

## **Big Wheel – big deal?**

### **Academic library contributes to education reform: case veterinary medicine**

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#### **Abstract**

##### *Aim:*

The education reform "Big Wheel" has started at the Helsinki University in 2015. The aim of the bold reform is that the University educates future experts for future careers. The university provides learning outcomes-based degrees that are competitive on the international labour market. From an applicant's perspective, the degree programmes offered by the University are attractive and competitive. The three-tier degree structure (Bologna model) must now be taken advantage of in a field-specific way.

In our paper, we will present how the University Library is involved in this process and what services it can provide to the academic community. One of our major services is Information literacy teaching (IL), which we aim to integrate deeply into the curricula. Other services e.g. access to information resources and open access support will also be investigated.

##### *Case veterinary medicine:*

In the Licentiate of Veterinary Medicine degree offered by the Faculty of Veterinary Medicine, intended learning outcomes have been specified for each study module and are continuously developed to meet the needs of employment. The Faculty increases dialogue with employers by engaging colleagues working in different fields in specifying intended learning outcomes and in developing learning assessment.

The Licentiate of Veterinary Medicine degree forms a continuum with both professionally oriented and academic postgraduate degrees. This challenges the learning outcomes-based approach in all degrees and requires re-examination.

##### *Results:*

The library continues and deepens the cooperation with the Faculty teachers in Information seeking and management. The first encounter with the freshmen is the ICT Driving Licence course where the library's role is to teach how to seek information and how to utilize and evaluate search results. The second phase is to contribute to the module "Introduction to scientific work" including the support of the writing process of the Bachelor's thesis in a more personalized way. Finally during the licentiate phase when the students work on their thesis for the degree, the library provides tailor-made special courses for the future researchers, as well as clinical practitioners. The aim is to provide the students with

competence for the veterinarian's profession, independent work as a veterinarian and continuing education.

*Discussion:*

Library will strengthen its online presence so that it will be more present in student's everyday life; it will no longer print out educational material for students, the material will be given electronically. Face-to-face instruction will be offered at the right moment: when students are writing their essays/papers/theses. The teaching and learning will be planned together with the subject teacher. The library defines what learning outcomes are its responsibility in different stages of studies. Student peer support will be encouraged both online as well as in the library facilities, the library will be more like a learning center. The online library services will be integrated into students' online learning environment. All the information literacy material will be collected into one place online. The library will have only one course calendar with clear study units.

Big Wheel is a big deal to the whole academic community. The faculties as well the library will change their processes to produce better learning outcomes. Lifelong education includes continuous need of information retrieval – the competence to find new relevant information is essential for success in professional tasks.

*Key words: Education, Universities, Veterinary Medicine, Curriculum, Information Literacy*

**Objectives**

National education policies and reforms led by the Ministry of Education and Culture, steer the University's operations and the planning of its degree education. At the University of Helsinki, the structuring of education according to the Bologna process has remained incomplete, as the first- and second-cycle degrees cannot be construed as independent degrees neither in terms of their profile nor content. Consequently, the University does not sufficiently benefit from the three-tier degree structure. Hence the University has undertaken educational reforms and has named it the "Big Wheel".



The content of the degree education provided by the University of Helsinki is based on learning outcomes and meets the future demands of the labour market. Digitization is integrated with the learning environment, and education provides the skills necessary for operating in various constantly changing operating environments.

Mobility within the University and between universities and universities of applied sciences is seamless, and prior learning is recognized. Good practices in the planning and implementation of education will be shared across faculty and unit boundaries at the University. All members of the University community who are responsible for education shall participate in the discussion on the development of education. The degree programs start in autumn term 2017.

Helsinki University Library (HULib) has operated as an independent institute of the university since 2010. It is responsible for the Information Literacy (IL) training in all the Faculties and all the study stages and in this Big Wheel carriage it supports the University by updating the IL planning and training process.

The Faculty of Veterinary Medicine is situated on the Viikki Campus of Life Sciences. A part of the Faculty is the Veterinary Teaching Hospital which is an important learning environment during the fifth year of studies. The hospital is located in two different towns and the students have to rotate between those.

The Viikki Campus Library provides the IL training. The IL training reform of the veterinary curriculum is carried out by the veterinary librarian.

## Methods

IL Teaching Team (ILTT) of the Library has been processing the IL study plans for each study degree: first year students, bachelor degree students, master degree students and doctorate students. The framework created by the Association of College and Research Libraries serves as a basis for the planning process. The six frames consisting of a concept central to information literacy, is a set of knowledge practices, and a set of dispositions.

### IL Threshold Concepts (Six Frames)

Scholarship is a Conversation	Research is Inquiry	Authority is Constructed and Contextual
Format as a Process	Searching as Exploration	Information has Value

The concepts were identified through an ongoing Delphi study being conducted by L. Townsend, A. R. Hofer, S. Lu, and K. Brunetti <sup>40</sup>

The subprojects of the ILTT project are based on the study degrees, each subgroup implementing the IL frames to the IL training program. In order to achieve the learning outcomes in the *Searching as Exploration* –frame of the candidature phase the student has to be able to:

- determine the initial scope of the task required to meet their information needs;
- identify interested parties, such as scholars, organizations, governments, and industries, who might produce information about a topic and then determine how to access that information;
- utilize divergent (e.g., brainstorming) and convergent (e.g., selecting the best source) thinking when searching;
- match information needs and search strategies to appropriate search tools;
- design and refine needs and search strategies as necessary, based on search results;
- understand how information systems (i.e., collections of recorded information) are organized in order to access relevant information;

- use different types of searching language (e.g., controlled vocabulary, keywords, natural language) appropriately;
- manage searching processes and results effectively.

### ***Research as Inquiry***

The student sees the information seeking as a part of scientific investigation and is able to:

- formulate questions for research based on information gaps or on reexamination of existing, possibly conflicting, information;
- determine an appropriate scope of investigation;
- deal with complex research by breaking complex questions into simple ones, limiting the scope of investigations;
- use various research methods, based on need, circumstance, and type of inquiry;
- monitor gathered information and assess for gaps or weaknesses;
- organize information in meaningful ways;
- synthesize ideas gathered from multiple sources;
- draw reasonable conclusions based on the analysis and interpretation of information.
- follow ethical and legal guidelines in gathering and using information;

Here we examine the candidate degree of the curriculum of the veterinary medicine, which includes a lot of elements necessary in the working life, e.g. Evidence Based Veterinary Medicine.

All the above mentioned IL skills are applicable in the working life, too.

### **Results**

In Finland, a member country of the European Union, the basic degree in veterinary medicine is the Licentiate in Veterinary Medicine. This degree requires completion of 360 ECTS (credits) and should take 6 years to complete. The curriculum is tailored to and follows the applicable EU-directives, the national government directives and legislations and the Guidelines set by the Bologna Process.

The objective of the curriculum is that every veterinarian has those Day-1-skills that the legislation requires. In Finland that means that the Faculty has to follow demands from European Union and the Finnish legislation: municipal and private veterinary services are subject to the Act on Veterinary Service and the subsequent Government Decree on Veterinary Service. The Act on practicing veterinary medicine lays down the required qualifications, rights and duties of a veterinary practitioner. According to the Bologna process the complete curriculum comprises a 3 years bachelor study (Bachelor of Veterinary Science) and a 3 years Licentiate study (Master's degree). The curriculum has been designed in farm to fork perspective to help students understand the link between animal and human health. This curriculum results in official certification by the licensing authorities of Finland and provides qualification of an official veterinarian.

HULib is involved in the IL teaching to the veterinary students. The IL program is embedded in the curriculum and the veterinary librarian provides both basic library services and research services to the scientific community of veterinary researchers and teachers.

All that is required in the Big Wheel reform have already been present in the curriculum of the Licentiate in Veterinary Medicine. Working life has been a guiding principle throughout

the six year curriculum; however, the business environment has dramatically changed during the last five years. It remains to be seen how this affects research and teaching in the field of animal health.

## **Discussion**

Library is involved in other aspects of this reform as well e.g. open science, helping teachers in choosing electronic study material etc. Of course libraries also continue to be important study environments for students; all the information literacy material will be collected into one place online. Library and student services develop together new digital learning environments, e.g. DOO:

The goal of the Digital Teaching and Learning Environment (DOO) project is to create a user-friendly, modern IT system which will form the primary environment for all University students and teaching staff. The project is being carried out according to the University of Helsinki's enterprise architecture, teaching philosophy and strategic objectives. The services will be piloted and taken into use during the year 2016.

Moreover, during the spring 2016, the University is preparing to reform its operational structure. The new structure will be adopted in the beginning of 2018. This structural reform is linked to the Big Wheel educational reform and the establishment of the University Services organisation, and it remains to be seen how the changes will affect the resourcing of teaching as well as the IL teaching.

## **Conclusions**

The future veterinarians on their first working day will have the skills that ensure their professional success, which results in better quality in animal health care.

In order to make all these changes happen the University needs an academic library with actively used collections, inspiring study premises and highly qualified librarians. IL teachers help the new wheels run smoothly. The possibility to continuing education or the library staff is essential in succeeding in implementing these plans.

Big Wheel is a big deal to the whole academic community. All we need is love, literature and life-long education.

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