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New trends in information literacy

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1. A variety of literacies

Literacy has many faces nowadays: its traditional concept - ability to read and write, läsekunskap - has been expanded and divided into different kinds of literacy: audiovisual literacy, computer or digital literacy, multimedia literacy, net literacy, cultural literacy, library literacy, information literacy etc. We use these concepts often without thinking how they interrelate and what kind of challenges they raise in our practical work in libraries and information services.

I'm not going into a deeper discussion of the concepts and contents of different literacies and their relations. We could, however take a look at some classification of abilities involved in information literacy. According e.g. to Skovira (Skovira 1991) an information literate person should be able

- to locate needed information,
- to determine relevance and adequacy of the information
- to apply information in problem solving and decision making.

To be information literate i.e. to gain these skills, the different literacies are a necessary prerequisites. Therefore, I think that information literacy is a kind of umbrella concept of other literacies, going beyond the other ones. Print, audiovisual, computer, digital, multimedia, net, library e.t.c. literacies are more or less technological skills, and to be fully information literate in the modern society one needs cultural literacy, intellectual ability in order to master the other skills.

Researchers (Habermas 1973, Linnakylä 1992) have seen both the traditional and the new literacy as

- a technical and instrumental literacy
- a functional literacy using literacy as a means of social and cultural understanding and communication
- a critical, emancipatory and liberating literacy supporting personal and critical evaluation of knowledge.

There is no hesitation that the last-mentioned kind of literacy is the prerequisite for successful academic studies and research work. At present, when we are more and more capable of providing our users with access to the huge amount of information, it is also more important than ever to emphasize the wise use of information: information is not yet knowledge, knowledge is not yet understanding, understanding is not yet critical judgement, and judgement is not yet

wisdom (Gardner 1996).

Shapiro and Hughes classify the prerequisites of the information literacy in higher education more detailed (Shapiro 1996):

- tool literacy:
the ability and understanding to use the practical and conceptual tools of current information technology, i.e. to use basic computer and network applications
- resource literacy:
the ability and understanding to use the form, format, location and access methods of information resources, especially networked resources
- social-structural literacy:
to know how the information is produced in the society, what are the various information producers and what kind of information can be expected from them
- research literacy:
the ability and understanding to use the IT-based tools relevant to the modern research work
- publishing literacy:
the ability to format and publish research ideas electronically, in textual and multimedia form
- emerging technology literacy:
the ability to ongoingly adapt, to understand, evaluate the emerging information technology not to be a prisoner of prior tools of resources
- critical literacy
the ability to evaluate critically the human, intellectual and social strengths, limits, benefits and costs of IT.

There is no hesitation that the last-mentioned kinds of literacy are more and more important in the successful academic studies and research work. Shapiro and Hughes underline that short technical courses like "Getting Started with Windows", "Surfing the Net" and "Bibliographic Instruction", are not enough, even they still have a role to play. Shapiro and Hughes propose a new thinking for curriculum framework. From librarians' point of view this means a need for a closer cooperation with the other partners in the academic community, i.e. teachers, researchers and students, of course.

This also means at present, when we are more and more capable of providing our users with access to the huge amount of information, that it is also more important than ever to emphasize the wise use of

information: information is not yet knowledge, knowledge is not yet understanding, understanding is not yet critical judgement, and judgement is not yet wisdom (Gardner 1996).

In the libraries, the problem is how our understanding of contents and the importance of these literacies should be considered in the design and evaluation of library and information services and how they influence the practical work, the user education in practice?

2. New ways of scientific communication and new forms of information carriers

The fast development and adoption of modern information technologies are changing the traditional ways of communication also in the academic world. On the other hand, even though new media and new channels of communication are emerging, the old ones are not necessarily disappearing, rather, they are getting new features. Scientific communication in the present research society is going through a period of transformation. The older generation still relies - at least in the human sciences - mainly on traditional information carriers while students and younger teachers and researchers are more and more acquainted also with the new forms of information. Computer or digital illiteracy may be a problem among some professors in the humanities, perhaps also among female students more than male students, but students in general are increasingly computer and net literate, which, however, does not mean that they would be information literate.

There are essential differences between the electronic information offered by networks and the printed information available as publications - while published information is available through libraries for a long time - in archival collections "forever" - the supply of information on the Internet changes constantly. What was available on the networks yesterday may have completely vanished today. New services are created all the time and what was earlier free of charge may now only be available for a fee. It is typical that a service or a piece of information is first offered free of charge and, if there is a market for it, a price tag is attached to it.

- there are more and more multimedia materials on the net, e.g. the documents are not necessarily linear in the way we are used to
- the evaluation criteria we are used to with the traditional information carriers are not valid for electronic publications.

The Internet is gradually realizing the concept of the "virtual library", which has been such a fashionable word in the library society for several years already. Although the reality is still today far from a real virtual reality, it seems to be the way we are unavoidably heading. Library catalogues are expected to be accessible through networks all around the world, and CD-ROMs and other electronic materials previously only in print are commonly accessible from work stations linked to universities' own networks. Internet services cover an increasing number of electronic publications and other information which traditionally have been accessible on the premises of libraries and information services or at academic departments.

The utilization of Internet services requires a much more active and critical attitude to information acquisition and evaluation than was necessary during the time of traditional publishing. All this means that our users should be able to use these new media and information channels critically.

The Internet is said to be a complete chaos of information as far as both organization and level of information are concerned. However, with regard to structure and level of information, the Internet does not in principle differ much from world-wide publishing activities. As we know, publishing activities as a whole produce passing fads or outright nonsense alongside valuable material. In the same way, though to a greater extent, the value of information offered by the Internet also ranges from one extreme to the other. As the library offers access to information sources it should also provide guidance in their use irrespective of whether information is acquired from traditional or virtual sources. And even if it is the user's task to assess the final usability of information, the library's role is to help in its transmission, initial selection and evaluation.

For the management and organization of printed publications, library and information services have centuries-old tools, which most users know at least in their own field. Corresponding, but not similar, tools also exist and are continuously developed for the management of the Internet. In fact, there are already directories and directories of directories, general and field-specific, which may resemble book catalogues, bibliographies or bibliographies of bibliographies. Navigation tools also allow keyword-based information retrieval, although random indexing of files is a problem. In the same way as the use of traditional information sources is encouraged through user education provided by the library, libraries should also be responsible to encourage and to enhance the use of these new information

resources and search methods.

According to these lines of thinking, the library cannot remain a bystander when information is increasingly available through networks. Otherwise the role of the libraries in the modern information society will no doubt be questioned.

3. Changing information needs, different types of users

Together with the virtual age a library without walls is coming true: the services offered by the library itself or by other information providers are increasingly used via the networks all the time. Distant library users, customers, who may never physically come to a physical library but still are active users of the services, are an increasing group of our clientele. Distance education and distance learning are becoming an essential form of academic education, and they are also increasing the distant use of library services. Open university calls for open libraries, open libraries call for distant and intensified user education.

As in education in general, there is an emerging tendency also in academic education to shift from the distribution of information from teacher to student towards teaching how to find information, in other words, to teaching information acquisition skills. This change is a result of problem-orientated teaching methods which essentially increase the need for independent information retrieval and use. In the Nordic countries, at least in Finland, this development is fairly new but a major challenge to libraries. Add to this the decrease of teaching staff and the increase of students at the universities, the independent use of information often with the support of library staff is becoming more and more common.

Novel forms of information carriers, new routes to information sources and changes in academic teaching methods are all together setting new challenges to the literacy skills of information users, and for libraries, too. The library's role as user educator is thereby also emphasized.

At universities, the use of electronic information via the Internet is increasing at a stupendous rate. The university computing centres have commonly started to give computer training to all new students. Network services are usually available to students right from the beginning of their studies. Computer and net illiteracy is not such a problem for this generation of new students as it has been for previous ones. There is, however, still a considerable variety of information

users in the academic society: technologically literate and efficient network users are a growing group, but we still meet old and young who shun digital and network information and typically also computers in general. These "technologically illiterates" include both older researchers and often those with a humanistic orientation, maybe female users. They are the most typical customers who the library is used to serving and who it still is pleased to serve. It is especially these users that the library also likes to acquaint with the utilization of new technology in information acquisition. For them the threshold to the training provided by the library may be lower than the threshold to the training provided by experts in the computing centre. The people providing training in the library are mostly female librarians or information specialists with a humanistic background who themselves could belong to this group.

In traditional user education, students were a fairly uniform group: they were all technically literate, able to read, even if their other information skills varied. In the new situation, even technological literacy is often most uneven. The library's role in guidance should follow the different types of users. In principal, after the technological literacy provided by the computing centres or acquired by practical experience, the library's role in its own user education and Internet-training should be orientated towards information content rather than technology. On the other hand, the teaching of information skills in the library may also lower the threshold to new technology compared with the training offered by the computing centres. It is not, however, unusual that the responsibility for teaching how to read electronic information, how to move purposefully in the networks, and how to filter the information that is useful, is in practice left to library and information staff.

4. Information specialists - subject specialists, how to cooperate?

The eternal problem of user education: cooperation of user educators with academic teachers and researchers of different subject areas something that of course concerns all library activities is nowadays an even more essential issue than before. The question has acquired unprecedented features in connection with the new technology combined with the enormous growth of easily accessible information. A specialist may feel that the librarian, a "pure transmitter of information", cannot help much in critical content evaluation of the new kind of information. A librarian or an information specialist is felt to be, and probably often is, a layman, a "technician" who has nothing to give to an expert. If this increases the difficulty of a specialist to turn

to a librarian in general, in the new situation it may also raise new problems in user education. On the other hand, since the evaluation of information is more important than earlier, increased cooperation between library staff and staff at university departments is essential.

One more important point of view: for library personnel, the change-over to teaching network-based services means new challenges, new training. In many cases it has increased the self-confidence of traditional librarians, perhaps also their status in the academic community. It has also meant that the different functions of user services have approached each other: general guidance, reference work, information service and user education are getting more and more tied up. Even if it is important that libraries have staff members who can specialize themselves in user education, the entire staff have to be more or less able to help the customers to improve their information skills in one way or another. One sign of this change is that we have started to use the expression 'development of information skills' instead of the traditional "user education".

5. IFLA and user education

The increased importance of user education or the development of the information skills of users is evident also at the international level. IFLA acknowledged user education as an important part of library activities in 1993 by establishing the Round Table on User Education. Before that a Working Group of UE had organized programmes in IFLA Annual Conferences already for two years. The establishment of the RT was possible mainly thanks to some active Nordic pathfinders: Nancy Fjällbrandt had for years lectured about the central role of user education in library services and carried out the UNESCO Survey of Library Orientation and Instruction Programmes (Fjällbrandt 1990) in 1990. Elin Törmudd's initiative was the UNESCO Expert Meeting on the Training of Information Users in Higher Education the same year (Expert Meeting, 1990). Sinikka Koskiala together with Ian Johnson, Chair of the IFLA Professional Board during these years carried out the idea of RT proposed by the Expert Meeting.

In addition to the general promotion of user education the objectives of the RT are

- to disseminate information on the development of curricula and teaching methods
- to encourage the development of the dissemination of

appropriate teaching material and
 - to encourage the development of education and training for librarians in user education.

The sessions and workshops that the RT has organized at the IFLA Annual Conferences have proved to be most popular and have featured the following aspects of user education:

- state of the art of user education around the world
- school libraries and user education
- teaching the use of Internet services
- teaching the use of electronic journals and other electronic materials
- information literacy - a challenge for user education
- teaching distant users.

The workshops are usually organized together with other IFLA units: cooperation has been close with the Section of Science and Technology Libraries and the Section of University and other General Research Libraries. The RT had also planned a seminar or workshop on the training of user educators: the popularity of the theme was proved as it became apparent that the RT on Continuing Education will organize the seminar together with the Royal Danish School in Librarianship as a Preconference Seminar at the IFLA 1997 Conference in Copenhagen.

As far as the future programmes of the RT are concerned it seems that encouraging the further development of new types of information skills will be emphasized in the programmes of the approaching Conferences. It has also been proved that the Nordic countries together with the Anglo-American library community are the forerunners in user education in the world. From this point of view I would like to call for your active participation in the work of the RT on User Education.

IFLA is initiating a new core programme "Literacy". The RT with its representative in the steering group of the Programme attempts to promote the new ideas of literacy, e.g. information literacy in this group. Even if traditional literacy has not yet been realized in the world, and even if resurgent illiteracy is a growing problem in the developed countries, new forms of information are creating new forms of illiteracy also among an unprecedented group of population, academics. Development of information skills is more important now than ever before at the universities.

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