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Changing the Default to Support Open Access to Education Research

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Abstract

This essay explores factors underlying the underutilization of Open Access (OA) to make education research literature freely available online, where it can benefit a global audience of researchers, students, teachers, and policy makers. Situating this autobiographical self-study in the context of the broader global and scholarly context, we use Bullough and Pinnagar's (2001) setting-convocation-resolution approach to present our stories as points of departure for reflection, conversation, research, and action. We do so to raise awareness and enhance understanding of the complex and rapidly evolving legal, ethical, and practical issues surrounding public accessibility to scholarship. We also issue a call to action by outlining concrete, stakeholder-specific steps that would help OA become the new default for publication of educational research.

Changing the Default to Support Open Access to Education Research

The internet has revolutionized the way we share and access information, yet most scholarly journal literature remains locked behind paywalls for the average reader. Thus, practitioners and policy makers in fields like education are unable to access articles that would otherwise benefit their professional practice. Moreover, students and researchers in the developing world are excluded from participating in (and citing) the latest scholarly discourse. As journal subscription costs continue to rise at an unsustainable rate (Bosch & Henderson, 2016), forcing academic libraries to cancel large journal packages, the article paywall problem has increasingly come to impact even researchers at affluent institutions in the developed world.

What is Open Access?

Open Access (OA)¹ is a movement and mode of research dissemination that seeks to make the fruits of academic endeavor freely available online, where they can reach and benefit a global audience of researchers, students, teachers, and policy makers (Suber, 2012). OA can be accomplished either directly, by publishers that make articles, books, and other research outputs freely available at time of publication (“Gold OA” publishing), or indirectly, by authors who make their work available in open repositories or on personal websites (“Green OA” archiving), often in peer-reviewed manuscript form after an embargo period imposed by the publisher (Harnad et al., 2008). In assessing the impact of these two forms of OA over the past 15 years, researchers have estimated that between 24-28% of the scholarly literature indexed on the Web is now openly available with no access restrictions, albeit with significant variation in the proportion of OA literature by discipline (Khabisa & Giles, 2014; Piwowar et al., 2017).

¹ See Appendix for a glossary of acronyms used throughout this paper.

However, there remains a general lack of consensus about the purpose, implications, and long-term sustainability of both Gold and Green OA (Schonfeld, 2017; Tenant et al., 2017).

In general, Gold OA refers to the process of publishers making articles freely accessible to readers at the time of publication, often by charging authors. Gold OA publishing comes in a variety of different forms, from non-commercial, “Diamond OA” publishers² that cover the cost of publication through a combination of volunteer labor and subvention funds (i.e., grants to cover publisher-side costs) to commercial OA publishers that generate revenue from article-processing charges (APCs) (Fuchs & Sandoval, 2013). The commercial OA publishing sector is further differentiated into a variety of different camps: apart from Gold OA publishers³ that make all of their publications openly available, many commercial journal publishers have implemented “Hybrid OA” business models⁴, whereby all articles are toll-access (only available to subscribers) by default, but authors are given the option of making specific articles openly available for an APC (Suber, 2012). Many North American universities provide their authors with funds to cover APCs for publications in Gold or Hybrid OA journals (Tananbaum, 2014). Business models based on APCs have been criticized on a number of accounts, including the exclusion of researchers who do not have funding to pay for APCs, the increasing cooptation of OA publishing by legacy publishers using Hybrid OA business models (Esposito, 2015), the long-term financial viability of an academic publishing system based entirely on APCs (University of California Libraries, 2016), and the rise of “predatory” OA publishers that charge APCs in return for questionable or nonexistent peer-review and rapid time-to-publication (Shen

² For example, neither authors or readers pay for articles in *Education Policy Analysis Archives*, which is published with the support of [edXchange](#), the knowledge mobilization initiative of the [Mary Lou Fulton Teachers College](#) at Arizona State University.

³ For example, authors must pay an APC to have their articles published by Sage Publishing in *AERA Open*.

⁴ For example, *History of Education Quarterly* is a hybrid OA journal, offering authors the option of making specific articles OA for a fee to Cambridge University Press, while articles are by default only available to subscribers.

& Björk, 2015). It has been estimated that approximately 20% of the world's 28,000 active peer-reviewed journals are Gold OA (Harnad, 2015).

Green OA, on the other hand, generally refers to the process of authors making their own articles freely accessible by archiving versions of their papers in repositories or websites. Green OA archiving occurs when authors make their publications openly accessible online, either by depositing them in OA repositories or by posting them to personal websites (Suber, 2012). Green OA is especially useful for authors of articles published by toll-access journals, since it allows these authors to make the peer-reviewed content of their articles openly available at no cost to the author or reader, even if the final, published versions of the articles remain locked behind paywalls. In practice, however, Green OA is highly dependent on publisher self-archiving policies, which vary significantly from publisher to publisher and can impose lengthy embargo periods that prevent authors from making their work available until months or years after publication (Laakso, 2014). In addition, there are many different kinds of OA repositories in which authors can deposit their work. Some OA repositories serve specific academic disciplines, as the ArXiv does for physics and mathematics (<https://arxiv.org/>), while others are specific to institutions or research funders (e.g., PubMed Central), and still others are owned by commercial enterprise and cater to researchers in all disciplines (e.g., ResearchGate and Academia.edu). Despite strong growth in the number of OA repositories over the last decade, the practice of OA archiving has not been widely adopted outside of a few disciplines, and many repositories have struggled to build their collections of published scholarship (Pinfield et al., 2014).

Is OA Growing?

Although both Gold and Green OA have enjoyed considerable growth in the past 15 years, the research suggests that between 62-66% of the scholarly literature indexed on the Web

remains locked behind publisher paywalls (Khabisa & Giles, 2014; Piwowar et al., 2017). For this reason alone, OA remains an important priority for all stakeholders in the global research enterprise, including researchers, academic institutions, scholarly societies, funding agencies, publishers, policy makers, and the general public (Tenant et al., 2017). In addition to giving readers barrier-free access to the latest research, OA also promises to directly benefit authors by giving their work the potential to generate more citations (e.g., Harnad et al., 2013) and strengthening its broader significance and impact within and beyond the academy (Tenant et al., 2017). Willinsky (2005) has highlighted the importance of OA to educational research in particular, arguing that open dissemination supports meaningful interaction between theory and practice, creating opportunities for scholarship to influence policy and public opinion, and thereby increasing educational research's profile in the public sphere and contributing to a better-informed democratic society.

The growth of OA has been spurred by various policy initiatives from research institutions and funders, including public access mandates adopted by public and private funding bodies that require the results of funded research be made publicly available. The first such mandate in the U.S. was the National Institutes of Health (NIH) public access policy (Suber, 2008), and, following a directive from the U.S. Office of Science and Technology Policy (2013), similar policies have been adopted by 16 of the 24 largest federal funding agencies. The U.S. Department of Education (ED) released its Plan and Policy Development Guidance (PPDG) in October 2016, announcing its intention to require public access to all peer-reviewed papers and supporting data arising from funded research. Specifically, all ED grant recipients will be required to submit final peer-reviewed manuscripts of articles based on funded studies to the Education Resources Information Center (ERIC, <https://eric.ed.gov/>) when accepted for

publication, and to make them publicly available no later than 12 months after publication. To promote compliance, the PPDG also includes a review mechanism to check that grantee compliance be considered for subsequent funding opportunities. In requiring deposit in ERIC, the PPDG reifies Willinsky's (2005) vision of leveraging ERIC as a platform for Green OA archiving and puts the ED in the elite company of NIH and the National Science Foundation (NSF) as the only three federal funding agencies with dedicated open repositories to support Green OA.

Institutional OA policies and research institutions have also played an important role in the growth of OA. Since the first institutional OA policy was adopted by Harvard University in 2008, scores of other research institutions have followed suit. The community of OA policy institutions has expanded to include both private and public institutions of all sizes, with strong growth in OA policy adoption rates across the U.S. more generally (Registry of Open Access Repository Mandates and Policies [ROARMAP], 2017). This community is represented by the Coalition of OA Policy Institutions (COAPI), which has 94 members to date and is dedicated to sharing information and expertise to support institutions at all stages of OA policy development and implementation. In September 2016, COAPI launched a public toolkit of OA policy resources (<https://osf.io/vhw6d/>) that includes a wealth of reusable materials and documentation, making it easier than ever for interested institutions to undertake their own OA policy initiatives. The authors' institution has been a COAPI member since 2012, and the generous support of our fellow members has been invaluable in guiding our work to adopt and eventually implement an institutional OA policy.

Despite the many benefits of OA and policy initiatives to encourage it, OA is still underutilized in educational research: the majority of high-ranked education journals are not

available OA, and Green OA archiving practices are neither widespread nor well understood (Furlough, 2010). This essay examines some of the factors that contribute to this underutilization, blending a review of recent developments and relevant research with personal accounts of our efforts to advance OA at our home institution in the U.S. Situating this autobiographical self-study in the context of the broader global and scholarly context, we intend for our stories, which follow the structure of setting-convocation-resolution (Bullough & Pinnagar, 2001), to be points of departure for reflection, conversation, research, and action. Ultimately, we issue a call to action, outlining how different stakeholders in educational research can help change the default to OA, including concrete steps to advance the growth and uptake of OA archiving and publishing by educational researchers.

Is OA Underutilized?

Although the number of Gold OA publications covering topics in education research has increased in recent years, most of these publications are still relatively new and lack prestige compared to the most established publications in the field. At the end of 2016, the *Directory of Open Access Journals* (DOAJ) listed 432 education journals, up 60% from 258 journals in 2008 (Furlough, 2010). According to Thomson Reuters' *Journal Citation Reports* (JCR), however, of the top 100 journals with impact factors in the field of education and education research, only seven (ranging in rank from 47th to 98th) are Gold OA publications. The proportion of Gold OA articles in education is also quite low: of the 37,226 articles published in ISI-ranked education journals in 2015, only 3,509 (9.4%) were published in OA journals. The lack of prestigious OA journals in the field of education is part of a larger trend. According to Harnad (2015), although approximately 20% of the world's peer-reviewed journals are Gold OA, very few of them are among the top journals in their fields.

With respect to Green OA archiving, there has been impressive growth in the number of peer-reviewed, full-text resources deposited in ERIC in recent years. Of 48,097 new records added to ERIC in 2015, 36,619 (76%) were peer-reviewed, and 11,681 (24%) were peer reviewed with full-text availability, an increase of 238% from 2014 and 343% from 2011 (U.S. Institute of Education Sciences, 2016). Although the recent growth of OA content in ERIC is encouraging, there remains considerable room for improvement.

The number of Green OA articles available in open repositories other than ERIC is difficult to gauge, especially given the rapid growth in the number of institutional repositories since 2005 (Pinfield et al., 2014). Research suggests most institutional repositories are still small relative to the large subject and funder repositories (Pinfield et al., 2014), and populating them with research publications has proven very difficult (Björk, Laakso, Welling, & Paetau, 2014; Marsh, 2015). In a study of institutional repository (IR) content from 2011-2013, for instance, Swan, Gargouri, Hunt, and Harnad (2015) found that the average full-text deposit rate for journal articles was only 15.5%. This is consistent with our experience at Florida State University, where an IR was launched in 2011 to support authors in making their scholarship openly available. Six years after its launch, the repository's collections total 23,678 digital objects, but its collection of faculty scholarship amounts to only 2,144 objects, including only 151 by College of Education faculty.

Why the Disconnect?

There are many well-documented reasons for the slow growth in the number of top-ranked Gold OA journals and the use of Green OA repositories. Unfortunately, most top-tier education journals are not OA, and rewards (the primary one being tenure) are typically not offered for efforts spent on public scholarship at research-intensive universities. Junior faculty

can feel trapped by the system that they must adhere to in order to remain in academia (Harley, Earl-Novell, Arter, Lawrence, & King, 2007; Migheli & Ramello, 2014; Xia, 2010). Senior faculty colleagues often become part of the publishing infrastructure through their work as editors on traditional subscription-based journals. At the same time, junior colleagues are indoctrinated into the traditional publishing model by graduate advisors, faculty mentors, and administrators who hold publications in top-tier journals as key for tenure success (Hurrell & Meijer-Kline, 2011). Tensions between values related to information social justice⁵ (Saunders, 2017) and obtaining tenure may lead junior faculty members to stifle their actions and voices regarding changing the default, closed, subscription-based publishing system. Until OA journals in education increase sufficiently in number and reputation, many researchers will continue to feel that publishing in closed journals is more likely to advance their careers. In addition, the cost of publishing in OA journals may be a barrier for many researchers, especially when no grant or institutional funding is available to cover author-side APCs, which are used by many OA journal publishers to recoup the cost of publication in the absence of subscription revenue.

With respect to the slow growth of Green OA archiving, it is worth noting that many academic publishers actively hamper the growth of OA archiving through the use of unnecessarily restrictive and complicated publication contracts, which typically require authors to assign their copyright to a publisher, impose lengthy embargo periods to prevent work from being made publicly available in a timely fashion (Laakso, 2014), and thereby work against the interests of authors, other researchers, and the public. This practice reinforces a reluctance on the part of researchers to voluntarily archive their work, whether due to perceived time commitment, concerns over copyright and version control, uncertainty about the deposit process, or a lack of

⁵ Building on the notion of public scholarship, information social justice refers to the idea that research information may not be equally accessible to all parts of the public.

awareness of OA archiving more generally (Nicholas et al., 2014; Pinfield, 2015; Yang & Li, 2015). Despite the best efforts of academic librarians to raise awareness, address common concerns and misconceptions, and provide services to streamline the deposit process for authors, researcher attitudes and behavior have proven slow to change.

Changing the Default

Based on our collective experience as faculty members and librarians, we suggest a number of ways different stakeholders in educational research—research funders and institutions, faculty authors, and journal editors—can help change the default to OA.

Implementing and Enforcing Open Access Policies

OA policies adopted by research funders and institutions are important because they provide top-down, structural incentives to change researcher attitudes and behavior. At the time of writing, over 750 Green OA policies have been adopted by funders and institutions worldwide, including 34 U.S. funding agencies and over 100 U.S. research institutions (ROARMAP, 2016). Funding agency policies have proven to be effective when enforced, with NIH reporting an 82% compliance rate for funded articles following the agency's decision to withhold funding for noncompliance in 2012, and with the Wellcome Trust in the U.K. reporting 69% compliance after announcing similar measures in the same year (Van Noorden, 2014). Some of the most mature and well-funded OA policies are being implemented in the U.K. and E.U., where the U.K. Higher Education Funding Council and the European Commission have adopted OA policies that promote compliance through archiving in institutional repositories, creating an imperative for research institutions to invest in related services and infrastructure (Harnad, 2015; Kerridge & Phil, 2014). The European Commission is also directly funding the development of Open Access Infrastructure for Research in Europe (OpenAIRE), which includes

a suite of support services for authors, an online portal for reporting and discovering articles made available across hundreds of OA repositories, and a sophisticated general-purpose repository for cases where an institutional or subject repository is not available (Rettberg & Schmidt, 2015).

The approach in the U.S. has been quite different. Most federal funding agencies have adopted policies that require deposit in a funder-specified repository (rather than an institutional repository), but the agencies have not been allocated additional federal funding to build new repository services and infrastructure to support compliance (Reilly, 2016; Sheehan, 2016). The ED PPDG (U.S. Department of Education, 2016) mentions some compliance strategies, but it remains to be seen whether ED will take a hard line like NIH and withhold funding for noncompliance, as opposed to merely “not finalizing new awards without reviewing the potential grantee’s compliance with public access requirements that applied under previous awards” (p. 16). Even after the PPDG has been fully implemented, there is no guarantee most ED grantees will be compliant with the new requirements. Judging by the experience of NIH, it will take strong compliance mechanisms, concerted outreach to authors, and cooperation of publishers for the ED policy to have a meaningful impact.

Institutional OA policies are also important because they apply to all scholarly articles authored by faculty at a given institution, including those from non-grant-funded research (Wesolek & Royster, 2015). Like funder policies, institutional policies can also provide strong, top-down incentives for researchers to participate in Green OA, especially in cases where article deposit is linked to the research evaluation process. For example, at the University of Liege in Belgium, where articles must be deposited in the IR in order to be considered for promotion and tenure, the repository has a full-text deposit rate of 87% (Swan et al., 2015).

In contrast, most U.S. institutions do not explicitly link their OA policies to faculty evaluation or tenure/promotion processes. Without such linkages, Anderson (2014) argued, “Institutional mandates in the United States, however, are very rarely real, and while they may be called ‘mandates’ colloquially, they often turn out to be little more than statements of institutional preference” (para. 3). Nonetheless, these policies can triple or even quadruple full-text deposit rates relative to institutions without (nominally) mandatory policies (Gargouri, Larivière, Gingras, Carr, & Harnad, 2012; Swan et al., 2015).

The situation at our home institution serves as an illustrative example of how such policies play out. Adopted by unanimous vote of the Faculty Senate in February 2016, our OA policy is typical of those at U.S. institutions. Although the “policy applies to all scholarly articles authored or coauthored while the person is a member of the Faculty” (Florida State University Policy, 2016), ours is not a strong mandate: it provides all faculty the option to opt-out for specific articles, and there are no repercussions for noncompliance. In just six months following the adoption of the policy, however, more full-text articles were added to our institutional repository than during any year prior to the adoption of the OA policy. But this growth is still just a drop in the bucket. Authors affiliated with our university published more than 2,000 articles in Web of Science-indexed journals during 2016, but only 374 have been added to our IR—a full-text deposit rate of less than 19%.

Increasing the rate at which peer-reviewed research is made freely available through public-access repositories, thus, appears to depend upon the willingness of funders and institutions to use their considerable influence to shape behaviors of both researchers and publishers to change the default of academic culture. To change researcher behaviors, funders can implement enforcement mechanisms to ensure high compliance rates with OA policies. In

addition, institutions can work to bolster their own policies by linking them to personnel evaluation processes. To change publisher behaviors, institutions can use their collective buying power as leverage in negotiating ‘big deal’ journal packages with commercial academic publishers, insisting on better terms that make it easier for authors to participate in OA. For example, renegotiated contracts could allow all authors from a consortium of institutions to publish in OA journals at no cost and deposit their articles in their IRs immediately at the time of publication. There has been encouraging progress on this front in recent years, particularly in Europe, where institutions from several European Union countries have negotiated more favorable agreements with large academic publishers such as Springer and Elsevier (Springer Academic Publishing AG, 2016).

OA policy initiatives on the part of funders and institutions appear to be gradually pushing publishers to adopt more permissive copyright policies, with a recent study of publisher policies finding that 80.2% permit some form of OA archiving (Laakso, 2014). However, there is a weak correlation between what publisher policies allow and the likelihood of finding green OA versions online (Covey, 2009), and a recent review of the green OA literature estimates that only 12% of articles published in subscription journals in recent years have been made available through OA archiving (Björk, Laakso, Welling, & Paetau, 2014). In light of this evidence, it seems clear that permissive publication agreements alone will only take us so far. Although many journal publishers now permit OA archiving in theory, this does not necessarily mean that they are empowering authors to exercise these rights in practice. This gap between what publishers permit in theory and how authors behave in practice further underlines the importance of OA policy initiatives on the part of research funders and institutions, as these policies have the

potential to address the greater challenge of changing researcher attitudes and behaviors, especially when they provide strong incentives.

Of course, some faculty members will be reluctant to embrace OA regardless of the policy conditions. In subsequent sections, we draw from the four authors' shared experiences as librarians and faculty members to highlight several challenges encountered as we have sought to advance OA within our home institution and with our own publications. Our data include paraphrased quotes from conversations with colleagues, as well as direct quotes from emails exchanged with editors, association leaders, and publisher representatives. Although data limitations do not allow us to make any claims to formal generalizability, our data are naturalistic and drawn from the real-world experiences of faculty members and librarians at a major public research university in the U.S. We present these data as concrete examples of broader, more intangible phenomena that may be impeding the progress of OA in educational research.

Overcoming Author Apathy and Fear

We contend that each of the following comments - expressed by faculty colleagues and intentionally paraphrased for rhetorical effect - are often the pragmatic manifestations of authors' underlying apathy toward and/or fear about OA.

- *It's not my job.* "My job's to generate new knowledge, not to ensure that it is freely accessible."
- *I don't have time.* "I don't have time to fill out another form or send another email to get each of my articles into a repository."
- *I won't get rewarded.* "I need to publish in top tier journals to get tenure," or "I already have to make my grant funded work accessible via PubMed."
- *I don't want to rock the boat.* "I don't want to get a reputation as a 'problem' author."

Regardless of the reason, overcoming author apathy requires authors to care enough to take active steps to promote OA in their own work. To be sure, some authors will be compelled by moral arguments regarding knowledge dissemination as a form of social justice, the belief that an informed citizenry is a critical component of an effective democracy, or aspirations for policymakers to privilege scholarly evidence over political ideology. However, individuals must judge these moral arguments amid more practical arguments driven by a potentially unconscious self-interest. For most faculty members, the moral arguments may be necessary, but not sufficient, to propel individuals towards action in support of OA.

To elicit action from authors, OA advocates must capitalize on interest convergence (Bell, 1980) and couple the moral arguments with more practical ones. It must be clear to faculty members that their participation in or promotion of OA policies and practices directly benefits the author. Instead of abstract generalizations drawn from citation impact studies, we suggest highlighting the influence OA practices have had on an individual author or article. For example, when presenting to our own colleagues, we show off our personalized monthly reports generated from our institutional repository, which tracks the number of article views, downloads, and shares for each entry. It can be quite powerful when colleagues see an article published only a year earlier has already been downloaded from the repository 683 times, let alone older records that have been downloaded over 40,000 times! Of course, such examples are only strengthened when presented alongside empirical data suggesting that articles made openly available in repositories are associated with significantly more full-text downloads than subscription access articles (Davis, Lewenstein, Simon, Booth, & Connolly, 2008).

Coupled with strong support from librarians to assist faculty with publisher negotiations and depositing work in an open repository, outreach and education strategies focused on real-world examples of how OA directly benefits authors can go a long way to overcoming author apathy. Even so, apathy is not the only obstacle with respect to changing authors' attitudes and behavior.

Fear felt by junior faculty members, as it relates to OA, may be due in large part to socialization experiences that occur during graduate school and mentoring by senior colleagues (Harley et al., 2007; Hurrell & Meijer-Kline, 2011; Migheli & Ramello, 2014; Xia, 2010). Senior faculty members have 10-30+ years of experience working within the system that they now effectively govern—as its association presidents, grant reviewers, tenure/promotion letter authors, and editors of top journals. Senior colleagues will eventually be reviewing new scholars' tenure/promotion dossiers, nominating them for awards, or serving as references when junior faculty members seek to change institutions.

The issues outlined above are particularly powerful for untenured, junior faculty who usually have only 5 or 6 years to put the tenure dossier together. Considering it can take years to go from data collection to publication, faculty may be wary of additional delays that might come from negotiating copyright agreements. As a pre-tenured faculty member, for example, one of this paper's authors was not willing to jeopardize a potential publication should a publisher or editor say, "Either you sign the agreement or we don't publish your article!"

Even after tenure is earned, faculty still may be wary of potential long-term consequences of arguing with a publisher, questioning standard practices of a scholarly organization, or drawing a journal editor into a stressful negotiation. In pushing back against the traditional publishing model, faculty may be pushing back against the very people who have literal veto

power over their scholarship in the field for years to come. To challenge the closed-access publication system, authors may be putting at risk whatever goodwill they had acquired in building a reputation as someone with whom it is easy to work, potentially limiting his future access to leadership roles in professional associations. Although we could not identify any empirical literature with which we could potentially validate those concerns, it seems likely that the reputational repercussions of such challenges to the system diminish as scholars establish themselves within the field, build strong networks of respectful colleagues, and feel the protection afforded those who are tenured.

Therefore, we call upon our fields' tenured faculty members to pause before signing the copyright agreement for their next article. Ask your librarian or your university counsel's office to review the agreement and ensure it is as beneficial for the author, scholarly community, and public, as it is for the company seeking to capitalize on your intellectual labor in pursuit of corporate profits. Because senior faculty also have influence over criteria for tenure and promotion, in addition to serving on editorial boards for prestigious journals, they also have an important role to play in changing the default research culture to value more open and equitable publishing practices, free of unhelpful biases that limit options for less experienced colleagues and even coerce them to perpetuate the status quo.

Reducing Editor Ignorance and Impotence

Although a journal's editor is often considered the person "in charge" of a publication, it appears many education journal editors have adopted a stance of willful ignorance regarding copyright, OA, publication agreements, and author licenses. As evidenced by the direct quotes in this section (blinded for privacy but extracted directly from emails, which are public record in this state), rather than actively address these issues, editors we have communicated with instead

defer to and rely upon scholarly societies or publishing companies to handle everything that comes after their decision to accept a manuscript. Said one editor of a highly respected journal in the field, publication contracts and related policies are “handled by the staff and the leadership at [scholarly society] not whoever is serving as editors at the moment.” Another editor noted the journal’s publishing company handles everything after she makes the decision to accept the manuscript, and she does not handle any publishing paperwork.

Editors’ decisions to defer to a scholarly society or publishing company in these matters come, in part, from their assumption that copyright issues are contractually negotiated terms agreed upon by the scholarly association and publishing company. Although one editor noted the association leadership “of course do solicit our [Editors’] input” on such matters, it appears even editors who are brought into the discussion still maintain some false assumptions. Said an editor of a different journal, “I’m not sure if this is all semantics, I thought what [the publisher] was saying was what you were asking for aligned with what they allow (but I have quickly come to understand this is not correct).”

Our conversations with editors suggest that they wade into topics of copyright and OA only when prompted to do so by authors whose manuscripts they publish. It seems few authors who submit to these journals have pushed editors to attend to these issues. Two editors with whom we communicated stated, “No one has ever asked about [OA, embargo periods, or author posting of articles on websites or repositories].” Another noted, “This situation is the first such one I have dealt with in my 5 years with the journal.” Thus, what we have labeled as editor ignorance may be reflective of the general ignorance—or at least lack of urgency—held by most of us in the academy.

Indeed, even scholarly societies organized to serve as the voice of academic professionals appear reluctant to push too hard on these issues. For example, when one of this paper's authors requested a reduction in the publisher-required 18-month embargo period, a representative from the publishing company replied, "We have consulted with [the scholarly association] and they have advised that they do not wish to waive the embargo period on the author accepted manuscript." The director of publications at the scholarly association indicated, "The embargo period is pretty standard across the industry given the significant resources that are invested in the peer review and production processes." Thus, in many respects, associations, their scholarly journals, and their editors are largely at the mercy of publishing companies. Reasons include multi-year contracts with publishers, complicated legal agreements between associations and publishers, and difficulties associated with renegotiating contracts or finding a new publisher.

So what can editors and other association leadership do? These senior faculty members can educate themselves, bring up the topic at editorial board meetings, and advocate for OA with scholarly societies and/or publishers. Associations, representing the collective power of faculty, can also solicit bids from different publishers to gain leverage in renegotiated publishing contracts that are friendlier to OA. See Table 1 for a summary of actions stakeholders can take to change the default to OA.

Becoming Stewards of the Academy

Although OA is still underutilized in educational research relative to other disciplines, there is ample evidence to suggest the situation is improving. Regarding Gold OA publishing, the number of reputable OA journals in education is growing, and the emergence of journals like *AERA Open*—with affordable APCs, broad readership, and fast time-to-publication—is especially promising. With respect to Green OA archiving, growth in the number of peer-

reviewed, full-text resources deposited in ERIC in recent years is also encouraging. The coming implementation of the ED public access plan provides a strong incentive for all educational researchers to familiarize themselves with OA archiving practices.

Despite these promising developments, there are still many challenges to overcome (particularly in the U.S.) with respect to researcher attitudes and behavior, including the problems of author apathy and editor ignorance that we have explored in this essay. Nevertheless, these challenges can be overcome if educational researchers take concrete actions to help enact change and move our community of practice toward a more open future. The role of authors and editors involves fulfilling our shared responsibilities as stewards of the academic record, asserting greater control over the rights to our work, taking an interest in how our scholarship is disseminated (and how we can broaden its impact), and pushing ourselves to question the status quo prescribed by commercial publishers. By embracing and acting on these principles, we perform a valuable service to the academy, insisting on the broadest possible readership for our work, and contributing to the collective change that will eventually lead our colleagues, editors, and scholarly associations to adopt more open research practices.

Alongside these efforts, we trust funders and institutions will continue to build the necessary infrastructure to make OA easy for authors, including clear policies and educational resources, funds for publishing in OA journals, robust repository services that streamline the article-deposit process, and agreements with publishers that favor authors' rights. The real work is now just beginning for us. Because newly-adopted OA policy at our institution is not a true mandate, we know its success will depend on continuing education and meaningful support for our faculty, as well as technological innovation to integrate our repository with key campus systems and automatically harvest article metadata from external web services. Though the road

ahead will not be easy, we are confident that we will eventually convince our colleagues that their participation in OA policies and practices will directly benefit both the broader research community and their own interests as authors. In pursuing these goals, we have committed to do our small part to shape a more open and equitable future for the academy. As such, we will continue to emphasize this mission and the value of making our work accessible to all those who might benefit from it to improve information social justice and stimulate meaningful interaction between research, theory, and practice.

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Appendix

Glossary of Acronyms

APC: article-processing charge

COAPI: Coalition of OA Policy Institutions

DOAJ: *Directory of Open Access Journals*

ED: Department of Education

ERIC: Education Resources Information Center

IR: institutional repository

JCR: *Journal Citation Reports*

NIH: National Institutes of Health

NSF: National Science Foundation

OA: open access

OpenAIREL: Open Access Infrastructure for Research in Europe

PPDG: Plan and Policy Development Guidance

ROARMAP: Registry of Open Access Repository Mandates and Policies