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CARROT OR STICK, INCENTIVES OR MANDATES, OR BOTH

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Introduction

The interest for Open Access has developed quickly within the last couple of years. In June 2010, Oslo University College (OUC) was one of the last Higher Education (HE) institutions to get an institutional repository. Mid-June 2010 the Open Digital Archive at Oslo University College, ODA, went public.
This article will look at the key events that resulted in ODA. Furthermore I will present the incentive scheme implemented at OUC.

Timeline

2005
In my email archive, I found the first reference to "open access" and "free access to research articles" dating back to June 2005. It was at that time Nora opened.

2007
A committee was appointed at the end of 2007 to recommend whether the OUC should have an institutional repository (IR), what content this archive should contain and which system should be selected. It has been very important that the work around the IR was NOT to be an employment measure in the Learning Centre, but at all times related to the OUC's strategy and policy around the dissemination of research. Therefore, the committee was composed of academic staff from several departments and the widespread support in management has been necessary to employ interest in ODA and for the information to the whole institution about open access.

2008
The establishing of an IR was adopted in the Board Proposal 44/2008.
The Learning Center of OUC immediately took action and hired an IT-librarian with the responsibility to build, operate, develop and maintain the repository.

2009
The first OA-Policy:
All peer-reviewed journal articles written by staff at OUC should be made available in ODA as quickly as possible after publication, provided that the journal's publisher allow self-archiving of the scientific work. (R & D committee proposal 19/2009)

2010
The Incentive scheme at OUC was adopted: Published journal articles that are added to the IR are given full benefit of the publication points in OUC's internal model for allocation of research incentives. While scientific articles not added in the IR only receive half the publishing points and loses the equivalent in monetary value that otherwise would have been budgeted to the faculty or department (Board Proposal 3 / 2010). The incentive scheme applies from 01.01.2010.

ODA opened in mid-June 2010.

2011
In August OUC merged with Akershus University College to become Oslo and Akershus University College of Applied Sciences (HiOA).
In September HiOA decided on a new open access policy.

Incentive scheme

The incentive scheme is based on The Norwegian documentation system for research funding (NVI). NVI is designed to facilitate a performance-based distribution of research funding to the institutions based on their academic publishing activity. Academic publishing serve as the basis for the research component of the budgets for universities and university colleges. Publishing-data will be reported at the departmental level and will form the basis for calculating publication points at the institutional level based on the quality level, publication type and weighted publication figures. (Read more about the Norwegian documentation system for research funding: http://dbh.nsd.uib.no/rapportering/publisering.action)

OUC reported in 2010 315.8 publishing points to the Database for Statistics on Higher Education (DBH) to be included in the Ministry's basis for setting the research component of the budgets. 50.8% of the publishing points were related to scientific articles. This amounts to 160.4 publishing points. The distribution of research incentives are based on the results of two years before. This means that the results from 2010 are the basis for the budget allocation in 2012.

The value of each publication point for the 2012 budget is NOK 33875. Academic articles are valued at

NOK 5,434,000. This represents a negligible amount of the university college's total budget.

At the Oslo University College, where faculty and Research Centers earn a certain number of publication points that trigger internal research funds each time they publish an article, the board decided that the scientific articles that are not deposited in the IR receive only half of the monetary value of the obtained publication points.There will be no subtraction when the publisher prohibits deposit.
When journals do not allow parallel publishing in an institutional repository the articles will be archived in a closed repository. The Learning Centre is managing the copyright clearance process.
Of the 219 articles published in 2010, 209 articles were self-archived in full text in Cristin, i.e. more than 95 percent. Of the 10 missing articles, 6 of them had good reasons: the co-author did not allow self-archiving, lack of access to the PDF-file, or that the employees had quit during the year, etc.

For the last four articles, we have not managed to get the author to deposit their articles.
Of the 209 articles, 120 articles are published in ODA.
OUC incentive scheme requires researchers to upload full-text versions of their articles in the research documentation system Cristin.

The incentive scheme at OUC has been widely accepted.

Amount of scientific content in the other Norwegian repositories
We have no empirical data to lean on when it comes to whether scientists would have self-archived their articles to the same extent without the incentive scheme. But when we look at figures from other higher education institutions in Norway, we think that the scheme has had an influence.

Of the total content in ODA 282 of 657 documents are peer-reviewed.
The most popular thesis was downloaded 634 times (http://hdl.handle.net/10642/270).
The most popular journal article/book chapter was downloaded 762 times (http://hdl.handle.net/10642/606).
It is interesting to note that more and more higher education institutions have mandates related to the disposal of articles in the IR. But this alone does not seem to affect the self-archiving of documents.

Success factors
Some of the success factors related to the good results might be:

- The Learning Centre- Digital Services has worked extensively with information aimed at researchers, creating web sites, visits to all departments, and have otherwise been available for guidance.

- It is important to us that the workflow is as simple as possible for all. As the scientists register the scientific activity they self-archive their post-print or the publisher's PDF of their scientific paper. Thus, there are no additional administrative procedures for the researchers to self-archive the documents.

- Digital Services has overall system responsibility for both Cristin and the IR ODA, and can provide technical solutions between the systems. This makes it possible to work closely together in terms of solutions, workflow, etc.

- Copyright management is handled by the Learning Centre.

Institutions	Opened	Total number of journal articles, NORA	Journal articles, 2010, DBH
NTNU (DiVA)	2000?	99* journal articles	2234
University of Oslo (DUO)	2002	202 journal articles	3639
University of Bergen (BORA)	2004	645 journal articles	2059
University of Tromsø (Munin)	2006	446 journal articles	1059
University of Agder (AURA)	April 2009	143 journal articles	285
Oslo University College (ODA)	June 2010	231** journal articles	199*

Journal articles in the Norwegian institutional repositories (12.10.2011):
**It does not seem to be a correlation between the contents of the DIVA and the contents of NORA.*
***ODA welcomes all peer-reviewed articles. Number of peer-reviewed articles for 2010 was 219, while the number of scientific articles reported to DBH was 199.*

- OUC researchers who self-archive two versions of their articles in Cristin. When the researchers upload both post print and the publisher's PDF they facilitate the work of copyright management significantly.

- The workflow of research registration in Cristin. At OUC each faculty has a Cristin superuser who is part of the R&D coordination and administration who work closely with scientists and help them to self-archive.

- Internal decisions and incentive scheme has been essential. Open Access work has had strong support from management at OUC, and the R & D Department.

- We've also been very lucky with the timing in relation to guidelines from the government. The Norwegian authorities have in recent years actively advocated for more public access, visibility, and access to research results. They point out that there should be free access to publicly funded research. (Report no. 30 to The Storting (2008-2009) Climate for Research).

Open access policy
In September 2011 HiOA decided on an open access policy. The policy should be considered in the light of the objectives set for the institution.
HiOA aims to ensure that the results of research at the institution shall be made publicly accessible in the institutional repository to ensure a free exchange of opinions about the research.

Journals and working papers published by HiOA should follow the principles of open access to scientific publications.

Students and researchers can choose the publishing channels that provide the most favorable access to the material, either because they have a good policy with regards to permitting self-archiving or because the publishing channel is an Open Access publishing channel.

HiOA's open institutional repository, ODA, will include peer- reviewed or editorially evaluated scientific publications.
In addition to the open access policy the board adopted guidelines for the establishment of OA journals by HiOA. As of today, HiOA publishes 6 OA journals.
Furthermore, the Board adopted guidelines for self-archiving of publications in the institutional repository, ODA:

All peer-reviewed journal articles prepared by researchers at HiOA are to be made available in HiOAs IR, ODA, as soon as possible after publishing, provided that the publisher allows self-archiving and parallel publishing of the scientific work. Everyone must self-archive their scientific journal articles in Cristin. This applies to documents published after January 1st 2010. If the journals do not allow parallel publishing, or where the co-author does not approve of publishing in IR, the documents are stored in a closed repository.
HiOA's main rule is that students and researchers self-archive their documents to be published in ODA.

Quality requirements

ODA contains:

- Peer-reviewed scientific articles registered in Cristin.
- Approved theses by students from HiOA's own master's programs.
- Approved doctoral theses by students from HiOA's own research programs.

The Learning Centre and Library (LSB) is responsible for copyright management issues related to accessibility.

Conclusion
It is emphasized that the growth in the number of openly accessible articles very clearly shows that OUC's incentive scheme works: the requirement of self-archiving in the IR to receive the monetary value of academic publishing.
But I think several things are contributing to the lack of resistance to demands for self-archiving. I think the timing was right: all other HE-institutions had IR in place. Furthermore, we had good ambassadors through involvement of all departments and research administrations, and the workflow was made easy for the researchers. And a lot of information through websites, and meetings with all departments and guidance during the process were provided.
It's equally important that it's the same R & D coordinators who remind researchers to register their research in Cristin who also ensure that they remember self-archiving their articles.
The new policy will probably be relatively easy to implement, since it is a continuation of the policy that has worked one year already. The incentive scheme is not yet adopted by the new board at HiOA. But it is indicated that the scheme will be continued.

There are no financial incentives to encourage publishing in OA journals when this means article processing charges. The R&D Department signals that an institutional fund for paying these charges should be considered established in the 2012 budget.

What will be interesting going forward is whether HiOA manages to get all researchers to self-archive their articles in the future.
Researchers are perhaps motivated to self-archive their articles through a combination of mandates and incentives. At OUC, the scheme is seen as a reverse incentive in that researches not complying will receive less money, but it has created negligible concern and debate and instead has led to self-archiving of articles.

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