

Repositories for Institutional Open Access: Mandated Deposit Policies.

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About two and a half million research articles are published annually in some 24,000 peer-reviewed journals across all disciplines and around the world. Only about 15% of those articles are currently being made Open Access (OA) (freely accessible online) through spontaneous self-archiving efforts by their authors, despite increased awareness of the reported benefits and the growing acceptance of this practice by the publishing industry. Studies comparing citation counts report an advantage of 25%-250% for self-archived articles over non-self-archived articles in the same journal and year in all 12 disciplines tested so far (Lawrence 2001, Hajjem et al 2005). Ninety-four percent of journals already endorse immediate OA self-archiving (69% for the peer-reviewed postprint, 24% for the preprint). With key advantages for scholarly communication and no obvious disincentives for any stakeholders (there is no evidence to date that self-archiving induces subscription cancellations, even in fields that reached 100% OA years ago) it is difficult to explain the lack of apparent progress in “self induced self archiving”, given the enormous increase in the number of repositories across the world.

Attempts to understand the so-called “OA advantage” show that it consists of at least 5 components: Early Advantage (early self-archiving produces both earlier and more citations), Usage Advantage (more downloads for OA articles, correlated with later citations), Competitive Advantage (relative citation advantage of OA over non-OA articles: disappears at 100% OA), Quality Advantage (OA advantage is higher, the higher the quality of the article) and Quality Bias (authors selectively self-archiving their higher quality articles – a non-causal component: disappears at 100% OA).

The limited motivational effectiveness of the “OA advantage” has led to the adoption by some authorities of mandated self-archiving policies (as listed in ROARMAP, <http://www.eprints.org/openaccess/policysignup/>). Studies are currently underway comparing the OA advantage for mandated and spontaneous (self-selected) self-archiving, to estimate the relative size of any non-causal component. Outcome studies comparing deposit rates for annual research output in Institutional Repositories (IRs) report that the deposit rate remains at the spontaneous 15% baseline if unmandated, whereas IRs with self-archiving mandates climb toward 100% OA within a year or two (Sale 2006), confirming multinational, multidisciplinary author surveys that predicted 95% compliance (Swan 2006).

Hence institutions (and funders) wishing to take a pragmatic approach to filling their IRs with Open Access materials need to seriously consider mandating the practice of self-archiving. In the United Kingdom, four of the eight research funding councils (as well as the Wellcome Trust) have already taken such a path; a self-archiving mandate recommendation is being considered by the European Commission. US University Provosts have likewise recognized the potential benefits of OA to research, endorsing the proposed US federal FRPAA self-archiving mandate in large numbers. But there is no reason for universities to wait for the passage of legislation to mandate self-archiving.

Five universities and two research institutions (including CERN) have already done so, with documented success. An Immediate-Deposit/Optional-Access Mandate covers all cases and moots all legal issues: metadata are immediately visible webwide and, where needed, access to the postprint can be set as Closed Access instead of OA throughout any embargo period. Software to support this approach (that allows the author to email individual copies of non-Open Access papers to individual requesters) has been created for both EPrints and DSpace repository platforms.

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