Institutional Repositories for Public Engagement: Creating a Common Good Model for an Engaged Campus*

ARTICLE

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ABSTRACT

Most higher-education institutions strive to be publicly engaged and community centered. These institutions leverage faculty, researchers, librarians, community liaisons, and communication specialists to meet this mission, but they have largely underutilized the potential of institutional repositories. Academic institutions can use institutional repositories to provide open access and long-term preservation to institutional gray literature, research data, university publications, and campus research products that have tangible, real-world applications for the communities they serve. Using examples from the University of Minnesota, this article demonstrates how making this content discoverable, openly accessible, and preserved for the future through an institutional repository not only increases the value of this publicly-engaged work but also creates a lasting record of a university's public engagement efforts and contributes to the mission of the institution.

KEYWORDS

institutional repositories, public engagement, common good, preservation, academic libraries

Beginning with the Morrill Act of 1862 and again through the Smith-Lever Act in 1914, the US federal government sought to transform American universities into institutions focused on "civic purposes and engagement with the public by implementing initiatives that would enhance their overall direct contributions to America's contemporary society" (Furco 2010, 376)[1]. Throughout the 1990s and 2000s, universities worked at the local and national levels to reaffirm and re-center public engagement as an essential part of the mission of higher education. These initiatives brought public engagement to the highest levels of a university, thereby institutionalizing this work rather than having faculty or campus centers support the public-service mission on an individual or ad hoc basis.

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1 The authors acknowledge that the federal lands provided to educational institutions through the Morrill Act and other land-granting acts of Congress, including to the University of Minnesota, were forcibly acquired through cession from Indigenous people.

Enabling public-engagement work requires strong institutional support. But even with that support the question remains, how does a university present a more holistic picture of its community partnerships and *institutionalize* public engagement into something much more integral and essential to campus (and local) culture? The answer may lie in the recognition, dissemination, and preservation of the outputs of community-based research, not only from individual faculty members but also from publicly engaged students, staff, and campus units. A resource like an institutional repository (IR) affirms a university's commitment to public engagement through its guarantees of open and persistent access. This improved access to the content produced by public-academic partnerships through IRs helps institutionalize public engagement in higher education and provides a conduit between campus units and community partners.

This paper demonstrates the benefits of an institutional repository that aligns with the public-engagement mission of the institution, rather than focusing primarily on the exhibition of individual scholarly works. The academic library does more than simply provide open access to the contents within the repository; it inserts a layer of trust between the university and the community that is based on access to the work in conjunction with the permanency of the resource. By highlighting the trustworthiness of the repository, libraries add to the transparency of the institution, which in turn strengthens community partnerships. The example from the University of Minnesota demonstrates how, with a commitment to the preservation of institutional works beyond faculty scholarship, a publicly engaged repository serves as a common good for both the university and the wider community. The authors build on prior discussions of IRs and engagement by describing this common good model and providing three methods for how the IR can encourage publicly engaged campus offices to contribute community-focused content. As a result, the common good model leverages the services and frameworks of the IR's digital access and preservation to support campus engagement activities in local communities.

Campus Public Engagement

Academic institutions, whether public or private, often share the tripartite missions of teaching, research, and outreach. Andrew Furco (2010) posits that public engagement is not solely a piece of the outreach mission; at an engaged campus, public engagement is a component of each of the three missions:

- Community-engaged *teaching* incorporates educational opportunities that focus on the application of classroom content in community environments.
- Community-engaged *research* seeks out community participation not as the subject of study but to better align research to community needs and to incorporate community expertise.
- Community-engaged *service* and *outreach* provide valuable experiences that yield similar opportunities for reward as professional service.

A key metric of how well an institution meets its mission is how well the output of an engaged campus persists and permeates throughout the community, contributing new knowledge and modeling best practices (Stanton 2007).

Nearly all higher-education institutions have embraced programs, centers, and offices that are publicly engaged and community-centered. These units leverage faculty, researchers, librarians, community liaisons, and communication specialists to create, promote, and disseminate research products that have tangible, real-world applications. For example, the

University of Minnesota's Center for Urban and Regional Affairs (CURA), founded in 1968, connects Minnesota communities, nonprofit organizations, and local businesses to the resources of the University. CURA has long recognized the need to ensure that knowledge created through these partnerships transfers back to local communities; it was one of the first research units on campus to create a website during the mid-1990s in order to publicly disseminate their research results (CURA 2007, 32). Such efforts by university programs like CURA demonstrate that there are "huge numbers of academic units that curate collections of information" and it is not just libraries and archives that are concerned with stewardship (Lynch 2003, 329).

The Role of Academic Libraries in Public Engagement

Any campus unit that supports the university's mission can support an engaged campus; academic libraries are no exception. Granting non-campus communities access to academic library collections is considered by some to be the "earliest and most popular form of community outreach" for academic libraries (Hang Tat Leong, 2013, 223). A 2009 survey exploring the "emergent concept of 'public engagement' at the institutional level," sent to over a hundred US and Canada institutions in the Association of Research Libraries (ARL), found that libraries consider many of their traditional outreach programs that provide community members access to services to be "public engagement" (Walter and Goetsch, 12).

Academic libraries do more than offer community services. The library has the "unique role and potential in supporting community engagement activities" by providing open access to and long-term preservation of institutional outputs, including material which is of benefit to communities outside of academia (Winston, 2013, 89). This is important as scholarly outputs may end up outside the public view and out of the hands of the community that helped generate that knowledge. And, just as lack of recognition for faculty participation is a major impediment for institutionalizing community engagement (Jaeger, Katz Jameson, and Clayton 2012), so too is the unavailability or ephemeral nature of reports provided only to the funding body or community agency (Stanton 2007). It is the latter concern that libraries are uniquely positioned to address with preservation and access.

Online content lacks permanency. Files posted to a website may be replaced or removed without notice, while the web pages themselves may move or be taken down, resulting in broken links that lead to a 404 error page. The text of a web page may change over time to a degree that it ceases to represent the original content. In a study of content drift over time, Jones et al. (2017) found that over 75 percent of the web content referenced by scholarly articles had changed from when they had originally been cited. Similarly, Oguz and Koehler (2016) found evidence of "URL decay" where only two URLs out of set of 360 were still active after approximately twenty years. Documents hosted on university websites might not be migrated to new websites, thus the continuity of access to older online files can be threatened (Bicknese, 2004).

The potential loss of public reports and community-centered publications requires an institutional solution. Miller and Billings (2013) suggest that libraries can find "new ways to document information on community engagement and can assist in the formulation of mechanisms and policies that will allow this work to be more broadly disseminated and more consistently valued (109)." Doing so ensures the continuity of a university's record of public engagement and can reassure community members that the university is committed to preserving the legacy of that work. For example, CURA, referenced earlier, began partnering with the University of Minnesota Libraries in 2007 to

make the results of their work as broadly available as possible by leveraging the institutional repository. In 2015, CURA worked with the University of Minnesota Archives to conduct a full-scale digitization of its entire publication record since 1968. At the project's completion, over 1,600 current and historical publications were added to the institutional repository. While CURA provided access to the content on their website, the institutional repository offered sustainable stewardship and permanency to the online content.

The ARL survey report briefly notes that "other digital library services, such as institutional repositories, may also be integrated into campus engagement efforts" (Walter and Goetsch 2009, 14). They point to the University of Massachusetts Amherst (discussed below) as one example but provide no further guidance as to how IRs might support public engagement, or what factors must be present in a repository to do so.

Seeing IRs as a Common Good

In her discussion connecting digital libraries and the common good, Deanna Marcum (2001) explains that "pursuing the common good involves thinking about how the various parts and their interrelationships can be maintained, developed, and corrected so that the whole community flourishes in a way that enhances the well-being of its various parts" (73). Libraries have a part in this as libraries "are reaching new audiences, becoming publishers themselves in order to distribute materials more widely, and defining what a digital library will be. And, in the process, they must consider how the common good is maintained in a digital environment" (75). Institutional repositories originated out of this common good digital environment and are well suited to house the publications, reports, and related content produced by public-engagement partnerships.

Clifford Lynch (2003) defines an institutional repository as 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" (328). A core belief in the development and design of IRs, both in their services and technology, is that their content is meant to be freely shared so that communities beyond the university may have access (Crow 2002). Novak and Day (2018) note that Lynch "moves the discussion of IRs beyond software to an organizational responsibility to steward an institution's digital assets" (158). For IRs that adopt this model of access and stewardship, the types of material found in the repositories include traditional scholarly works published elsewhere but made available as open-access copies, as well as non-traditional scholarship (also known as gray literature), institutional publications, and research data (Lynch 2003, Bicknese 2004, Miller and Billings 2012, Marsolek et al. 2018).

Margaret Heller and Franny Gaede (2016) reason that institutional repositories that provide "access to people who would otherwise lack it is a crucial role for libraries in sustaining the public sphere" and that "libraries fail to make the argument for why they are a social good if they ignore the altruistic impacts of repositories" (2). This altruistic motive of access, Heller and Gaede argue, "is a critical part of preserving the public sphere"; they stress that "we, as librarians, must build and assess our open-access initiatives with the understanding that they are a vital public and social good" (4). Yet, open access is not the only function of an IR and not the only common good it provides the community. Novak and Day view preservation in addition to access as "paramount services for the IR" and that stewarding material against the risk of digital loss is the main reason to establish an IR (2018, 159). Concurrent with the early development of repository systems, those charged with preventing the

loss of cultural memory through digital archives also approached their work as a public good (CLIR 2002). The preservation of cultural and institutional materials requires a series of actions including appraisal, acquisition, description, and arrangement, all of which are closely aligned with the services of institutional archives and mirrored in the functions of institutional repositories (Bicknese 2004).

Institutional repositories are based on the Open Archival Information System (OAIS) reference model, which provides a framework for a set of tools and services focused on *authenticity* and *trustworthiness* (Bantin 2016). Authenticity is determined by an IR's chain of custody, the processes and policies that oversee changes to or withdrawal of deposited materials. Authenticity ensures the document is what it purports to be. Trustworthiness describes the confidence in the repository. In 2002, the Research Libraries Group (RLG) published its *Attributes and Responsibilities* of a trusted digital repository. The report explains that "institutions responsible for the preservation of nondigital material already tend to enjoy a fairly high level of public trust because libraries have reliably preserved a large amount of the human record over time" (9). The public will trust academic libraries in the management, preservation, and continued access to digital material "so long as they sustain reliable access to information" (9).

A publicly engaged campus is characterized by the "*authenticity* and *genuineness* with which community engagement is integrated into the research, teaching, and service mission of higher education institutions" (Furco 2010, 387). While similar to the terminology that defines trusted repositories, the use of *authenticity* and *genuineness* is specific to public engagement. Authenticity is embodied in the reasoning behind a university's involvement with a community and the weight it places on the subsequent education or research. Genuineness is the result of the equal partnership between university and community members, their equal contribution, and the acknowledgment of the expertise the other brings to the work (387). Furco concludes that "authenticity and genuineness are essential ingredients for securing sustainable and effective campus/community partnerships as well as for building a strong engaged campus" (387).

What *authenticity* and *trustworthiness* in institutional repositories and *authenticity* and *genuineness* in community engagement share are the commitments to transparency and to leveraging the infrastructure of the academic institution for mutually beneficial partnerships and sustainable outcomes. Shortly after the adoption of IRs at several North American universities, Clifford Lynch and Joan Lippincott (2005) observed

> considerable interest in institutional repositories in the context of public, state-supported institutions as a vehicle for public engagement and for communicating the intellectual and artistic contributions of the university to the people of the state; these have clear parallels to the national-level discussions taking place outside the United States about the role of the institutional repository in structuring information flow and communication between universities and the publics that support them (found under "National Policies and Institutional Repositories").

Institutional repositories, while not a catalyst for public engagement, serve the common good by ensuring authenticity and trustworthiness in the management of public scholarship. IRs participate in a reciprocal trust that is vital to public engagement.

Examples of IRs at state-supported institutions demonstrate how some university repositories serve as vehicles for public engagement and provide a space for the engaged campus to fulfill its mission. The first example comes from the University of Massachusetts Amherst, where librarians and outreach

staff created a space in their IR designed to "establish a dedicated institutional archive of university-community partnerships that would allow faculty to build their individual portfolios while creating a greater institutional capacity to demonstrate the scope and value of work with external partners" (Miller and Billings 2012, 117). The implementation team worked with faculty and researchers connected to community-engaged projects in a pilot effort to select materials for inclusion in the repository. The intended outcomes of the project included advancing university goals in public engagement, promoting gray literature through institutional exposure, and incentivizing faculty with reward structures. Content submitted by faculty were assigned one of three categories that reflected elements of the university's mission statement in order to better illuminate the ways "community engagement generates activities and products related to all areas of the institution's mission" (116). A review of the project concluded that "repositories have the potential to make complex information about engagement with community partners more visible, more valued, and more thoroughly understood" (119).

The second example of repository-based engagement focuses on community-generated contributions rather than faculty portfolios of external partnerships. In her article on IRs and community engagement, Amanda Makula (2019) highlights three separate projects that utilized IRs as a means of outreach to local communities. Central Washington University, Boise State University, and the University of San Diego are representative of engaged campuses leveraging their services to incorporate community-created works into the repository, stretching the commonly defined boundaries of IRs. Makula argues that this expansion of an IR's function should find its "purpose not from the library community, but from their parent institution" (para. 8). Makula identifies that purpose in the University of San Diego's strategic plan, which describes the university as an "anchor institution for our local community" (para. 9). The IR is reimagined as "a bridge between the University of San Diego and the outside world" and as a method "to build and nurture institutional-community relationships, foster collaboration, and cultivate goodwill" (para. 12).

What these examples highlight are repositories illustrating relationships between the institutions and the communities they serve and are supported by (Makula 2019). In the Amherst example, the content is primarily faculty-authored works that are included in the repository to raise awareness of an individual's—and, subsequently, the institution's—role in public engagement. In the University of San Diego example, the repository is open to members of the community to deposit their works so as to preserve the cultural history of the community in which the institution resides.

The University of Minnesota presents another method by which academic institutions can fulfill their public-engagement missions through their institutional repositories—a method that has not been explored extensively in the literature. Rather than seeking faculty scholarship or community-created contributions, the repository seeks to permanently capture content produced by university-community partnerships—the studies, reports, plans, newsletters, information sheets, and data sets that are not found in the published academic literature or through a library's catalog. While this content can be found physically in offices, storages spaces, or within the collections of the university archives, it is also prevalent within the digital output that is found at all levels of the institution. The extent of digital information on websites, servers, and personal computers represents the problem of "little archives everywhere" and highlights a preservation concern for those who create and utilize born-digital content as to whether it "will be accessible as time passes and technology changes" (Dunnam et al. 2005, 5). Thus, the preservation function of

institutional repositories serves institutional goals "where the end-user in mind is not the faculty, but the institution" (Novak and Day 2018, 164).

Supporting Public Engagement at the University of Minnesota

The Digital Conservancy, administered by the University of Minnesota Libraries, is an institutional repository program launched in 2007 with a focus on digitally collecting the University's broad institutional output, including administrative and archival material of historical importance; it serves as the "digital arm" of the University Archives. Because of the ongoing work of repository staff and liaison librarians, many publicly engaged units across the University of Minnesota turn to the Digital Conservancy for the necessary infrastructure to house, preserve, and make their research products freely available for the common good. In their roles, repository staff and liaisons promote the repository's potential to content authors and contributors by relating "the benefits of the repository to their constituency groups and serving as a champion and advocate" (Callicott, Scherer, Wesolek 2016, 161).

The inception of the Digital Conservancy began with a 2005 exploratory report that focused on the challenges in collecting and preserving the digital output of the University at all levels of the institution. The report emphasized that it is the University's "public responsibility to store this information for the public good, the public benefit" (Dunnam et al. 2005, 46). The Digital Conservancy maintains a strong focus on the institutional output of the University, well beyond the traditional scholarly content that is generally considered the domain of IRs (Bicknese 2004, 89). With over 80,000 records at the time of this publication, only about 11 percent of the content in the Digital Conservancy represents previously published articles, preprints, and book chapters. Of the ten most common types of content in the repository, only one (articles) would be traditionally considered "scholarly," while the remainder demonstrate the range of works produced or sponsored by the University (Figure 1). These works include administrative documents,
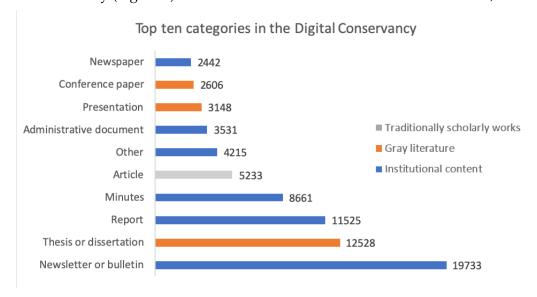

Figure 1: The top ten most frequently assigned categories in the University Digital Conservancy, as of July 2020. The single category that would traditionally be considered "scholarly" is highlighted. The items within these ten categories make up approximately 90 percent of the total content (n = 82,524) in the Conservancy. The type *Other* represents 4,200 items of which nearly 40 percent are part of the University Extension collection and consist of institutional content such as informational booklets, fact sheets, and educational guides.

committee minutes, assessment reports, and informational bulletins, as well as gray literature such as conference papers, presentations, and theses or dissertations (Marsolek et al. 2018).Two of the Conservancy's partnerships exemplify successful connections between publicly engaged campus units: CURA, mentioned above, and the University of Minnesota Extension service. Like CURA, the Extension service connects communities in Minnesota to the resources and research of the University. Both organizations acknowledge the importance of documenting engagement over time to demonstrate how the "collective impact through published accounts of community engagement promotes awareness and generates community support" (Hunzicker 2017, 99). These two units see the Digital Conservancy as a program they can leverage to make their ongoing output immediately and permanently accessible to the communities they serve. Their decision to use the institutional repository, rather than relying on less stable means, communicates the authenticity/trustworthiness of the university and the authenticity/genuineness of the partnership and its sustainability.

The University of Minnesota Extension service was established by state legislation in 1909 to "publish frequent home education bulletins" that "shall be sent free to all persons resident within the state who shall request said bulletins to be sent to them" (Minnesota Revised Laws Supplement 1909). Past and current Extension content is deposited to the Digital Conservancy as a modern method by which Extension can continue to provide its research freely to the public and to expand their reach globally, while also avoiding the potential of loss that occurs when campus websites undergo frequent migrations. The Conservancy further provides access to digitized historical bulletins from Extension that would otherwise be difficult to locate through library catalogs or access physically.

In both the Extension and CURA examples, the ability of the Conservancy to remove their website hosting concerns, and the ease with which they can upload content, proved to be valuable features of the repository. Furthermore, the inclusion of both programs' digitized historical publications demonstrates their long record of publicly engaged research at the University.

Methods to Support Publicly Engaged Campus Units

The University of Minnesota's experience can be applied to other programs looking to expand their institutional repositories to support a publicly engaged campus. These methods include scoping IRs beyond faculty scholarship, supporting distributed deposit, and preserving campus content.

Scoping IRs beyond faculty scholarship

At the 2017 executive roundtable for the Coalition for Networked Information (CNI), participants reaffirmed the purpose of institutional repositories is "to capture all types of content produced by the institutional community, particularly material at the greatest risk of being lost" (CNI 2017, 5). Yet, despite understanding the "wealth of digital and digitized archives from various sources," roundtable participants remained unsure if institutional archives and records should go into the institution's IR or some other platform (4). The focus of the Digital Conservancy's recruitment strategy remains centered on content that documents the university's activities as well as the institution's broad research portfolio. In other words, the publicly available, university-produced reports and community-centered publications that would traditionally go to the University Archives in paper form are core to preserving the record of the university's engagement mission in the IR.

Early in the development of the IR program at the University of Minnesota, University Archives staff made a significant effort to digitize university-produced publications available in the archives and to incorporate them with their more recent, born-digital counterparts in the repository (Moore 2014, 2). Content in the Digital Conservancy dates back to 1851; over thirty thousand records represent content that has been digitized either by the Libraries or campus partners. The effort focused on populating the repository in order to encourage continued submissions by collaborating campus offices, which is based on the experience that a well-populated repository strengthens the incentive for others to contribute content (Devakos, 2006, 175; Moore 2014, 11). This approach was particularly effective for Extension: today it is the third most populated collection in the Conservancy. Shortly after the Conservancy launched in 2007, librarians who worked closely with Extension began to identify, digitize, and upload Extension's historical publications to "extend the reach of this knowledge geographically, removing barriers and boundaries to its discovery and use" (Mastel 2015, 2). Liaisons then worked with Extension staff to encourage self-deposits of recent, born-digital Extension materials; the two methods now work in tandem to continually expand the Extension collection.

Supporting distributed deposit

Ruth Kitchin Tillman points out a common theme regarding faculty self-deposits into institutional repositories: "faculty do not deposit their works in them" (Tillman 2017, 3). To encourage faculty self-deposit, the Amherst initiative relied on an implementation team of librarians and outreach staff to usher faculty through the process. When staff for this pilot was redirected, it became clear that faculty deposits would be "difficult to maintain and impossible to expand without the benefit of dedicated staffing" (Miller and Billings 2012, 117). This example supports Tillman's assessment survey (2017), which concludes that the additional support needed for even willing faculty contributors to self-deposit is an unsustainable effort unlikely to lead to satisfactory self-deposit rates. Rather than funnel IR submissions through individual faculty self-deposit or a small number of repository staff or designees, repository technology can support the distribution of responsibilities, including selecting items for submission and uploading the content (Devakos 2006, 174). This type of self-deposit can be undertaken by campus units through their communications staff, research associates, community specialists, and others who create content—all without requiring repository input or guidance. At the University of Minnesota, we consider this a distributed deposit.

A significant number of repository uploads to the Digital Conservancy come directly from a distributed-deposit model that rewards content contributors with timely dissemination of information. This distributed model empowers the staff of contributing departments, research centers, and administrative offices to contribute content at or near the point of creation. These deposits are not the scholarship of individual faculty; they are the research and technical reports, educational bulletins, newsletters, and annual reports produced by contributing institutional offices. As of July 2020, the Digital Conservancy has approximately three thousand registered campus users contributing almost two hundred items per month. The yearly rate of contributions via distributed deposit is roughly half of all annual deposits to the repository.

Preserving campus content

For campus centers and offices that use their websites as clearinghouses to distribute information, it is not the concept of open access that brings them to the institutional repository—they have been providing public access all along; it is the permanence of the item and persistent access to it. University websites are ephemeral, and the websites of major colleges and departments frequently undergo transitions to new platforms or upgraded versions. Links to reports and other documents may break as the site URL changes; files may not always transition to the new platform. Most approaches to web archives focus on the systematic crawling and wholesale capture of websites. The web-crawling technology that captures these websites can also be used to identify, appraise, and collect web-based content—such as reports, publications, or other files hosted online—that is at risk of loss and suitable for the repository. By moving this content into the IR, individual units like CURA and Extension no longer have to worry about the long-term preservation of the files; they can instead link directly to the persistent URL of their material in the repository. The CNI Roundtable (2017) found that "for institutions that are doing systematic web archiving (either for institutional reasons, such as archiving images of the institutional web space as part of the local archive, or in support of faculty research initiatives) this work is typically siloed away from the IR strategy" (10). Systematic web archiving does not need to remain siloed from the IR strategy. It can, in fact, be a channel for repository growth.

Content preservation also enables the IR to take an active role in file mediation. The IR can offer, for example, Optical Character Recognition (OCR) in older digitized content, which increases the usefulness of these documents to the end-user. The project to digitize and make available CURA's publication library also included evaluating previously digitized or digital publications already available on their website. CURA and archives staff reviewed the digitized surrogates to decide if rescanning would be warranted. Their concern was twofold: the accurate representation of the publication and its reliability in the hands of the user—in other words, the authenticity and trustworthiness of the repository's content was at stake. Similarly, Extension sought to preserve datasets in the Digital Conservancy (which includes the Data Repository for the University of Minnesota, or DRUM). As with other digital content, data is often stored in a precariously managed patchwork of systems, which may not provide long-term preservation or open access to those seeking the content (Mastel 2015, 3). Additionally, centralizing these materials in an IR enables users to search all of the available research and documentation in a single location and discover connections that may not otherwise have been visible.

An Engaged Campus Repository in Practice

What does the implementation of a distributed deposit of publicly engaged research by a campus research center look like in the repository? Campus units can upload reports as soon as they are finalized without having to go through a prolonged publishing workflow, resulting in the timely dissemination of relevant materials. In his discussion of the importance of open access to public health research, Bicknese provides a contemporaneous example of the 2003 SARS outbreak and the benefit repositories provided to the public health community in combating the epidemic (2004, 83). A recent example from the Digital Conservancy involves the timely submission of informational bulletins to assist rural communities responding to the COVID-19 pandemic. University Extension researchers working with community partners on local sustainability projects (University of Minnesota Extension 2020) formulated instructions for

creating affordable, nutritional, fourteen-day quarantine meal kits based on common food items stocked in rural grocery stores; a separate set of instructions guided stores in how to set up contactless pickup.

These were the first documents related to the COVID-19 pandemic added to the repository in March 2020; they were downloaded 3,958 times in their first ten days and accessed from communities as far away as Iran. Additional pandemic-related content that has been deposited since the onset of COVID-19 in North America includes strategies for remote classroom learning and an initial analysis of the pandemic's economic impact. These examples demonstrate the value of the institutional infrastructure paired with university-community expertise in providing timely, persistent access to novel research designed to mitigate a public health crisis in communities with limited resources, and in preparing the broader population for economic and educational disruptions.

Conclusion

Academic institutions have well-established missions to engage local citizens and strengthen ties with the surrounding community. Heather Joseph sees institutional repositories as "integral to the mission of the larger body in which they are housed," and asserts that they must "be able to demonstrate their clear value" (Callicott, Scherer, Wesolek 2016, 326). Although the CNI report suggests that libraries are still debating whether a repository "should be focused on discovery, access, and/or preservation" (2017, 7), the Digital Conservancy's role at the University of Minnesota demonstrates how an institutional repository focused on preservation can be a conduit for public engagement and an expression of the institution's mission. For university programs, preserving works of community-engaged research and public scholarship in an IR that is open to everyone provides transparency and adds to the overall public discourse within the larger community. This, in turn, supports the trustworthiness of the university as a committed partner and the genuineness of that commitment. Furthermore, IRs support the timely addition of content from these campus units by a distributed-deposit method that allows campus units to upload their materials directly.

The permanency, authenticity, and trustworthiness of an IR program enable it to provide resources for citizens who might not otherwise have access to traditional scholarly communication channels; institutional repositories democratize content for all. The Digital Conservancy and institutional repositories like it are not just containers for scholarly content or tools for open access. Rather, they play a strategic role in public engagement for their institutions and their libraries. By acting as a common good to showcase, contextualize, disseminate, preserve, and institutionalize this content, IRs support the research, teaching, and outreach mission of an engaged campus, provide a service as a public good, and contribute to an informed citizenry in society.

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