### Institutional Repository Success Is Dependent Upon Mandates

**Institutional Repositories: The Great Debate**

#### Affirmative Argument

**Steve Harnad**  
School of Electronics and Computer Science, University of Southampton  
Email: harnad<at>ecs.soton.ac.uk

The institutional repository (IR) movement is an outgrowth of two movements that preceded it:

1. Open Archives Initiative (OAI) [1], which designed the OAI Protocol for Metadata Harvesting in order to make all (what eventually came to be called) institutional repositories interoperable – so their distributed local contents could be treated as if they were all in one global repository.

2. Open Access (OA) [2] movement, which defined the primary target contents of IRs within academic institutions (refereed research journal articles) and the fundamental reason for depositing them (to make research freely accessible to all would-be users online so as to maximize research uptake, usage and impact).

There are, of course, many other kinds of things one may wish to deposit in IRs (such as unrefereed drafts, courseware, data, multimedia or software), and there are similar repositories associated with different types of institutions besides those of higher education. However, that said, if IRs

#### Negative Argument

**Nancy McGovern**  
Digital Preservation Officer, ICPSR, University of Michigan  
Email: nancymcg<at>umich.edu

I would like to approach this problem by first re-stating it. If we deconstruct the assertion in the topic, it has three components: success, dependent and mandates. How might these three concepts be defined in this context?

Although the term institutional repository itself is a concept to consider in the topic statement, this response accepts the view that the scope of an institutional repository varies by organization and is whatever the organization determines it to be [14].

**What does success mean for an institutional repository?** Defining success – or success metrics – is a precursor to measuring success. Indicators of success for an institutional repository might include the following:

- **Submissions**
  - Number of submissions – a high number of submissions (i.e., digital content that is contributed to the institutional repository by its creator or producer)
  - Frequency of submissions – the occurrence of submissions is continuous over time and/or there are increasing submissions from recurring producers
  - Type of submitter – broad representation of constituents (e.g., this might mean that faculty at all levels – staff, graduate students and undergraduate students – in most or all departments submit content)
  - Participation of key stakeholders – for example, submissions by senior faculty or documentable support from institutional or other funders of the institutional repository
in higher education are to be successful in what was and still ought to be their main raison d’être, then they need to capture their target contents: their own institutional refereed research journal article output. The measure of that success is accordingly the proportion of their faculty’s annual journal article output being deposited in the IR.

The global baseline value for this deposit rate is about 15% according to various estimates, such as Bjork et al (2008) [3]. Institutional repositories within higher education can only be counted as successes if they are ingesting a significantly higher percentage of their institution’s scholarly output, approaching 100%, rather than languishing at the global baseline.

Thanks to large international, pan-disciplinary surveys conducted by Alma Swan and her associates [4], we know that academic authors are favorable to open access, but most will not self-archive until and unless their institutions and/or their funders mandate that they do so. If it is indeed mandated, however, 95% of authors report that they will comply – over 80% of them saying they will do so willingly.

Does actual behavior conform to the self-predictions in these surveys? Although their number is growing rapidly, IRs are indeed nearly empty, languishing at or below the 15% rate for OA’s primary target content: refereed journal articles. There are exceptions, however, namely, the IRs of those institutions that have adopted a deposit mandate (currently about 30 institutions [5]).

Arthur Sale [6] compared the deposit rates of three comparable Australian universities, (a) one with only an IR, (b) one with an IR plus encouragement and help in depositing, provided by library staff and (c) one with an IR, encouragement/help plus a self-archiving mandate. Their

What does dependent mean in this topic statement? Dependent suggests that the success of the institutional repository relies upon – solely or in large part – or requires mandates. The statement does not explicitly state, but does imply, that the success of an institutional repository is solely dependent on mandates. Therefore, another way of say this would be that mandates provide the only means for achieving a successful institutional repository.

What do mandates refer to in this context? A mandate refers to the authority or the obligation to do something. An institutional repository might be the authorized or designated repository for all digital content produced by or for the institution. Creators of content that fall within the scope of the institution’s responsibility (however that is defined) might be obligated to deposit content they create or produce in the institutional repository. The latter is more likely to affect the success of the institutional repository, although the designation of an institutional repository should imply the commitment of resources to maintain it.
There are different types of mandates that might have an impact on an institutional repository: a deposit mandate, as discussed in the preceding paragraph; a preservation mandate that might require an organization to provide ongoing access over time to content deposited in an institutional repository, for example; or a confidentiality mandate, requiring an organization to adhere to a range of access control requirements regarding digital content for which it is responsible. For many institutional repositories, there may be the expectation that the content will be preserved without explicit commitment by the institution to do so.

Restating the Topic Statement

Having examined these core concepts in the original statement, we can restate it for consideration in this context:

The obligation for content creators, especially within a sponsoring organization, to deposit content is the prerequisite for the establishment of a well-populated and widely-used institutional repository.

With this understanding of the statement, there are several aspects to discuss, especially regarding the concept of mandates.

Case against the Topic Statement

Preference for carrots. Studies are beginning to show that other factors – for example, incentives, peer pressure, positive outcomes (e.g., increased citations for the content) – may contribute more to success than the stick (mandates). See, for example, the results of a study that looked at carrots (such as value-added services for users, promotional plans or financial incentives) and sticks for institutional repositories [15].

Implications of mandates. Mandates may be difficult and potentially costly to promulgate and enforce. In practice, staff and other resources might have to be used to ensure that the mandate is enforced. Determining the content that should be submitted to an institutional repository may itself be a challenging task. Accomplishing this task may include determining who is affected by the mandate based on the nature and terms of their affiliation with the institution, then determining what content they produce falls within the scope of the mandate.

There may be challenges in determining that the whole of the scope of expected content has been submitted depending on the type of persistent identifiers used, if these devices are in place for all of the relevant content types.
Resistence to mandates. Some content creators may not accept the mandate – that is, may not believe the institution has the authority to require that their content be deposited. Based on responses from repository managers who have attended the Digital Preservation Management workshops, for example, some organizations intentionally do not call their implementation an institutional repository to avoid the problem of defining what the “institutional” portion of the term institutional repository includes.

Unfunded mandates. Mandates can be difficult to sustain in the absence of dedicated funding from the institution for which it is implemented. The institution effectively commits to the idea rather than the reality of having the repository. A lack of funding may make it difficult to justify continuing to maintain an institutional repository, especially in difficult financial times.

Competing mandates. In addition, if depositors are allowed to deposit content that does not have a known, feasible or affordable preservation strategy (for example, new types of or complex forms of digital content) and there is an expectation that content will be accessible to depositors and other users over time, this practice could challenge the ultimate success of the institutional repository. Preservation issues regarding institutional repositories are further considered in a forthcoming article [16] in a special issue on institutional repositories.

Re-stating the Topic Statement Again

Considering these factors, the original statement might be again restated:

Success for an institutional repository should be explicitly defined (qualified or quantified) to reflect its organizational context; then appropriate incentives should be determined to achieve what should be the inherent mandate of institutional repositories: to capture (and preserve) designated content to optimize the value and impact of an organization’s digital assets (designated digital content) over time.

Mandates alone – or possibly at all – are not the determining factor in the success of institutional repositories.
Resources Mentioned in the Topic 4 Debate


