
UNIVERSITY OF HELSINKI OPENS ITS RESEARCH VAULTS: a few words on Open Access and the new research environment in Finland

Marjut Salokannel

Open Access Self-Archiving Mandate at the University of Helsinki

In May 2008 the Rector of the University of Helsinki made the historic decision to make available to the general public across the world all research results funded by the University. This so called open access self-archiving mandate means that the University will institute, for its research and teaching personnel, an obligation to submit their research publications to the University's open publication repository. The mandate does not apply to monographs but does include, in addition to journal articles, also individual chapters written by researchers and published in books.¹ In addition to the material for which the deposit is mandatory also other kinds of publications such as popular articles, other published texts, serial publications of University departments, teaching material and as well as monographs may be stored in the University open repository.²

In its decision the Rector emphasizes the effects of making the research results of the University openly accessible to the rest of the world. Open access to the results of publicly funded research enhances the visibility and the impact of the work of the University and individual researchers. The fact that the research is made available by University's own openly accessible research archive also increases the visibility, use and impact of the research performed at the University. This also means that the on-line availability of University's repository and publication records makes it possible to link them with other repositories at the international level. This, for its turn, should also enhance cross-border and transdisciplinary research collaborations.

The University press release relating to the decision states that the purpose of the decision is, in addition to supporting open access to research results and making results of publicly funded research openly accessible

online to anyone interested, also to encourage other funding bodies to require that the results of the research they have funded should be made publicly available.³ Publication in high quality open access journals is something that the Academy of Finland, which is the biggest public funding body of academic research in Finland, already recommends for all research publications which have been written with the Academy funding. It has not yet, however, taken the step further, *to require* open availability of research publications which have been produced by its funding.

With its decision the University, for its part, is transforming the static archiving and publication culture into a new, open and dynamic one. Archives are no long static preservation facilities but dynamic facilitators of research. When publications, underlying research data and archives are all interlinked, the research cycle is accelerated, which saves both time and money.

Open Access at the international level

The trend at the international level also seems to point towards requiring that the results of publicly funded research should be made openly available. Many of the biggest funding bodies already require that the results of the research they have funded must be made publicly available. These funding bodies include, *i.a.*, the National Institutes of Health in the US, the Wellcome Trust and the Research Councils in the United Kingdom.

The European Research Council also requires that all peer-reviewed publications from ERC-funded research projects be deposited on publication into an appropriate research repository where available, such as PubMed Central, ArXiv or an institutional repository, and subsequently made Open Access within 6 months of publication. Moreover, the ERC considers that primary data are deposited to the relevant databases as soon as possible, preferably immediately after publication and in any case not later than 6 months after the date of publication.⁴ The OECD⁵, the EU

¹ A research article is defined as a single article published in an academic journal, serial publication, conference publication or another kind of compilation.

http://www.helsinki.fi/ejulkaiseminen/rinnakkaistallennus/pdf-tiedostot/126_08.pdf

³ http://www.helsinki.fi/ejulkaiseminen/rinnakkaistallennus/pdf-tiedostot/pressrelease260508_eng.pdf

⁴ ERC Scientific Guidelines for Open Access, 17 December 2007,

Council of Ministers⁶ and the EU Commission⁷ as well as the European University Association have all recommended that the results of publicly funded research should be made publicly available. In August 2008 the EU Commission started an open access pilot project in seven areas within the framework of the 7th Research Framework Programme.⁸

The formal basis of the open access self-archiving mandate

Unlike at the Harvard faculty of Arts and Sciences this open access mandate institutes the mandate upon the researchers by the University administration. At Harvard it was the faculty itself that decided upon the mandate⁹, whereas at the University of Helsinki the research personnel has to abide to it under the condition that their respective departments may not otherwise receive the funding which is made subject to the number of publications produced by each faculty member. The open access self-archiving mandate applies to all faculties at the University. In some, like e.g. physics, it has been the standard way of publishing already for years whereas in others, like humanities or law, it is only slowly emerging.

The mandate will enter into force on 1st January 2010. During the transition period the Rector strongly recommends that researchers would already deposit their articles in the University open repository but this will be obligatory only with regard to articles approved for publication from 1st January 2010 onwards. Before that period the library personnel of the University is committed to educate the researchers with regard to the details of and procedures involved in the deposit mandate. Detailed instructions in relation to depositing publications to the repository are given in

http://erc.europa.eu/pdf/ScC_Guidelines_Open_Access_revised_Dec07_FINAL.pdf, accessed September 15, 2008.

⁵ OECD Principles and Guidelines for Access to Research Data from Public Funding

⁶ Council Conclusions on scientific information in the digital age: access, dissemination and preservation, November 2007.

⁷ Commission Communication (COM(56)2007) on 'scientific information in the digital age: access, dissemination and preservation'.

⁸ Under the pilot project grant recipients in seven areas are required to deposit peer review research articles or final manuscripts into an online repository and make their best efforts to ensure open access to these articles within either six (health, energy, environment, parts of information and communication technologies, research infrastructures) or twelve months (social sciences and humanities, science in society) after publication.

⁹ See the agenda of the Harvard faculty meeting at http://www.fas.harvard.edu/~secfas/February_2008_Agenda.pdf

the library web-pages.¹⁰

Publication agreements

The most complicated part with regard to the implementation of the self-archiving mandate will, at least in the beginning, probably be the relations with the publishers. The publishers will have to be informed about the decision of the University and also to adapt it into their publication agreements. The University has taken it upon itself to inform the Finnish publishing community of the new deposit mandate. According to the Rector's decision the research personnel should, in their publication agreements, retain the right to deposit their articles in the open repository of the University. Should there arise problems with the publishers in this respect, the University will offer assistance in negotiations. The decision permits a moratorium imposed by the publisher in relation to the original publishing.

Other connected projects at the University of Helsinki: access to research data

In addition to ensuring that the results of publicly funded research are openly available it is also essential for the efficient functioning of the open research environment that also the underlying research data is openly accessible. Public availability of primary research data and other research materials is of utmost importance as a guarantee of the integrity of research in making it possible to verify the research results.

New technologies have also brought up new areas of research which rely upon data mining and analyzing and connecting of data from different resources, such as bioinformatics or computational linguistics. The availability of health related data (such as influenza virus strains), oceanographic and seismological data are of vital importance for researchers in order to fight against human and natural disasters. The tsunami early warning system is dependent of seismological and oceanographic data. Hurricane predictions depend on meteorological and oceanographic data. The prevention of a human influenza pandemic is dependent on the availability of the H5N1 virus strains from infected people. The prevention of human catastrophes is intrinsically dependent on the availability of the basic scientific data for the pooled resources for all scientists working together and sharing information at the global level.

Currently large amounts of research data lie under-utilized and research funding can be regarded as wasted in this respect. For example, in genomics the major funding bodies, such as the NIH and the Wellcome Trust, already today demand the deposit of

¹⁰ www.helsinki.fi/ejulkaiseminen/rinnakkaisallennus.

research data in a public data bank (e.g. GenBank) as a condition for funding. The fact that Finnish researchers have not been able to participate in international research projects funded by such funding bodies, is a major concern and being recognized by the University of Helsinki. Concurrently with instituting the open access publication mandate the Rector also appointed a working group whose task is to analyze how and to what extent could the research data collected in all the faculties of the University be made accessible to researchers and the general public.¹¹

The clouds hanging over the open research environment

While information technologies and in particular the internet has made production and distribution of and access to information immensely easier than before and thus undoubtedly contributed to the advancement of science and emergence of new fields of scientific research, this scenario is not without its shadows. There still exists some potential obstacles to the realization of fully open research environment. The most pressing one is constituted by lurking copyright issues, in particular clearing of database rights and solving dilemmas created by instituting strict paracopyright type of protection for technical protection systems and rights management information.

For example, in Finland there exists no statutory exemption in the copyright law which would allow the use of copyrighted works for research and educational purposes. Moreover, the law prohibits even private digital copying if the original source of copying, that is the work copied is, e.g., uploaded onto the internet against the permission of the right holder or if the technical protection measures or digital rights management information has been removed without the permission of the right holder. It comes without saying that for an individual researcher – or a citizen – it is impossible to know under what circumstances a given work has been uploaded onto the internet. Consequently, in the absence of a *creative commons license* or equivalent permission to copy the work, a researcher may be potentially infringing the rights of the right holder and subject to paying damages under the Copyright Act.

It is clear that such state of affairs is not conducive to a

rich and productive research environment.

Institutional actors such as the University and research funding bodies can do what they can in order to make such research that is undertaken through their funding publicly accessible. But in order to be able to reap the full benefits of the possibilities of open science, the society should take responsibility for creating clear statutory framework for accessing data and research results, at least when created with public funding. What is needed is to have clear statutory basis for accessing research data and publications, at the very minimum for research purposes or private study, so that researchers could sleep their nights peacefully even when using materials available on the internet without an explicit license.

The new research environment and the relevance of the open access self-archiving mandate

The increasing adoption of open data and publication policies by the academic communities can be seen as part of the transformation of the society into one lead by open innovation infrastructure and policies. So far this transformation is not prevalent in the Finnish government policies but can be seen as emerging in the private sector, in particular in the IT-industries. With its adoption of open publication policy and with its work towards open data policy the University of Helsinki has risen up to the vanguard of the Finnish society in promoting open information policies. With its vast research materials the University donates an immeasurably valuable input into the Finnish society. This will increase the national information reserves and thus raise the international competitiveness of the Finnish economy.

Open publication policy of the University will increase the scientific and social impact of its research at the global level. It will also enable and facilitate interdisciplinary research and inter-country research activities, and thus produce new research which otherwise would not have been born. The fact that the research is available at the global level has added importance for researchers in developing countries which otherwise may not have had any access to this material. By adopting the open publication policy the University of Helsinki is showing the way to the rest of the academic community, both nationally and across borders.

Marjut Salokannel LL.D. Docent Helsinki Collegium for Advanced Studies has a long experience in working and conducting research in various areas of IPR law, in particular copyrights and patents. Her latest work has focused upon public policy issues in IPR's, in particular in scientific research and public health. She is currently working as IPR expert in the EU funded CLARIN infrastructure project. She is also appointed by the Rector of the University of Helsinki as the chairperson of the working group analyzing how access to research data could be organized at the University of Helsinki.

¹¹ Decision of the Rector 6 June 2008, no. 37/2008.