Digital preservation of e-journals in 2008:
Urgent Action revisited
Results from a Portico/Ithaka Survey of U.S. Library Directors

The shift from print to electronic journals has raised significant challenges for libraries as they consider ways to ensure the preservation of these important digital resources. In September 2005, library directors from 17 universities and colleges met to discuss the current state of electronic journal preservation and endorsed a statement calling for "Urgent Action" to preserve scholarly electronic journals.[1] In the months that followed, many library associations also endorsed this statement and its principal message that "in a scholarly environment that is increasingly dependent on information in digital form, preservation of electronic journals is necessary and urgent."[2] Over two years later, how far has the library community come in taking steps towards the digital preservation of e-journals?

In January 2008, Portico and Ithaka, with encouragement from the Portico Advisory Committee,[3] developed a survey of library directors at four-year colleges and universities in the United States to examine the community's current perspectives on the digital preservation of e-journals.[4] The survey was designed with two goals in mind: first, to analyze attitudes and preservation priorities that can be used to guide Portico in fulfilling its role as a not-for-profit archive of digital scholarly resources; and second, to provide concrete data that could assist library directors, funders, and administrators as they allocate limited resources for library priorities. We are grateful to the many respondents who took the time to complete the survey, and we hope that the data presented here and the questions they raise will spark fruitful discussion of digital preservation needs and strategies.

Note 1: Donald J. Waters, editor. "Urgent Action Needed to Preserve Scholarly Electronic Journals," October 15, 2005. Available at: http://www.diglib.org/pubs/waters051015.htm.

Note 2: Associations endorsing the Urgent Action statement included the Association for Library Collections & Technical Services, Association of College and Research Libraries, Association of Research Libraries, Canadian Association of Research Libraries, Consortium of Academic and Research Libraries in Illinois, International Coalition of Library Consortia, Medical Library Association, NorthEast Research Libraries Consortium, and others.

Note 3: Portico Advisory Committee members are listed on the Portico website: http://www.portico.org/about/advisory_committee.html.

Note 4: A note on methodology: A web-based survey was sent to 1,371 library directors at four-year academic institutions in the United States. The survey launched on January 11, 2008 and stayed open for 11 days. A total of 186 full submissions were received, in addition to 10 partially completed surveys, for a response rate of 13.6%.

Most surveys carry a risk of response bias in the results. We found no evidence of response bias according to the Library Materials Expenditure of the institutions polled; our sample mirrored the larger population in its LME breakdown (according to ACRL data). We also checked to see if the survey might be skewed towards those who were actively concerned about preservation or favorably disposed towards Portico, since the survey announcement came from the librarians on the Portico Advisory Committee. The percentage of Portico participants in the sample was indeed higher than that in the population (39% of respondents were Portico participants; while 24% of the 1,371 libraries surveyed are Portico participants). In order to correct for this bias, we removed responses from Portico participants at random from the sample until the proportion of Portico participants in the sample matched that of the larger population. This correction left a total sample size of 168. Because of some incomplete surveys, the sample size for particular questions varies and is indicated in the graphs that follow.

Key Findings

Library directors believe that preservation of e-journals is important, regardless of the size of the institution or the size of the materials budget at its disposal. They describe the potential risk of losing access to e-journal materials as unacceptable, and many feel that their own libraries have a role to play in the digital preservation of e-journals.
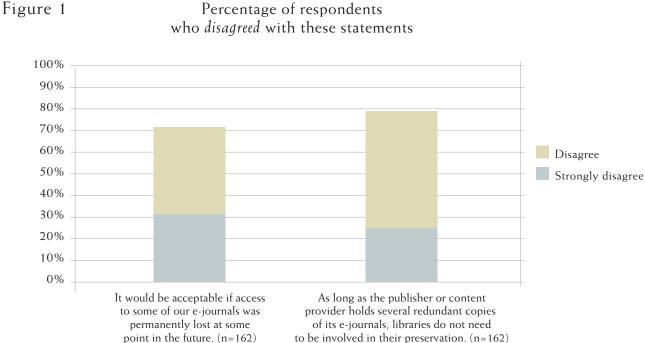
However, there is a pronounced gap between thinking that the digital preservation of e-journals is important and taking action to ensure that e-journals are preserved.[5] Sixty-six percent of respondents are not yet participating in an e-journal preservation initiative. This gap is most pronounced among institutions focused on teaching, where 76% are not yet taking action. The gap is less pronounced in libraries with a research focus, where 53% of respondents have not yet taken action to preserve e-journals.

Among those libraries that are not participating in an e-journal preservation initiative, the responses suggested several factors were at play. We found a wide range of opinion on just how urgent the need is for the digital preservation of e-journals. Many library directors expressed a desire to wait before taking action. In addition, many non-participants acknowledged that the topic of e-preservation is complicated, and there was a divergence of opinion on which types of libraries are ultimately responsible for the digital preservation of e-journals. Finally, the responses suggested that preservation of e-journals, while valued, has not yet become a strategic budgeting priority for many libraries in the face of other competing priorities.

Note 5: For the purposes of this survey, "taking action" on e-journal preservation is defined as participating in an e-journal preservation initiative, as self-reported by survey respondents. In our corrected sample of 168, 57 respondents said they were participating in an e-journal preservation initiative.
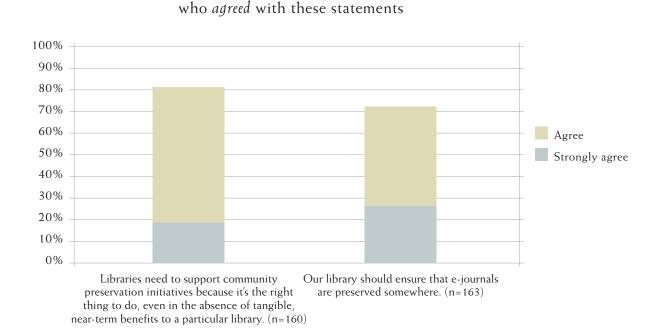
Attitudes towards the digital preservation of e-journals

Library directors believe that e-journal preservation is an important issue. Nearly three-quarters of respondents felt it would be unacceptable to lose access to e-journal materials permanently, and 82% agreed that "libraries need to support community preservation initiatives because it's the right thing to do." (See figures 1 and 2.) Seventy-three percent of respondents agreed that "our library should ensure that e-journals are preserved somewhere," indicating that they see a role for their own library in addressing the issue. Almost no respondents (4%) believed that preservation could be achieved simply by publishers holding several redundant copies of their e-journals.[6]

Figure 1   Percentage of respondents
who *disagreed* with these statements

Legend:
- Disagree
- Strongly disagree

It would be acceptable if access to some of our e-journals was permanently lost at some point in the future. (n=162)

As long as the publisher or content provider holds several redundant copies of its e-journals, libraries do not need to be involved in their preservation. (n=162)

Note 6: In surveys of this type, it is common to use very strongly worded statements in order to better stratify respondents. As a result, the degree of unanimity in these responses is quite striking, and stands in contrast to the range of opinions about how urgent an issue e-journal preservation is, or who is responsible for it.

Figure 2

Percentage of respondents
who *agreed* with these statements

Libraries need to support community
preservation initiatives because it's the right
thing to do, even in the absence of tangible,
near-term benefits to a particular library. (n=160)

Our library should ensure that e-journals
are preserved somewhere. (n=163)

However, this broad support for library engagement does not always translate into action at the level of the individual library. While many felt that e-journal preservation was a "must have" for their library (43%), even more (49%) considered it just "nice to have." Only 34% of the sample is currently participating in an e-journal preservation initiative. The majority of library directors from non-participating institutions believe that it is unacceptable to lose access to e-journal materials permanently and believe that their library should ensure that e-journals are preserved somewhere (74% and 64% of non-participants, respectively). They also overwhelmingly (76%) agreed that "libraries need to support community preservation initiatives because it's the right thing to do." What could be causing this "disconnect" between affirming the need to ensure the digital preservation of e-journals, and taking the steps to accomplish this?
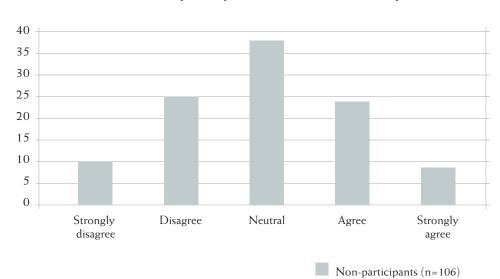
What can explain the gap between stated priorities and actions?

When we compared the survey responses of those who have taken action on the digital preservation of e-journals and those who have not, several factors appeared to contribute to non-participation. First, respondents were split on just how urgent the e-journal preservation issue is. Second, the survey revealed a substantial amount of uncertainty about the right approach to the digital preservation of e-journals, including which types of libraries should be taking responsibility for this issue, and the nature and desirability of the various options. Third, the responses suggest that while libraries might consider the digital preservation of e-journals to be important, the issue has not yet become a strategic budgeting priority for many.

Limited sense of urgency

Institutions that are not participating in an e-journal preservation initiative were evenly split on whether it was acceptable – or unacceptable – to take no action on e-journal preservation within the next two years. (See figure 3.) Moreover, the relative absence of strong agreement or disagreement, and the very high level of neutral responses, suggests that respondents are fundamentally unsure of or even confused about the risks of inaction in the near term.

Figure 3   E-journal preservation does not require any action
from our library today or within the next two years.

Non-participants (n=106)

Respondents reported significant differences in campus interest in the digital preservation of e-journals, and we suspect that this could affect the sense of local urgency around the issue. Of those libraries that participate in an e-journal preservation initiative, 74% reported having been approached by a faculty member about the topic of e-journal preservation. On the other hand, 66% of those institutions that are not participating reported that a faculty member has never approached them about this topic.[7] (See figure 4.) It is unsurprising that librarians would respond to expressed faculty concerns; these data suggest that librarians may have greater impetus to take action on campuses where active discussion serves to amplify the urgency of the topic. On those campuses where faculty or administration have not yet raised the issue of digital preservation of e-journals, what role can the library play in starting and leading this discussion? Should libraries wait for faculty or administrators to open the discussion or do libraries have an obligation to take the lead?
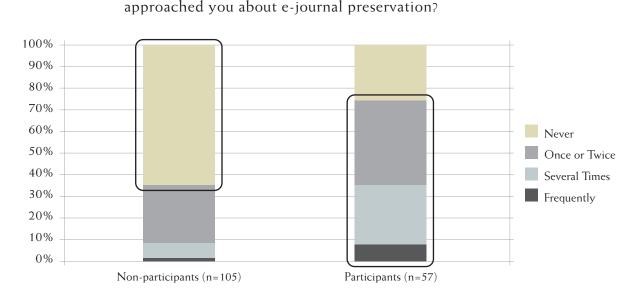
Figure 4 — Have faculty members ever approached you about e-journal preservation?

Non-participants (n=105)   Participants (n=57)

Legend: Never, Once or Twice, Several Times, Frequently

Note 7: Ithaka's 2006 survey of faculty at U.S. four-year academic institutions found that 82% of faculty rated "long-term preservation of electronic journals" as "very important." Faculty support for e-journal preservation was strong at all sizes of institutions, with 70% of faculty at very small institutions deeming it very important, and higher majorities concurring in every other tier. (Tiers were based on JSTOR library classifications, which are derived from the Carnegie classifications.) For more details on the survey, please see: http://www.ithaka.org/research/faculty-studies/.
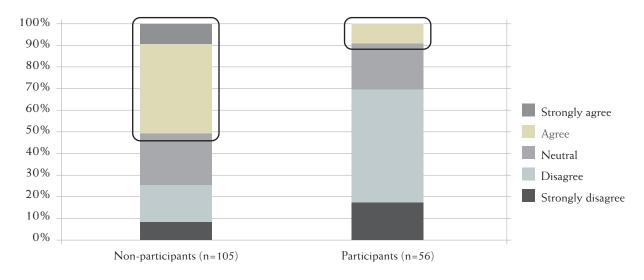
Uncertainty reigns

The survey data also indicate that a feeling of uncertainty pervades the topic of preservation, from understanding which options currently exist and how they differ, to agreeing on who is responsible for the digital preservation of e-journals.

Half of the non-participating libraries agreed with the statement "The e-preservation landscape is extremely complicated; our library doesn't really understand our options in this area," while most of the participating libraries (70%) disagreed with this statement. (See figure 5.) And indeed, statistical regression analysis confirmed that perceiving the landscape as complicated was one of the variables most strongly associated with not participating in an e-journal preservation initiative. What role can community leaders play in clarifying the landscape and options for e-preservation? How can e-journal preservation initiatives help to simplify an issue that strikes many library directors as confusing?

Figure 5   The e-preservation landscape is extremely complicated;
our library doesn't really understand our options in this area.

Opinions also vary as to who is responsible for the digital preservation of e-journals. To what extent should research institutions alone shoulder this responsibility? Approximately half of the respondents who are not participating in an e-journal preservation initiative agreed that "research libraries should be 'taking care of' e-journal preservation on behalf of the entire library community." These respondents might believe that the digital preservation of e-journals is important, but they do not see it as their problem to address and instead regard this problem as solely the domain of larger institutions. A sizable proportion (43%) of respondents from libraries that focus solely on research or equally on research and teaching agreed that preservation of e-journals is exclusively the responsibility of research libraries.[8]

In fact, this sentiment translates into action; research institutions are far more likely than teaching institutions to have taken action on e-journal preservation. Over 60% of participating libraries defined themselves as focused on "research" or equally focused on "research and teaching." Nearly half of respondents who came from these types of institutions had taken action to support digital preservation of e-journals; in contrast, just 24% of teaching-focused institutions had taken action.

Despite strong general support for digital preservation of e-journals, the library community does not appear to have achieved real consensus on just who is responsible for it. Is digital preservation of e-journals truly a community-wide responsibility? Or are larger research institutions willing—and able—to cover the costs for the entire community? Are smaller teaching-focused institutions running any risks by assuming that others will take care of the problem? Without agreement on which organizations can be expected to contribute to e-journal preservation, it may be difficult to develop appropriate models to organize their efforts.

Note 8: We do not have reliable statistics for institutions that identified themselves solely as research-focused because only 10 respondents identified themselves as such. Comparing other data such as LME and FTE leads us to believe that many ARL respondents, for example, identified themselves as being equally focused on research and teaching, which is why we combined those two groups in this analysis. (Teaching Only n=92, Equally Research and Teaching n=65, and Research Only n=10. One respondent did not self-identify in any of these categories.)

Competing priorities

Many libraries face hard choices about how to allocate limited resources. Library leaders often cannot do all the things they might like to do. The survey found that about half of the respondents who are not participating in an e-journal preservation initiative agreed that budget constraints kept them from "adopt[ing] new products or approaches until we see they are broadly adopted by the library community." This suggests that budget constraints lead many libraries to take a wait-and-see approach when faced with relatively new issues like the digital preservation of e-journals. Indeed, e-journal preservation participants were nearly twice as likely to consider themselves "trailblazers" than were non-participants.[9]

Yet, at the same time, 44% of this budget-constrained group said that "when our library identifies a top priority, we can make room in the budget for it." Less than a third disagreed with this statement. It appears that, while most library directors believe digital preservation of e-journals is important, not all are prioritizing it in the face of other competing priorities.

A closer look at how e-journal preservation activities would be funded illustrates the practical challenge of devoting resources to a new priority that does not yet have a line item in the budget. We found a range of responses when we asked "If your library were to expend financial resources on e-journal preservation, from which budget area would monies most likely be drawn?" Most libraries identified this as part of the collections budget (56%) while others said it would come from the "binding or other processing budget" (15%) or from the librarian's discretionary fund (10%). Only nine percent said that monies would come from a "preservation" budget. These findings suggest two things: first, that the digital preservation of e-journals does not seem to have a consistent home in the budget; as an activity or set of activities, it does not yet have a place in the organizational consciousness. As with many new priorities, finding resources to support digital preservation of e-journals requires a certain amount of creativity and flexibility. Second, e-journal preservation most often appears to be funded as part of the collections budget. If funding preservation activities requires "borrowing" from or competing for funds from another core library activity – particularly the acquisition of new materials – does this increase the likelihood that it will not happen at all?

Note 9: The question defined "trailblazers" as trying new things "before they become 'best practice' throughout the library community."

Conclusion and further questions

The preservation terrain is a complicated one, in need of definition and clarification. While the academic library community at large believes that digital preservation of e-journals is important, there is still significant confusion about how to pursue it and how urgent it is. Many libraries seem to be taking a wait-and-see approach, with some institutions relying on the actions of others for the time being. These data raise several strategic questions for individual libraries and for the community as a whole:

- Who is responsible for ensuring the digital preservation of e-journals? Can e-journal preservation be sustained if only a relatively small proportion of libraries is engaged in supporting e-journal preservation initiatives?

- If it is desirable for participation in the digital preservation of e-journals to move beyond the "trailblazers" of the library community, when and how might that "tipping point" be reached? In the meantime, is there a risk that libraries could wait until they are out of options?

- What can community leaders and e-journal preservation initiatives themselves do to help simplify the e-journal preservation landscape?

- What is the appropriate place for e-journal preservation efforts in the face of competing priorities?

These questions are ripe for discussion, and we hope that this survey will prompt further conversation and energetic debate throughout the academic library community.