Costs, Fiscal Feasibility, Benefits & Drawbacks

Public Act 098-0295 requires information on the “costs of maintaining and, where applicable, creating institutional repositories” and “the fiscal feasibility and benefits and drawbacks to researchers of institutional support for Gold open access fees (where publication costs are covered by author fees rather than by subscription or advertising fees).” This report covers both of those sections of the law.

A survey of Gold open access costs for articles published by WIU Faculty was developed based on publications for 2012 listed in the WIU Author’s Database (see Appendix I). Journal titles for articles published in 2012 were searched in Ulrich’s Periodicals Directory to identify their publisher. The website for each journal was then examined to determine whether the journal charged open access fees, page fees or other fees and whether authors could archive pre- or post-prints. The costs of all possible fees were noted. For articles published by WIU Authors in 2012, Gold open access would have cost somewhere between $219,955.00 and $222,470.00.

Public Act 98-0295 requires that “published research articles . . . be made as widely available as possible.” This can be done through various means. Faculty can post their articles on their own web sites, upload articles into sites like academia.edu or ResearchGate or into subject repositories such as RePEC (Research Papers in Economics) and arXiv (a physics repository). At least one publisher has issued take down notices to academia.edu, so it might not be an acceptable alternative. Since the law specifically mentions institutional repositories, it is assumed that these repository alternatives will not meet the requirements of the law.

According to an article on the costs of Institutional Repositories (1), the expenses associated with institutional repositories cannot be determined. The author does, however, list items that involve costs. They include:

- Technical personnel – to develop, run, maintain and customize the repository (full time initially, but part time after it is established).
- Librarian(s) – to educate people at the institution about the repository, recruit participation and other duties (copyright management). This could require at least 25 – 35% of a person’s time. Some of this work might also be done through the Libraries’ liaison program, but will require additional time (i.e. Academic Credit Equivalent or ACES) for liaison duties.
- Clerical Staff – needed to ensure that information is input correctly (title, authors, abstract, subject terms, etc.) and/or mediate submission.
- Equipment – development server, web server, storage, a relational database and a back-up system.
- Software – many repositories run on open source software such as DSpace, although other options are available.

Although not mentioned in this article, since the law requires that articles be placed in a repository, personnel would be needed to oversee compliance.
Some of the technical and software costs could be outsourced to repository hosting corporations, such as Berkeley Electronic Press (bepress), which provides the Digital Commons software system used at several Illinois institutions (ISU, EIU, SIUC). They charge a fee based on institutional Full-Time Equivalent. Technical personnel would still be required to work with bepress on design and implementation. Personnel costs for non-technical (Librarian), clerical, and administrative (compliance officer) would remain the same.

The following table from Burns, Lana and Budd (2) provides approximate costs of a repository:

<table>
<thead>
<tr>
<th>Costs</th>
<th>n</th>
<th>Min (dollars)</th>
<th>Mdn (dollars)</th>
<th>M (dollars)</th>
<th>Max (dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation</td>
<td>17</td>
<td>$1,200</td>
<td>$25,000</td>
<td>$52,100</td>
<td>$300,000</td>
</tr>
<tr>
<td>Annual</td>
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<td>$500</td>
<td>$31,500</td>
<td>$77,300</td>
<td>$275,000</td>
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<tr>
<td>Personnel, Annual</td>
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<td>$100</td>
<td>$70,000</td>
<td>$86,186</td>
<td>$235,200</td>
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<td>Software, Annual</td>
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<td>$2,500</td>
<td>$23,000</td>
<td>$22,350</td>
<td>$40,000</td>
</tr>
<tr>
<td>Hardware, Annual</td>
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<td>$500</td>
<td>$5,500</td>
<td>$13,250</td>
<td>$50,000</td>
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<tr>
<td>Total</td>
<td></td>
<td>$4,300</td>
<td>$149,500</td>
<td>$237,936</td>
<td>$850,200</td>
</tr>
</tbody>
</table>

**Fiscal Feasibility, Benefits & Drawbacks**

Open access to research would benefit the people of Illinois and researchers all over the World. SPARC outlines the benefits of Open Access in a document on their website (3). Open access to research increases the visibility of and ability to find and use research and contributes to the University’s value of Social Responsibility: “to serve as a resource for economic, educational, cultural, environmental, and community development” (4). Support for Gold open access and establishing and maintaining a repository will both cost more than $200,000. It is clear that a source of funding for a repository will be needed.


