The Joint Higher Education Library of Lahti: Confluencing for Academic Knowledge – Supporting the Study Paths from Upper Secondary School to University

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Abstract:

Promoting the development of pre-academic information literacy skills of the so-called Google Generation, and especially among the upper secondary school students, is one of the current topics of discussion in the field of media and information literacy. The Joint Higher Education Library in Lahti, Finland has taken several steps to meet these demands by collaborating with the region's educational institutions of vocational, upper secondary and university levels. This paper discusses these issues and presents our approach to supporting and promoting knowledge creation, pre-academic information literacy skills and lifelong learning.

As a joint library we are in a unique position to offer our users local access to the licensed digital resources of three universities; therefore the focus of our services has shifted into teaching and guiding users in both the use of these collections and in information literacy. To further promote especially the development of pre-academic skills, we have recently teamed up with Lahti's Kannas Upper Secondary School's new IB-programme which, with its critical, innovative and scientific focus, is an excellent starting point for learning the information literacy skills needed in later academic studies.

As one part of this collaboration, we are planning to launch a new initiative to create a futuristic and mobile Information Skills Clinic. The aim is to develop new methods for teaching pre-academic information and media skills by using serious gaming and participatory design. As part of their studies, the students themselves will participate as developers and testers of this new service. The Skills Clinic will go mobile for example in LINKKU, a multiservice smart bus that also serves as a modern learning environment, making IL guidance and access to library's digital resources available also to the region's more remote upper secondary schools.

Keywords: information literacy, knowledge creation, pre-academic skills, eLibrary, joint academic libraries

Introduction

The role of academic libraries is shifting more and more towards supporting a knowledge driven economy instead of the delivery of ready-made answers. Information services must in its part meet the ever growing demand for information and media literate citizens, who have the skills needed in navigating through the vast amounts of both information and disinformation readily available to anyone with access to Internet. Promoting the development of pre-academic information skills[1] of the so-called Google Generation, and especially among the upper secondary school students, is one of the current topics of discussion in the field of media and information literacy in Finland.

Traditionally the upper secondary school library services have been provided by and developed with the public libraries, but in our view also the academic libraries, with their special expertise and digital resources, should take part in the teaching of pre-academic information literacy skills (Holmström and Karevaara, 2014). The Joint Higher Education Library in Lahti, Finland is doing exactly this by collaborating with the region's educational institutions of vocational, upper secondary and university levels. The information and library services are developed and maintained in collaboration with Lahti University of Applied Sciences (LUAS), Salpaus Further Education and the universities within Lahti University Campus.

Why Google Is Not Enough: Information Illiterate Diginatives

In recent years the information literacy skills of the digital natives, or the Google Generation, has been subjected to discussion. By a simple definition, a digital native is 'a person born during or after the general introduction of digital technologies and who, through interacting with digital technology from an early age, has a greater understanding of its concepts' (Wikipedia, 2014). Other terms used for these new generations of young people brought up in a digitally rich environment include "Millenials", "Net Generation", "Google Generation" and "Gaming Generation", to name but a few (Jones and Shao, 2011: 3). Regardless of the terminology used, they all share the view that since these generations are born in the digital world, they not only see these technologies and the Internet as "natural" but will also challenge the current forms of teaching and learning on all educational levels, including higher education (Jones and Shao, 2011: 5). The assumption of digital natives' somehow given knowledge of the digital culture has also been criticized. For example Reijo Kupiainen (2013) talks about a "diginative myth", which has had negative influence on teaching: since students are expected to already master the digital culture, they aren't taught even the basic media skills.

But does being born into the Internet era also automatically make these generations information literate? A recent study conducted by Carita Kiili (2012) suggests that being used to digital technology isn't the same as being Internet or information literate and that these skills are something that needs to be taught. Kiili (2012: 34-36) conducted a number of sub-studies, in which she investigated Internet search actions

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[1] The term 'pre-academic information skills' is used here to describe the upper secondary school students' (aged 15-18) inquisitive and scientific attitude towards life that is needed later in university studies (Holmström and Karevaara, 2014).

and information evaluation skills of upper-secondary school students as they searched for source material on the Internet for an essay on a given topic. These sub-studies showed substantial variation among the students.

According to the study, the students faced problems in formulating adequate search queries, understanding how search engines work, analyzing search results and regulating search activities (Kiili 2012: 43). As for the search queries, the queries including only one term were the most common, accounting for 41% of the queries; almost a third (30%) of the search queries consisted of two terms and 17% included more than two terms. Some students didn't include the main concept or used very vague terms, which resulted in unsuccessful search queries: most difficulties were caused by using the whole title of the task as a search term. It was also noted that some students weren't able to reformulate their unsuccessful searches appropriately. (Kiili, 2012: 37) Kiili points out that although a majority of the students were able to locate relevant information quite effectively, it seems that all students need some guidance for developing their searches and that 'practicing systematic use of conceptual knowledge in specifying search queries would also prepare students for their university studies where inquiry and research based practices are pronounced (2012: 43-44).'

The study also found students lacking in the skills relevant to evaluating information. Since the Internet is so frequently used for information seeking in school work, it is 'exceedingly important that students evaluate what is worth reading and critically ponder what they read' (Kiili, 2012: 47). However, according to Kiili, students evaluated the relevance of information more frequently than its credibility when reading online (2012: 47). The variance in both relevance and credibility evaluation was substantial, with several students not evaluating the credibility at all (Kiili, 2012: 35).

Building Information Literacy from Upper Secondary School to University: Advantages of a Joint Library

Information and library services must in their part meet the ever growing demand for information and media literate citizens, who have all the basic skills needed in the information technology driven world. This is why the information literacy, or quite often illiteracy, of the Google Generation is something to be taken seriously also by the academic libraries. How to make sure students entering higher education are well equipped in information literacy, not to mention the much talked-about concept of life-long learning? The Joint Higher Education Library in Lahti, Finland has a unique position from which to tackle both these issues.

A joint library is a library for one or several independent universities and independent polytechnics (or Universities of Applied Sciences), with its operation based on a contract between its parent institutions (Palonen et al, 2013: 224). The Joint Higher Education Library of Lahti is stretching this definition by also co-operating with the region's educational institutions of both vocational and upper secondary levels. The Information and Library services are developed and maintained in collaboration with Lahti University of Applied Sciences (LUAS), Salpaus Further Education and Lahti University Campus with units of three different universities (Helsinki University, Aalto University and Lappeenranta University of Technology). The Learning Centre

Fellmannia[2], home also to the library, was founded in 2011 and is located in the city centre, which makes it easy to access. The whole concept of the Learning Centre was developed for learners of different ages and levels of education from upper secondary level onwards, making it an attractive learning environment for all learners. In addition to Fellmannia, the Joint Higher Education Library has several smaller information centres in the Lahti region, reflecting the subject interests of their users and thus forming a multi-disciplinary network.

The collaboration of different educational institutions has several advantage points. Students entering the Salpaus vocational or upper secondary education will immediately become familiar with the higher education library services, as each group of new students will be welcomed to the library by a short tour and introduction. Printed collections and most of the services as well as local use of the digital resources are available to all students, as well as guidance in their use[3]. The Joint Higher Education Library offers information literacy (IL) teaching to both students and staff of all educational levels. As a result the library staff has gained extensive experience and expertise in IL teaching, making it possible to further develop teaching and guiding methods and tailor them to best meet the needs of the different student groups, as well as bearing in mind the whole study path from upper secondary to higher education, whether it be polytechnic or university. The information and library services are therefore an integral and natural part of the whole educational continuum.

To further promote the development of pre-academic information skills, we have recently teamed up with Lahti's Kannas Upper Secondary School's new IB-programme which, with its critical, innovative and scientific focus, is an excellent starting point for learning the information skills needed in later academic studies. (Kannaksen lukio, 2014) This collaboration will support the study paths of students from the IB-programme to universities and make sure their knowledge and skills in information literacy are gradually developing together with other areas of their studies.

Offering Access and Supporting Knowledge Creation

Availability of digital collections is directly linked to the support of knowledge creation. As a joint library we are in a unique position to offer our users local access to the licensed digital resources of three universities: Lahti University of Applied Sciences, University of Helsinki and Aalto University. This gives our users an opportunity to expand their information seeking to include resources they otherwise wouldn't be able to access.

Of course simply offering access to resources is not enough: in order to really support knowledge creation, libraries must also offer easy access to guidance. One could argue that in the last few years the role of the information specialist has changed from a more traditional sense of librarianship into that of a coach, not giving ready-made answers

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[2] To read more about Fellmannia, visit http://www.fellmannia.fi/.

[3] Due to current institution specific licensing models of digital resources, customers of the same joint library have different solutions and rights for remote use depending on their institution; therefore for example the students of Salpaus may only access the digital resources of LUAS on the library's computers. For more, see Palonen et al, 2013.

but helping and encouraging users in finding the answers themselves. This is also why the focus of our services is in teaching and guiding information skills, source criticism and using the digital collections. As an example, our Information Skills Clinics offer personal, tailored sessions where information specialists help users in using databases and finding sources relevant to their subject and level of study, give guidance in assessing information quality and help in citing digital information. These clinics are especially popular among the under-graduate students writing their thesis.

The Information Skills course is one part of studies at Lahti University of Applied Sciences and is worth one study credit. All LUAS students will attend a two hour lecture and complete an information skills test; alternatively they can participate in an online course. The aim is to make sure students have the needed competence in information literacy and in using the available resources. It is advisable for students to complete the course during the first year of study.[4]

The Joint Higher Education Library is also developing eKnowledge and eLibrary services as part of the FUAS Virtual Campus[5]. As the number of virtual campuses is increasing, must academic libraries find ways to best serve their users online. The aim is to integrate information and library services with the virtual campus and also develop innovative new online services. Teaching students and staff in information skills and using the digital collections plays an integral part in this development, as well as promoting the educational use of these collections. Library services must be made available and usable also for those users who can only access them online. (Kiviluoto and Blinnikka, 2013).

Putting Information Literacy on Wheels: Case LINKKU

As discussed earlier, offering access both to information resources and guidance in their use is a critical part in supporting knowledge creation and the development of both pre-academic and academic information literacy skills. But what about upper secondary school students, who are living and studying in the more remote areas of the region? How could they benefit from the services of a joint library? Our answer is to make these services mobile, both physically and virtually.

The project SmartBus tests a multipurpose, mobile service unit in the Lahti region. The project, financed by the European Regional Development Fund (ERDF), is being administered by Lahti University of Applied Sciences and implemented in cooperation with Salpaus Further Education, Learning Centre Fellmannia and several of the region's social and health care service providers. The project is running until March 31, 2015, after which the SmartBus will stay in operation for a minimum of five years.

LINKKU, as the SmartBus is called, will start piloting its services in Autumn 2014, visiting several smaller towns and villages in the Päijät-Häme region with a regular schedule, providing different services on different weeks. LINKKU is designed to be easily modified to adjust to the needs of several different services, so it can function for

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[4] For more on Information Skills services, visit http://www.phkk.fi/english/services/information-and-library-services/Sivut/default.aspx
[5] FUAS - Federation of Universities of Applied Sciences is a strategic alliance formed by HAMK, Lahti and Laurea Universities of Applied Sciences. For more, visit http://www.fuas.fi/en/Sivut/default.aspx

example as a mobile health care unit, a dental clinic, an ICT classroom or a mobile polling station. (Lahden ammattikorkeakoulu, 2013 and LINKKU, 2014)

LINKKU is also a new kind of learning environment on wheels, with advanced mobile telecommunications technology and networks making the licensed digital collections of the Joint Higher Education Library available to students, teachers and other learners in the whole Päijät-Häme region. Expert services such as the Information Skills Clinic will be made available either physically with an information specialist on board or virtually as an online service. The focus again is in teaching and guiding information and media literacy skills and creating an equal opportunity for learning these skills regardless of where one is located. It should be noted that LINKKU will not be a traditional mobile library, since those services are already well provided by the region's public libraries. Our aim is to complement the already existing services by bringing something new from an academic library's viewpoint, delivering essential services to support a knowledge driven economy.

In addition to this new mobile learning environment and already existing services, we are developing new ways of teaching pre-academic information and media literacy skills to upper-secondary school students. The aim is to make learning these skills more interesting and appealing to the 'Gaming Generation' by using serious gaming and participatory design. This is where the previously mentioned collaboration with Kannas Upper Secondary School's IB-programme comes into play: as one part of this collaboration we are planning to launch a new initiative to create a futuristic and mobile Information Skills Clinic together with the students. As part of their studies, the IB-students themselves will participate as developers and testers of this new service.

The Mobile Information Skills Clinic will pilot several new learning games, for example Role Play and INTACT Information Battle (Holmström and Karevaara, 2014). In Role Play, the student chooses an alias (for example a researcher, a chemist or a historian) and will interact with the virtual information specialist in this chosen role, trying out different strategies for searching and evaluating information as if she/he actually was a researcher, a chemist, etc. This will give students an opportunity to use their imagination and get a real working life experience in information searching. Feedback and assistance will be given online by the information specialist.

In INTACT Information Battle students will practice academic debating. The debate will be over a given topic and the winner is the one with most credible arguments, which need to be based on scholarly articles. The aim is to learn how to find peer-reviewed, scholarly articles from different databases and use them in argumentation, getting students acquainted with source criticism and other academic practices. To add more challenge, also non-Finnish information sources will be used. The battle can take place in an online environment, with an information specialist as the game master (Holmström and Karevaara, 2014).

These learning games will be available online, so anyone can participate regardless of location. In addition, LINKKU will take the digital collections of the Joint Higher Education Library to the region's more remote upper secondary schools, giving an opportunity to use these collections in serious gaming as well as other studies.

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