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ABSTRACT

Viikki is one of the four campuses of the University of Helsinki. The Viikki Virtual Infocenter will be located on the Viikki Campus in Helsinki. It will be a modern learning environment that offers library and information services, study rooms and learning facilities, computer and network services, and administrative campus services to students and researchers. A good guiding system and a clear user interface are essential for the effective use of all these services. Clients will need quidance in the navigation, both in the physical building and in the huge information cyberspace. The Viikki Virtual Infocenter will consist of two interlinked parts: the guiding system of the building and the user interface to the library's networked resources providing users with easy access to a range of systems and services. The Virtual Infocenter integrates electronic information services into a broader electronic learning environment and functions as a facilitator in an information landscape. The Viikki Virtual Infocenter will be available in Finnish, English, and Swedish. This paper describes the electronic guiding system and discusses the challenges and rewards in the development of the virtual learning environment. (AEF)



Viikki Virtual Infocentre - an Integrated Information Workstation

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Abstract

The Viikki Infocentre will be located on the Viikki Campus in Helsinki. It will be a modern learning environment offering library and information services, study rooms and learning facilities, computer and network services and administrative campus services to students and researchers. A good guiding system and a clear user interface are essential for the effective use of all these services. Clients will need guidance in the navigation both in the physical building and in the huge information cyberspace. This paper describes the electronic guiding system and discusses the challenges and rewards in the development of the virtual learning environment.

Introduction

The amount of retrievable information has grown tremendously. It has become more difficult to locate relevant information quickly. Students and researches often lack the skills necessary to succeed in the rapidly changing information environment. Information seekers are faced with an information overload and they are easily overwhelmed. Therefore it is essential to provide clients with tools which help them to locate, read, process, and publish electronic information. Students and researches need support from information management professionals throughout the whole process of research, from the formulation of a research problem to the dissemination of the results. Libraries are faced with new challenges when they try to develop their services to meet the needs of their clients. One interesting example of the services is the Advanced Information Workstation developed at the Koninklijke Bibliotheek, the National Library of the Netherlands (1).

Users of the electronic services are not dependent on opening hours or location, therefore web services are especially suitable for remote users. Electronic services cannot completely replace face to face contacts with human beings. However, the more there are useful tools and guides available on the web, the more time information management professionals can devote to other services, e.g. personal counseling of the clients who have challenging questions.

Viikki Infocentre

Viikki is one of the four campuses of the University of Helsinki. The Faculty of Agriculture and Forestry and the Department of Biosciences and the Department of Pharmacy of the Faculty of Science are located on the Viikki Campus. In a few years the Home Economics Section and the Textiles, Clothing, and Craft Design section of the Faculty of Education will move to the Viikki Campus, too.



The Viikki Infocentre Building will be completed in the summer of 1999. It will be a many-sided and stimulating learning environment offering library and information services, study rooms and learning facilities, computer and network services and administrative campus services to students and researchers. The service providers at the Viikki Infocentre are

- Viikki Science Library, University of Helsinki
- Viikki Library, a branch of the Helsinki City Library
- The Student Affairs Office of the Faculty of Agriculture and Forestry
- The Administration of the Faculty of Agriculture and Forestry
- The Administration of the Viikki Campus

Viikki Science Library is the biggest service provider at the Viikki Infocentre. Subject areas of the Viikki Science Library are agriculture, food, forestry, home economics, consumer research, textiles, clothing and craft design, education, biosciences and biotechnology, ecology, systematics and environment, pharmacy, and general science. The collections and services of the Viikki Science Library are available to everyone.

Viikki Virtual Infocentre

The Viikki Virtual Infocentre consists of two interlinked parts: the guiding system of the building and the user interface to library's networked resources providing users with easy access to a range of systems and services. The virtual infocentre integrates electronic information services into a broader electronic learning environment and the infocentre functions as a facilitator in an information landscape. The Viikki Virtual Infocentre will be available in Finnish, English, and Swedish.

The guiding system of the building

1.1. The three dimensional model

The three dimensional model is based on VRML (Virtual Reality Modeling Language) and WWW technology. In the model the user can move virtually in the building using floor plans. There is access to the online catalogues of the academic library and the city library and other electronic information services via links in the VRML model or from a separate WWW page. In practice this is done by linking the objects of the model (e.g. computers) to appropriate WWW pages. The VRML model can be used both in the building and on the web.

The application runs in a WWW browser with an additional plug-in component (Cosmo Player) for VRML. There are certain minimum requirements for the PCs which can run the virtual model. Therefore it cannot be viewed by the users of older PCs.

1.2. The two dimensional map and the service directory

The two dimensional map provides another type of navigational tool for the visitors. Users can pinpoint on the map where areas or services are located. The two dimensional map can be viewed also by those whose PCs cannot run the three dimensional model.

The guiding system of the information resources: "From Information to Publication" Interface

The interface provides access to information resources, training material, and guides on the use of

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information retrieval and editing systems, and software which is needed when pieces of information are worked up into a publication. This helps students in their studies and teachers and researhers when they prepare course material and publications.

"From Information to Publication" Interface consists of six elements. The elements are presented in the figure 1.

1. Information retrieval - web course 2. Easy user interface to information resources - library catalogues, CD-ROM databases, virtual libraries, electronic journals, Internet resources 6. A finished publication retrievable from a database 3. Bibliographic reference management - software, guides, training 5. Entering a publication into a database - indexing, metadata, electronic thesauri, guides 4. Working up notes into an electronic or printed publication - software, guides

From Information to Publication

Figure 1. From Information to Publication Interface

1. Information Retrieval

The online course provides students and researchers with the skills they need to use information resources and searching tools efficiently and reliably. A web course on information retrieval and information resources has been used at the Faculty of Agriculture and Forestry since the autumn 1996. New disciplines will be included into the web course (biosciences and pharmacy). Also the geographical scope of the course will broaden because other libraries of the NOVA University (The Nordic Forestry, Veterinary and Agricultural University) will adopt the course and provide material on their national databases. The existing course material is translated into English.

The web course consists of the following parts:

- 1) course material
- 2) exercises
- 3) programme for allotment of questions
- 4) student and credit register
- 5) programme for registration for courses and exams
- 6) learner support, assessment, and feedback

Feedback from students has proven that the web course is very useful although it is quite challenging and requires much more work than on-class courses.

2. Information Resources

Information resources include library catalogues, reference databases, electronic journals, virtual libraries, and Internet resources.



There is a huge amount of information resources available and this can be confusing. It is not easy to group and present them clearly. Different users need different ways to access information resources, e.g. there are university students and staff who have access to all the licensed resources and there are remote users who only have access to the public domain resources which are freely available to everyone.

Also on-campus users need tailored services because there are several disciplines on the campus. Information resources are grouped by disciplines in order to make it easier to locate relevant resources. A searchable catalogue of databases which includes e.g. descriptions, keywords, dates of coverage, and update frequency of available electronic information resources will offer an alternative way to look for information resources.

3. Bibliographic Reference Management

A network license of a bibliographic reference management programme will be available on the Viikki Campus Local Area Network. The software helps users to search, sort, and print citations in a variety of ways. Guides on the use of the software will be provided.

4. Preparing an Electronic or Printed Publication

This module includes

Software: word processors like Word, and web and graphics editors, e.g. Netscape Gold, Corel, and PaintShopPro. These tools are provided via the Viikki Campus Local Area Network.

Guides on using word processing and web editing software.

Manuals for writers of term papers, theses, dissertations and other academic publications. Most departments and publication series have their own guidelines. Therefore, it is useful for the students and researches to have all the manuals collected into one place. Manuals can be either printed or electronic, and when possible, they are converted into PDF or HTML format.

The University of Helsinki has projects on electronic publishing (2, 3) which provide guides and consultation for researches, teachers, and students. These guides will be linked into our interface.

5. Entering a Publication into a Database

Authors and the library staff need tools for indexing and classification.

- 1) The electronic thesaurus, Agrisanasto, has already been publicly available on the web for a few years. It is a tool both for indexing and for information retrieval.
- 2) The indexing guide is a tool for writers and the library staff.

Authors can provide their publications with keywords derived from the electronic thesaurus. Bibliographic references are entered into the reference databases (HELKA, Linda, Agri, Forestree, Agris) by the library staff.

Authors will themselves produce metadata for their HTML documents by using Dublin Core Metadata Template (4). Guides on how to include metadata into electronic publications will be collected and produced. Some of the electronic publications will be stored by the projects on electronic publication at the University of Helsinki (2,3).

6. An End Product Retrievable from a Database

The cycle closes when a finished publication is searchable in a database or on the web. An information seeker finds the publication easily because it is provided with sufficient metadata and because she/he has



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learned efficient information retrieval skills.

Conclusions

Because funding is always a problem students do not have enough PCs available. Many users still have PCs which are not powerful enough for the proper use the VRML model. Also a plug-in is needed in order to view the VRML model. Some clients might not be motivated enough to download the plug-in although it is available free of charge on the web.

It is very challenging to create a clear user interface when so many information resources are available and users are heterogenous. Information resources have to be presented differently for different users. We have e.g. students and researches of the University of Helsinki who have access to all our resources and we also have users who come outside the university and who have access to considerably fewer resources.

We still have not reached our goal where users could access electronic information and resources from a single interface. Although we do not have a truly user friendly interface to access all the information resources, at least we have collected them into one place, so that clients know which resources are available and they have one starting point in the information landscape. Many of the problems cannot be solved by the library alone. This work requires cooperation between various organizations and information providers.

Feedback from users indicates that there is clearly a need for a wider range of electronic services.

References

- 1) Marco de Niet. Hit the road. Access to professional information services. http://www.konbib.nl/kb/sbo/netwerk/aiw/wworkstat.html
- 2) OODI Opiskelijakirjasto Digitaaliset Oppimateriaalit

(Digital Learning Materials, Undergraduate Library of the University of Helsinki)

http://www.oodi.lib.helsinki.fi

3) Helsingin yliopiston elektroninen julkaisupankki (Electronic Publishing at the University of Helsinki, University of Helsinki Library)

http://linnea.helsinki.fi/elbanco/

4) Dublin Core Metadata Template, Nordic Metadata Project

http://www.lub.lu.se/cgi-bin/nmdc.pl

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