Open Access Institutional Repository: 
Maximizing Future Returns on Investment

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ABSTRACT
The Open Access Institutional Repository (OAIR) supports scholarship and research. To Maximize the OAIR’s future return on investment, the following items should be considered; how to handle copyright, the value of an Open Access Publication Policy, how to implement OA journal publication, and the relationship between Open Access Resources and Open Education Resources.

Keywords: open access institutional repositories, open access, OA, open education resources, OER

1 INTRODUCTION
The Open Access Institutional Repository (OAIR) supports scholarship and research. The greatest bottlenecks that restrain the growth of the IR and possible solutions will be the focus of this presentation. Approximately 75% of Marshall’s faculty are not participating in Marshall Digital Scholar and handling copyright clearance activities on behalf of the 25% who do participate is time consuming. In about a third of all cases where the final peer-reviewed manuscript submission is the only version permitted by the publisher to be posted in the OAIR, faculty have not retained, or cannot find the manuscript. The adoption of an Open Access Publication Policy would require 100% faculty participation and would eliminate the need to obtain permissions and pre-published manuscripts from faculty.

The IR also functions as a platform on which to publish journals. Marshall currently publishes four journals through Marshall Digital Scholar (MDS): Euscorpius, Marshall Journal of Medicine, Sermon Studies, and the Journal of Applied Digital Evidence.

The Open Access Repository has also been identified as an excellent resource for the inclusion of Open Education Resources. There are similarities and differences between OA and OER. These will be identified along with a possible way forward to support and further OER creation through the IR.

In 2003, Clifford Lynch offered this definition of an OAIR,
"... a university-based institutional repository is a set of services that a university offers to the members of its community for the management and dissemination of digital materials created by the institution and its community members. It is most essentially an organizational commitment to the stewardship of these digital materials, including long-term preservation where appropriate, as well as organization and access or distribution."

**Historical background**

The current OAIR revolution could not happen without the growth of technology. Regardless where historians peg its beginning, the digital age, also called the information age, was in full-swing in the 1970’s. Aspects of this revolution that have strongly impacted the academic library include the 1970s, which gave us Project Gutenberg and the Online Public Access Catalog (OPAC) via a local area network (LAN). The 1980’s saw development of Integrated Library Systems, desktop publishing and the Internet. The 1990’s brought the Modern Internet, OPACs connected to the Internet, the World Wide Web, the commercialization of the Internet through sites such as Google and Amazon, online databases, and the Digital Millennium Copyright Act (DCMA). The new millennium gave birth to the modern institutional repository with D-Space and Digital Commons. The past decade has seen explosive growth in cloud computing. These technologies have combined to allow libraries to make scholarly research that is produced locally freely available to the world via the Internet.

**2 RESULTS**

Since its inception seven years ago, MDS currently holds over 12,000 items. 20% of the collection consists of scholarly writing and research and represents 30% of full-text downloads, the total of which currently stands at 1,777,630. Before these published items can be uploaded to the IR, faculty must make a request to have their publications uploaded, the copyright holders (usually the publishers) must grant permissions to load either the published version or a pre-published version of the items, the proper manuscript version must be procured and all permissions must be placed on file to document compliance with copyright law. A spreadsheet is used to track the entire process.

Efforts to market MDS to the faculty of Marshall University are ongoing. A faculty participation rate of 25% has been reached and appears to be holding at this level. The 75% non-participation rate is a huge bottleneck that prevents the full utilization of the IR. Another significant bottleneck occurs even when faculty participation is secured and copyright clearance is obtained. About one-third of the time, faculty do not retain, or cannot locate, copies of their peer-reviewed final manuscript submissions (the final author manuscript submitted to a journal for publication). This is unfortunate because it not only prevents these items from being added to the IR, but because the peer-reviewed final version of an author’s works are usually the only version over which authors retain copyright. It is estimated that the elimination of these two bottlenecks would lead to a six-fold increase in the utilization of MDS.
3 DISCUSSION
Marshall’s experience is not unique, but rather typical. As a response to low faculty participation rates, hundreds of universities have developed Open Access Publication Policies that require their faculty to submit a copy of their peer-reviewed manuscript to their university’s institutional repository immediately after submitting the very same manuscript to the publisher. The U.S. and U.K. are leading this effort.²

The year 2013 saw an increase in the number of grant-funding organizations that also require OA publication (note the dark-green area of the graph below).³
Marshall University Libraries is advocating an OA Publication Policy for Marshall University. There are two primary interpretations of what constitutes open access publication. Faculty either have to publish in an OA journal, or they must publish in a subscription based journal that allows the published, or the peer-reviewed final, manuscript submission to be reposted in an open access repository.

Most journals allow the published, or the pre-published, peer-reviewed manuscript to be posted in an OA database, such as MDS, 12 months (embargo periods may differ) after publication. It is our goal that Marshall Digital Scholar make these articles freely available whenever this is permitted.

- The library will determine if OA publication is allowed for every peer-reviewed manuscript submitted to MDS. We will post the published version of an article if this is permitted, followed by the peer-reviewed version if this is all that is permitted. Embracing OA publication will assure that all final manuscript submissions made by our faculty to publishers will also be made to MDS, which will ensure that these manuscripts are available for eventual inclusion in MDS whenever this is allowed by the publishers.
- The faculty of Marshall University will support a Policy of Open Access Publishing.
- An open access policy will encourage faculty members to submit their final peer-reviewed manuscript to a publisher for publication, as well as an identical copy of the peer-reviewed manuscript to the university’s institutional repository (IR) for “tentative” inclusion in MDS.
- Certain journals do not permit any version of an article to be posted in an OA database. The Marshall University Library faculty will continue to provide copyright clearance services to ensure that only permitted articles are posted after the specified embargo period has passed. The library will take care of all other legal and procedural matters.
- This proposal will not extend to previously published articles, but only to future publications. Faculty will continue to be encouraged, but not required, to submit...
conference papers, presentation slides, and posters. Since faculty members often perform research in collaboration with other institutions, only the principal co-author will be required to participate in the upload to MDS.

**Additional ways to maximize use of the IR**

Four OA journals are currently published in MDS. Different strategies led to this happening. It is suggested that the same strategies may lead to additional journal creation.

- Migrate an existing journal to the IR (*Euscorpius*).
- Demonstrate OA publication to interested departments (*Marshall Journal of Medicine*).
- Journals in MDS are free of charge (*Sermon Studies*).
- Help to create and temporarily assist in maintenance of journal (*Journal of Applied Digital Evidence*).
- Word of mouth may convince others to migrate their current publication to the MDS platform (*WV Criminal Justice Educators' Association Journal*): –Pending

The OAIR is also an excellent place to maintain and disseminate Open Education Resources (OER). In addition to offering OA to scholarly material, OER allows users to remix the publication to suit their course requirements and course outlines. Here is an accepted definition of OER.

"OER are teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use and re-purposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge." (The William and Flora Hewlett Foundation)

OER has the potential to save students thousands of dollars toward the cost of earning a degree. It allows faculty to take ownership of the content they use, there is no limit to the amount of copies shared, curriculum and instructional design are customizable, and updates may be made quickly.

The impetus for OER at Marshall is not coming primarily from the library, but through the Student Government Association (SGA), which has presented on this topic before the Faculty Senate. The library is fully supportive of the SGA initiative, offering the IR as the best place to contain OER and marketing existing OER databases to our faculty.

Open Education Resources are free, and users are free to retain, reuse, revise, remix and redistribute the material. One way to determine if an article, textbook, or textbook chapter is OER, is to check whether or not it has a Creative Commons License. If it does, one additional step must be taken to see what type of CC license it has. Two of the six types of CC licenses stipulate *No Derives (ND)*, i.e., no derivative works. Although the *ND* designation allows the work to be copied, reposted online and shared without restriction, it forbids modifications to the work. Such OA resources are not OER because they may not be modified or remixed.
4 CONCLUSION
The Open Access Publication Policy, if adopted, will lead to a significant expansion of content and utilization of Marshall Digital Scholar. The result will be an improvement in Marshall’s “return on investment” in its institutional repository. The realization of the platform’s journal publication potential and the inclusion of Open Education Resources are also important ways to leverage the IR to make Marshall University and its faculty’s research more discoverable and completely accessible to students and researchers world-wide.

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