were school libraries and 1,295 were public libraries. University libraries, college libraries, government libraries and special libraries made up the rest.

One of the inheritances of the post-1994 South African government was an education system that consisted of a mixture of state and private provision, overlain by separation on "racial" lines, a system developed by the former apartheid state. The consequences of this policy were readily apparent, principally in a skewed allocation of resources, largely to the detriment of schools attended by non-white children, and schools in rural areas. The consequences were also manifest in the inadequate provision and training of staff at many schools and the lack of even basic school facilities in many rural areas. It is not surprising that school drop-out rates were high and that the quality and preparedness of entrants to further and higher education was extremely uneven, thus further discouraging participation.

The principal aim of the first democratic government and its successors has been to ensure that an affordable compulsory system of primary and secondary education was introduced with adequate safeguards to ensure quality and community consultation. Furthermore, it was recognised that an integrated system of post-secondary education, embracing the concept of lifelong learning, was essential for social healing and economic development. The National Education Policy Investigation (NEPI) of 1992 and the establishment of the Centre for Education Policy Development in 1993 were significant steps towards development of policy and practice to support these aims.

Fixing the higher education system was widely regarded as being of the first priority for economic development. Bunting (2006) has described the vacillations and uncertainties of this period as experiments with the idea of massification conflicted with the power of the South African economy to support such an

approach. It is questionable, also, whether the level of social and community involvement in education was yet great enough to make such a policy politically acceptable. Thus, while the present state of the education system is greatly improved in terms of access and resources, it cannot be said that the problems are resolved or that the system is yet stable.

One of the major impetuses behind the recognition of the importance of information literacy in South Africa has been the report, "The Western Cape Library Cooperative Project" (1992), usually known as the "Senn Breivik Report" (Breivik, Pitkin, & Tyson, 1992). It addressed the need for the facilitation of cooperative academic planning within the tertiary education institutions of the Western Cape of South Africa in order to achieve transformation with limited economic resources. Weaknesses in the access to information and the management of information resources were identified as problems for which a cooperative solution would be viable. Information literacy was identified as key part of the solution. The report also indicated that information literacy is inherent in the service role played by higher education to the regional community, including the granting of access to its resources by the community.

In its recommendations, the Senn Breivik Report included the establishment of a pilot project in information literacy, with staff and faculty development activities. A specific point was made: "Only access to a rich base of information resources in many formats can allow a move away from the traditional lecture/textbook/short loan/reserve teaching approach that currently characterizes the great majority of course delivery styles. A rich base of information resources is necessary to design assessments that develop students' information accessing and evaluative skills . . ." (Breivik, Pitkin & Tyson 1992, pp. 21-22).

A grant of $1 million (US) (3.6 million Rand at 1995 rates of exchange), to be paid out in tranches over a five-year period, from the Reader's Digest SA allowed the establishment in 1995 of the INFOLIT Project. The primary objectives, listed in the five-year plan included:

— promoting the concept, value and importance of information literacy in the context of globalisation and redress to key players in the region,

— launching a series of pilot projects which explore and establish various means of spreading information literacy education in the region,
— investigating information literacy models, programmes and initiatives in other countries that could be adapted to local conditions.

These objectives were the guiding framework for activity for the INFOLIT Project.

There is considerable evidence that the INFOLIT Project achieved several of its objectives, the greatest being the creation of awareness of the potential of information literacy amongst librarians and faculty. This was achieved by holding workshops around the region, often involving a mix of faculty and library staff, to discuss educational transformation, the issues of redress and the impact of Information and Communication Technologies (ICTs) on the 'learning space.' 'Capacity development' amongst faculty and library staff was the principal method of working, guided by the belief that development of the curriculum is best

undertaken with the specific needs of each discipline in mind. The sharing of experience with librarians in other regions also ensured that the influence of the Project was more widely-spread.

Influential early research in information literacy in South Africa was done by Shirley Behrens, who in 1994 comprehensively reviewed the local state of the art following the completion of her pioneering PhD thesis in 1992 (Behrens, 1992). Subsequently Sandra Olen considered the role of the school library and media centre (Olen and Kruger, 1995). Thus, active consideration was given, almost as soon as the Government of National Unity was installed, to ways in which information literacy could begin to influence academic performance and community development.

B. IL Products for Users

Information literacy education in higher education

The state of information education (ILE) from 1997 – 2002 has been extensively reviewed in a paper by De Jager and Nassimbeni (2002). The survey showed that there were many IL interventions taking place. It was found that librarians were aware of the pedagogical desirability of the integrated approach, but were finding it difficult to make inroads into the academic curriculum.

The current position is that most institutions offer library orientation courses in addition to ad hoc interventions when requested by students or academics. Examples include training on the OPAC, electronic databases and bibliographic referencing. There has been demonstrable progress towards the integration of IL modules into the academic curriculum at more institutions. While the majority of courses are still generic and standalone, some are credit-bearing, there is now evidence of a greater number of IL modules embedded into various curricula with their own assessment components. Assessment of student performance uses a range of methods from questionnaires and assignments to portfolios of work. An information literacy workshop for academic librarians in 2004 agreed that the South African Qualifications Authority (SAQA) be asked to accept the ACRL Standards for use in South Africa, with the addition of the final CAUL standard relating to lifelong learning as a 6th standard. This has not transpired yet as there have been delays in setting up the structures to generate standards for the LIS community. 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 the relevant education and training sectors throughout the country are registered.

Most institutions have a librarian whose primary responsibility is ILE; very often supported by subject librarians who offer training in their specific fields or disciplines. Some of the training is delivered in classrooms/computer laboratories while some in offered virtually through platforms such as Web-CT. A training librarian makes the point, however, that at her institution they are unable to offer an

online course as many of their students come "from rural areas, farms and townships where there are no libraries and computers". In some institutions, for example at the University of the Western Cape and the University of Cape Town, the library and the library school cooperate in the design and delivery of a credit-bearing course for first year students.

Many of the generic courses offered by the libraries are accessible from their websites. Examples include:

Cape Peninsula University of Technology
http://www.cput.ac.za/library/infoLit/index.html an information skills general training course.

Rhodes University
http://www.ru.ac.za/library/infolit/ a general skills training course.

University of Cape Town
http://www.lib.uct.ac.za/Training/lit/infoskills.htm. The information literacy website on the UCT Library's website, offering an information skills corner with a variety of guides.

University of Johannesburg
http://general.uj.ac.za/library/lidi/ujlic/Trainingframe.htm. This is the information literacy section on the University of Johannesburg's library website.

University of South Africa
http://www.unisa.ac.za/. There is a special section under Instruction on the Unisa website, describing the training courses.

University of Stellenbosch
http://www.lib.sun.ac.za/Library/eng/help/IG_Programme/Opleiding/Training_Index html a catalogue of training course on offer by the Library.
http://www.sun.ac.za/library/eng/help/Viewlets/menu.htm. Online training modules on topics such as the OPAC and various databases:
http://www.lib.sun.ac.za/Library/eng/help/Database_Tutorials/PubMed/Pubmed_vie wlet_swf.htm. A tutorial on how to use PubMed

University of the Free State
http://www.uovs.ac.za/support/library/ilk/index.htm a credit bearing course for first year students at the University of the Free State

University of the Western Cape
The website of the library at the University of the Western Cape offers online user guides on how to search the OPAC and electronic resources. The website has a section for information literacy at http://www.uwc.ac.za/library/ from which an online information literacy module is accessible: http://www.uwc.ac.za/library/infolit/infolit%20new/start.html

A number of published manuals and workbooks have been produced by the Gold Fields Library and Information Centre of Technikon SA, now merged with UNISA. These manuals and workbooks by Sandra Erasmus provide the framework for students' information literacy portfolios.

*School libraries (*contribution by Sandy Zinn*)*
A clear and common understanding of information literacy still needs to be addressed amongst school librarians in South Africa. Research into information literacy at the school level in South Africa has been limited. The outcomes based curriculum has created enormous opportunities to engage with information literacy skills. The SAQA Act lists seven critical and five developmental outcomes which embody the kind of learner who will exit the schooling system. Of these critical outcomes the ones which relate to research skills (collect, analyse, organise and critically evaluate information overlap with information literacy skills. Both the Revised Curriculum Statement (May 2002) and the existing Curriculum 2005 (which provide the framework for curriculum delivery) offer opportunities to develop information literacy skills within the learning areas. However, there is a need for a separate statement of information literacy outcomes or guidelines.

The Education Library and Technology Services of the provincial Department of Education of KwaZulu Natal has produced a useful template for schools wishing to create a whole school information literacy policy. It is available at http://www.kzneducation.gov.za/elits/Publications.htm.

Public libraries
Very little has been done yet in public libraries, and very little, therefore, written about it. In the last couple of years, however, there has been notable progress in this field. Two research dissertations were awarded for investigations into information literacy in public libraries (Hart, 2005; Van der Walt, 2005). A recent report describes an information literacy education project with 30 public librarians in Mpumalanga province. It is intended that this pilot project, which will be completed early in 2007will, extend to other public libraries in the province (http://www.ched.uct.ac.za/cil/dils/Information literacy campaign.pdf.

Organisations
The Library and Information Association of South Africa is the lead body promoting and providing continuing professional development of library and information workers in South Africa (http://www.liasa.org.za/). One of its five policy statements incorporates the goal of information literacy for all in conjunction with lifelong learning (http://www.liasa.org.za/policies/policies.php). The act of Parliament that brought into being the National Library of South Africa by amalgamating the South African Library in Cape Town and the State Library in Pretoria lists the promotion of information awareness and information literacy as one of the functions of the national library (South Africa 1998).

Training of the trainers

LIASA has since 2002 facilitated a number of workshops and training courses to equip librarians with an understanding of the role of IL in student learning and to provide them with guidance on curriculum design, teaching and assessment methods.
In addition, individual libraries are encouraging their librarians to attend professional development courses such as developments in web technology, new electronic products and communication tools, thus enhancing their own information literacy capacity. CICD. Of the library schools, the Department of Library and Information Science at the University of the Western Cape offers a compulsory module on information literacy in the third year of the four-year undergraduate degree.

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D. Organizations
E. Training the Trainers
F. Communication
G. Conclusions
H. References