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NON-EMPIRICAL PAPER

Open-Access Publishing in Special Education and Related Fields: Making Scholarship Freely Available to All

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ABSTRACT

Open access to research findings, syntheses of research, and papers providing guidance on implementing researchbased practices is critical for informing policy and practice in special education and related fields. Yet most published articles are behind paywalls and cannot be accessed freely by many practitioners, policymakers, individuals with disabilities and their families, and other interested parties. In this article, we describe the benefits of open-access publishing for researchers and research consumers, as well as different types of open-access publishing–with a particular focus on self-archiving or green open-access publishing. Self-archiving makes papers freely available, with little time burden and no monetary cost to authors. We provide recommendations for what, where, when, and how to self-archive one's papers. We conclude by sharing our own experiences with open-access publishing.

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Keywords: Self-archiving; open access; open science; preprints; special education

A primary way authors disseminate research and scholarship in special education and related fields (e.g., communication sciences and disorders, developmental psychology, rehabilitation counseling, school psychology) is through publications in peer-reviewed journals. Advantages of publishing in journals include papers being vetted through peer review, as well as accepted articles being edited, formatted, archived, and indexed. However, most articles in professional journals are behind paywalls and are inaccessible without payment. Some paywalled articles published in journals can be accessed freely through institutional subscriptions and paid membership in professional organizations. Institutions, such as universities, contract with publishers so that affiliated individuals (e.g., students, faculty, staff) can access articles in journals covered in the subscription.

However, individuals not affiliated with a subscribing institution must pay to access paywalled articles from journal websites (see Figure 1 for the message that appears when attempting to access a paywalled article published in a top-ranked special education journal). Many special education teachers, for example, are not affiliated with an institution that subscribes to academic publishers. Moreover, institutional subscriptions do not cover all journals (i.e., some published articles remain inaccessible even when affiliated with a university). Although membership in some professional organizations provide free access to articles published by or affiliated with the organization, paywalled articles in other journals remain inaccessible. Therefore, despite calls to inform practice with research (e.g., Odom et al., 2020), practitioners cannot access most of the peer-reviewed literature reporting original research, reviews of research, and how-to guides for implementing research-based practices published in traditional journals.



Figure 1: Sample Purchase Access Message for Paywalled Article in Special Education Journal.

Given the importance of research and research-based publications being available to all interested parties in special education and related fields (e.g., teachers, related service providers, administrators, instructional coaches, policymakers, family members), it is not surprising that many funding agencies require that articles based on federally funded research in the United States be published openly (e.g., White House Office of Science and Technology Policy, 2022). Fortunately, authors have many options to make their scholarship freely available to everyone with internet access, some that come with a financial cost to authors (e.g., gold and hybrid open-access [OA] publishing) and some that do not (e.g., green OA publishing or self-archiving). The purpose of this paper is to describe and provide guidance for scholars in special education and related fields on making their publications openly available, with an emphasis on approaches without

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financial cost to authors. In the following sections, we describe problems associated with paywalls, benefits of OA publishing, and different types of OA publishing; make recommendations for effective self-archiving; and discuss our own experiences with OA publishing. In doing so, we aim to facilitate OA publishing and make more peer-reviewed scholarship in special education and related fields openly available.

THE PROBLEM OF PAYWALLS AND THE PROMISE OF OPEN-ACCESS PUBLISHING

Limited access to peer-reviewed literature slows scientific progress (Adelson et al., 2019) and perpetuates the ongoing research-to-practice gap in special education and related fields (e.g., Cook et al., 2024). Simply stated, the special education community cannot base practice and policy on research without full access to publications reporting research findings, synthesizing research findings, and providing guidance on implementing research-based practices. Indeed, the current situation of limited and uneven access to publications is an issue of equity that violates Merton's (1973) norm of communalism, which suggests that scientific findings should be shared freely. Unfortunately, the cost of accessing published articles behind paywalls is not trivial. For example, a teacher would have to pay \$35 to access a paywalled article in the current issue of *Teaching Exceptional Children*, generally regarded as the flagship practitioner-focused journal in the field, for 24 hours. Paywalling articles limits the scope of sources from which many practitioners can draw to inform decisions, forcing them to rely instead on the interpretations of those with access to the published research base via low-cost outlets (e.g., podcasts, social media, blog posts). For special educators and other practitioners (e.g., speech-language pathologists, occupational therapists) trying to stay current on research in multiple areas related to their work, the cost of accessing relevant journal articles quickly becomes prohibitive.

Open science (also referred to as open scholarship or open research) is a set of practices aiming to facilitate the transparency and accessibility of research processes and outputs (see Cook et al., 2018; Crüwell et al., 2019; Kalandadze & Hart, 2022; van Dijk et al., 2021 for overviews). Given that research directly informs both practice and policy in special education and related fields, applying open-science practices will arguably benefit not only the research base, but also relevant practice and policy (see Cook et al., 2022 for a how-to guide for open-science practices). One open-science practice is OA publishing, which refers to unrestricted and free availability of research outputs (Chan et al., 2002; Crüwell et al., 2019). OA publishing aims to remove barriers to accessing research and other types of scholarship (e.g., commentaries, practitioner-focused articles). A fundamental benefit of OA is the democratization of research findings (Fleming et al., 2021). Open access is in part an equity issue; OA publishing allows researchers and practitioners, regardless of their country of residence, career status, or institutional affiliation, to access, read, reuse, and build on scholarly publications as long as they have internet access (e.g., Huang et al., 2024; Young & Brandes, 2020). OA publishing can, therefore, heighten the impact of research and contribute to bridging the gap between research and practice, an urgent need in special education and related fields.

OA publishing can increase the impact of research for reasons beyond providing access to all interested parties. For one, the time between submission and publication of a paper can be lengthy in traditional journals (Bourne et al., 2017). Posting papers on public archives, institutional repositories (IRs), or personal websites, in contrast, allows researchers to disseminate their work as soon as it is completed. Although preprints should be consumed cautiously because they typically have not undergone peer review, making research available as rapidly as possible can have important benefits (Watson, 2022). Another advantage of posting preprints is that scholars can receive feedback on their papers prior to publication (Tennant et al., 2016). Readers can identify and point out potential errors and make other suggestions for improving a paper before it is submitted for publication, potentially leading to collaboration between researchers through commenting on each other's work (Fleming & Cook, 2022; Pennington, 2023). Additionally, OA publishing is associated

with increased metrics of scholarly impact (e.g., number of citations, downloads, and social media attention to articles) often used to evaluate scholars and scholarship (Fu & Hughey, 2019; Piwowar et al., 2018). Finally, OA publishing can help reduce publication bias by allowing researchers to share research that might otherwise be difficult to publish because of null and negative findings (Pennington, 2023). This point is important for special education and related fields, as the scarcity of null and negative results in the published literature can result in skewed knowledge bases and inaccurate perceptions of the effects of interventions (Cook & Therrien, 2017). Although OA publishing is not a panacea, it can contribute to bridging the research-to-practice gap through greater, more equitable access to scientific evidence.

TYPES OF OPEN-ACCESS PUBLISHING

Authors have many options for publishing OA to provide free access to their scholarly work. These options can be categorized as (a) diamond, (b) gold, (c) hybrid, (d) bronze, and (e) green (i.e., self-archiving) OA (Fleming & Cook, 2022; see Table 1 for a summary of these models). In diamond OA (sometimes called platinum OA), all articles in the journal are freely available at no cost to the author, often through support from institutions, governments, or private individuals or groups (Kelly, 2013; Normand, 2018). Articles published using diamond OA undergo the typical peer-review process and then are made freely available. Because diamond OA requires some support to cover production costs, journals published by for-profit publishing houses are unlikely to adopt the model. Diamond OA journals are just beginning to emerge in special education and related fields and include *Journal of Special Education Preparation, Teaching and Learning in Communication Sciences & Disorders, Journal of Critical Study of Communication & Disability, Single Case in the Social Sciences*, and the journal publishing this paper: *Research in Special Education*. We recommend diamond journals to authors who wish to make their publications freely available when their papers align with their aims and scopes.

OA MODEL	DESCRIPTION	PEER REVIEWED	FEES (APC)	OA LICENSE	LOCATION	VERSION OF PAPER
Diamond	Free access to all articles in journal without cost to authors or readers	Yes	No	Yes	Journal	Published
Gold	Free access to all articles in journal with cost to author	Yes	Yes	Yes	Journal	Published
Hybrid	Mix of subscription and OA articles with cost to readers (subscription) or authors (OA)	Yes	Yes	Yes	Journal	Published
Bronze	Free access to article without OA license, may be paywalled at any time	Yes	No	No	Journal	Published
Green: Preprint	Free access to the author's version of the manuscript; not peer reviewed	No	No	Yes	Public archive, IR, Personal website	Author- formatted
Green: Postprint	Free access to the author's version of the manuscript; peer reviewed.	Yes	No	Yes	Public archive, IR, Personal website	Author- formatted

Table 1: Open Access Publishing Models.

Note. APC = Article processing charge. OA = Open access. IR = Institutional repository.

Gold and hybrid OA require authors to pay an article processing charge (APC) to the publisher to publish in the journal. In gold journals, all articles in the journal are OA. APCs vary per journal, with a global average of about \$1,600 (Morrison et al., 2022). In exchange for this fee, an article becomes publicly available on the internet (El Amin et al., 2023). *AERA Open* and the *Australasian Journal of Special and Inclusive Education* are examples of gold journals in special

education and related fields. Hybrid OA refers to journals that publish both paywalled, or closed, articles and open articles. Authors have a choice between publishing their article without any cost to them (that is then behind a paywall) or paying an APC to make the article freely available. Similar to APCs for gold OA, these charges vary per journal and can cost authors several thousands of dollars. Most journals published by major publishers in special education and related fields (e.g., *Exceptional Children; Journal of Speech, Language, and Hearing Research; Child Development*) are hybrid and provide an option to pay an APC to make specific articles open. Although gold and hybrid OA result in open publications, paying APCs is not desirable or feasible for many authors because of the cost, particularly for early career researchers and those from institutions with fewer resources. As some institutions have begun to negotiate waivers for APCs in their contracts with publishers (i.e., researchers employed at the university do not have to pay an APC to make articles OA in that publisher's journals) and offer internal grants that can be applied to APCs, we encourage researchers to investigate their institutional resources for covering APCs.

Bronze OA refers to journal articles made available on publishers' websites but are not openly licensed for reuse (Brock, 2018). Publishers can choose to lift paywalls for any article and may do so for various reasons (e.g., as a service to the field, to drive traffic to a journal's website). However, authors have no way of knowing whether their article will be selected to be made open, and, because bronze OA articles are not licensed OA, publishers can place bronze OA articles behind a paywall at any time.

The last OA option is green OA, also known as self-archiving. Self-archiving is the "act of making a manuscript legally and freely available online on a lab/personal website or in a repository" (El Amin et al., 2023, p. 1929). This is a free way for authors to make their papers openly accessible without breaching copyright (Long et al., 2023). Specific requirements are dictated in publisher and/or journal policies. However, this information is not always shared clearly on journal websites, requiring authors to contact editors to request the information. If authors wish to self-archive their work, they should identify and consider these policies when selecting a journal to which they will submit their work for publication. Because (a) self-archiving involves no cost to authors, and (b) authors can self-archive any paper (so long as it is published in one of the many journals in the field that permits self-archiving), we recommend that scholars consider self-archiving their papers.

GUIDANCE FOR SELF-ARCHIVING PAPERS

In this section, we provide guidance to authors who wish to self-archive their work. We discuss the various manuscript versions that can be self-archived, several different platforms for self-archiving, how to determine when self-archiving is permitted, and recommendations for how to self-archive one's papers.

Which Version to Self-Archive

The first consideration for self-archiving is which version of the manuscript authors can share freely and legally. There are three main versions of manuscripts. The first is the author's original manuscript, which is the initial submission to a journal for peer review. When self-archived, this is referred to as a preprint. The second manuscript version is the accepted version that has fully undergone the peer-review process. When self-archived, this document is referred to as a postprint. Both preprints and postprints are author-formatted files (e.g., a PDF of the author's word-processed file). Last is the journal-formatted article, which may be referred to as the published version.

A benefit of posting a preprint is that it is available as soon as authors post it, reducing the months or sometimes years between submission and publication in a journal. However, preprints are typically not peer reviewed and may (or may not) differ substantively from the final, peer-reviewed version of a paper. Klein et al. (2019) found that the contents of over 13,000 preprints in the fields of science, technology, and medicine generally differed very little from the subsequently published articles. However, such an analysis has not yet been conducted on articles published in special education and

related fields, and it is always possible that meaningful changes to papers can occur through the peer-review process. As such, we recommend that (a) readers consume preprints cautiously and (b) authors update preprints with peer-reviewed postprints if the paper is eventually accepted for publication.

Authors should weigh the pros and cons of making their work available as soon as possible with concerns about disseminating their work prior to peer review. Availability of postprints is delayed by peer review, but they have the advantage of having incorporated feedback from peer review, being vetted by other scholars, and having the same content (with the possible exception of minor copyediting) as the published journal article. One potential disadvantage of both preprints and postprints is that they may be more difficult to find than journal articles, especially if posted on a personal website without a citable digital object identifier (DOI).

Where to Self-Archive

A second consideration is where a version of a manuscript can be shared. Journal policies will dictate whether a particular version of a manuscript can be self-archived on a public archive, an institutional repository, or a personal website. Each of these options has potential benefits and drawbacks. First, there are several public archives to choose from for self-archiving, including PsyArXiv and EdArXiv, an education-specific repository. Authors who self-archive a preprint on a public archive receive a DOI to index their work, and their paper is time-stamped on the platform (Fleming & Cook, 2022). For PsyArXiv and EdArxiv, authors can see the number of times a preprint is downloaded on the upper right-hand side of the preprint webpage. A benefit for authors sharing work on a public archive is that they can use the assigned DOI to cite their work on grant applications and/or their vitae. A potential drawback is that it requires time to create an account and upload a manuscript to the archive. However, the process is relatively straightforward and once an author creates an account, they can use it to share any future papers.

Another option is for authors to self-archive in an institutional repository (IR). IRs are digital collections that "capture and preserve the intellectual output of a single or multi-university community" (Crow, 2002, p. 2). IRs were developed to make faculty members' work accessible and have expanded to host not only journal articles, but also working papers, multimedia, conference and workshop papers, dissertations, and theses. Depending on the institution, posting work may be the responsibility of library staff or faculty themselves. Potential benefits of IRs include that they provide OA to published and unpublished work without a fee, can potentially meet funders' mandates for OA archiving for sponsored research, and may link with Google and Google Scholar to reach larger audiences (Vaughn, 2023). Drawbacks of IRs include that they are under the direct control of the author's institution (Hadad & Aharony, 2023), and the processes and benefits may vary across institutions. Authors are encouraged to seek out the processes and procedures for their institution's IR from their library staff.

Authors can also choose to self-archive on personal or institutional websites. Some authors may not have direct access to edit their individual web page maintained by their institution and may find creating their own website to be more practical for self-archiving. Websites offering personal website creation include Wix, Squarespace, Weebly, Google Sites, Owlstown, and WordPress. Although some options are free, such as Google Sites, others like Owlstown require a subscription. Authors can choose to use a domain generated by the website creator or purchase a domain on their own that may be more relevant to their research, such as their name or their lab's name. Domains can be purchased through external websites such as namecheap.com or within the website creator (e.g., Wix, Google). Benefits to self-archiving on a personal website include ease of personalizing and updating content, and ability to share other information such as an author's vitae or information about their lab. Potential drawbacks of self-archiving on a personal website include (a) availability of papers depending on one's personal website being maintained and (b) potentially having to pay to maintain the website and/or the domain.

Many authors choose to archive their work on ResearchGate, an academic social networking site that requires an institutional email address to create an account and request others' work. Researchers can upload full-text versions of papers—including

journal-formatted articles, postprints, and preprints—to their profiles to share either openly or upon request. Those outside of academia, such as practitioners and clinicians, cannot create ResearchGate accounts to request papers that are not shared openly, but can access content that researchers have uploaded to share freely on their ResearchGate profiles. It is important that authors check publisher and journal policies before uploading papers that have been published, especially published versions of journal articles, to share freely on ResearchGate to ensure compliance with copyright.

When to Self-Archive

The last consideration in self-archiving is when the identified version of the manuscript can be shared. Some publishers and journals will not publish a manuscript that has been previously posted as a preprint or postprint, whereas others may only allow for author-formatted versions of accepted papers to be posted after a period of time (Fleming & Cook, 2022). Many publishers specify an embargo period, which is a period of time after publication when the accepted manuscript cannot be self-archived and must be purchased through the publisher's website (see Moshontz et al., 2021, for embargo policies of publishers of many of the journals in special education and related fields). Embargos incentivize journal subscriptions and apply primarily to postprints because these are the final, revised, and edited versions of manuscripts after the peer-review process (Fleming & Cook, 2022). Embargo periods vary across publishers and journals, ranging from non-existent to lengthy (e.g., multiple years); Table 2 presents a brief overview of major publishers' policies regarding pre- and postprint timing. Embargos slow the research-to-practice pipeline, keeping the latest peer-reviewed research findings behind paywalls and out of the hands of many research consumers. We encourage authors to self-archive as soon as journal policy permits.

PUBLISHER	PREPRINTS	POSTPRINTS	WEBSITE
Elsevier	Anytime	After an embargo (see link in next column for embargo periods for specific journals)	https://www.elsevier.com/about/policies- and-standards/sharing
Sage	Anytime	Anytime	https://us.sagepub.com/en-us/nam/journal- author-archiving-policies-and-re-use
Springer	Anytime	Anytime or after a 12-month embargo, depending on where postprint is shared	https://www.springerpub.com/journal- article-sharing-policies
Taylor & Francis/ Routledge	Anytime	After an embargo (see https://authorservices. taylorandfrancis.com/choose-open/publishing- open-access/open-access-cost-finder/)	https://authorservices.taylorandfrancis. com/research-impact/sharing-versions-of- journal-articles/
Wiley	Anytime	After embargo of 12–24 months (see https:// authorservices.wiley.com/author-resources/Journal- Authors/open-access/author-compliance-tool.html)	https://authorservices.wiley.com/author- resources/Journal-Authors/licensing/self- archiving.html

Table 2: Publisher Policies for Posting Preprints and Postprints.

Note. Preprint refers to the original submission (i.e., before incorporating feedback from peer review. Postprint refers to the accepted manuscript, not the published article. Specific journals may have different policies. See websites for additional details.

How to Self-Archive

In this section, we provide an overview of the self-archiving process and offer recommendations for researchers interested in this practice.

Recommended Procedures for Self-Archiving

Scholars frequently post their manuscripts to a public archive while simultaneously submitting them to a scholarly journal for peer review. Even if authors do not intend to submit their work to a journal for publication, we recommend

that authors self-archive polished manuscripts (in contrast to a rough draft), given the persistence and discoverability of self-archived prints. When preparing a non-peer-reviewed manuscript for self-archiving, authors should explicitly label it as a preprint, both on the title page and within the file name (e.g., title_preprint_date), and clearly indicate that the paper has not been peer reviewed (see Figure 2 for suggested phrasing). This informs readers of the status of the manuscript, minimizing the potential for readers to mistake a preprint for a paper that has been peer reviewed.

As the manuscript undergoes peer review, authors may choose to update their preprint and adjust the description on the title page. For instance, after each round of review and corresponding revision, authors can share the updated manuscript and identify its status (e.g., "not accepted for publication, revised after one round of peer review"). More importantly, once published, authors should promptly update the preprint with the accepted version of the paper (i.e., postprint), clearly identifying its status on the title page and in the file name (e.g., title_acceptedversion_date), providing the reference and DOI of the published paper (as soon as it is available), and directing others to only cite the published version (see Figure 2). Note that posting the revised and accepted manuscript is only recommended when journal policies allow immediate postprinting. As always, researchers are encouraged to check journal policies to ensure adherence.

Once a manuscript is ready to be posted to an archive, repository, or website, the lead authors should obtain permission from co-authors and select a copyright license. Creative Commons (CC) licenses identify the paper as open and clarify how authors permit the paper and its contents to be re-used (e.g., re-use a table or figure, quote extensively from the paper). Scholars often use the CC Attribution license (CC BY), which allows others to re-use a paper and its contents but requires them to give appropriate credit (e.g., reference the work and authors) when doing so, when self-archiving. Other licenses allow authors to restrict reuse to non-commercial purposes and to not allow modifying the work when being reused. In some instances, publishers may recommend or require a specific CC license. We recommend reviewing journal and publisher requirements before sharing manuscripts and consulting with librarians or others with copyright expertise. See "About CC Licenses" (n.d.) for more information about CC licenses. To ensure visibility, researchers should specify the chosen license on the title page of self-archived papers (see Figure 2), as research consumers may access the print directly from search engines, bypassing the public archive or IR websites that may contain licensing information. We recommend posting self-archived papers to a single repository or website to avoid confusion. Multiple DOIs of one paper may cause challenges for others when citing the work.

Recommended language for preprints:

This manuscript is a preprint and has not been peer-reviewed. It is licensed under a Creative Commons

license [license type].

Recommended language for postprints:

This is the peer-reviewed, accepted version of an article published by [publisher] in [journal], © [year],

[volume (issue)], [page range]. It is available online at [DOI] and is made available here in accordance

with guidelines set by [publisher]. This paper is licensed under a Creative Commons license [license

type]. Please use the following citation when referencing this work: [APA Citation of published article]

Considerations and Potential Concerns in Self-Archiving

As researchers work through the process of self-archiving, considerations and concerns may arise. For example, researchers may be apprehensive that posting a preprint may result in journals not accepting it for peer review. However, most journals in special education and related fields allow self-archiving preprints and have developed policies for researchers to follow when doing so. We encourage researchers interested in self-archiving to ascertain and consider journal policies prior to submitting a paper for publication. Authors can consult Sherpa Services (n.d.), a database of journal policies regarding self-archival of manuscripts, or identify journal and publisher policies online. If authors do not find clear information regarding journal policies on self-archiving, we suggest (a) communicating directly with editors and (b) discussing questions and problem-solving with colleagues who have self-archived work submitted to journals of interest.

Another concern may be the potential of self-archiving preprints to compromise or impede the peer-review process. That is, most journals in special education and related fields use double-masked peer review, in which authors and reviewers do not know each other's identities. Self-archiving a preprint of a paper submitted for peer review makes authors potentially identifiable. Researchers wanting to submit self-archived papers for peer review can self-archive a de-identified manuscript without author names or affiliations on public archives such as the Open Science Framework that provide this option. Authors can then update their print with identifying information when the paper is accepted. Ultimately, it is possible for peer reviewers to identify authors of many masked papers through various means (e.g., searching the internet for conference presentations with similar titles), regardless of whether a preprint is posted. Masked peer review assumes that peer reviewers do not seek out author identifies of papers they are reviewing, which includes not actively searching archives, IRs, and personal websites where preprints may be posted.

As with all research activities, researchers may wonder about the cost, including time, related to self-archiving. Although gold and hybrid OA publishing can incur significant financial costs to authors, self-archiving is a free approach for increasing access to one's work. Public archives and IRs typically do not require fees for posting research-related materials. Although self-archiving is generally not a time-consuming process, it does involve learning the steps of the self-archiving process, uploading a manuscript, and potentially updating versions of the paper as described in the overview of procedures presented previously.

In addition, authors may not perceive a clear benefit of self-archiving for career advancement. As preprints are not peerreviewed and postprints are simply freely available versions of papers that are already published in journals, self-archiving may not be seen as advancing one's case for tenure and promotion. However, there is evidence that publications with free, self-archived versions available are cited more often than publications behind paywalls without a self-archived version available (Piwowar et al., 2018), presumably because more authors who might cite the paper have access to self-archived papers. So, self-archiving may lead to greater citations, a metric typically valued by tenure and promotion committees. Scholars can also make the case to promotion and tenure committees that self-archiving enhances potential real-world impact of scholarship by enabling practitioners and policy-makers to access the paper, pointing to the number of downloads of the paper as tracked by the public archive, IR, or personal website.

Another consideration for scholars interested in self-archiving may be how to best support students and other mentees in this process while learning it themselves. Kathawalla and colleagues (2021) provide a comprehensive guide for graduate students to incorporate open-science practices into their repertoire, including specific guidance for mentors. The authors note that self-archiving may be a good first step for graduate students and their advisors to explore open-science practices, as it is low in cost and presents few additional steps beyond those with which most scholars are already familiar. Mentors and mentees may consider working collaboratively through the procedures for self-archiving outlined in Figure 3 to ensure that all issues are considered and addressed.



Figure 3: Self-Archiving Procedures.

PERSONAL EXPERIENCES AND PERSPECTIVES WITH OPEN-ACCESS PUBLISHING

In this section, we provide some personal examples of the ways we incorporate OA publishing into our respective workflows. We also discuss some ways that our team members have benefitted from participating in the OA publishing process at various points throughout our academic careers.

My (Esther Lindström) experience with self-archiving began with trying to post a preprint of a dissertation-related manuscript on EdArXiv, only to learn that it was a postprint, because it had recently been accepted for publication. In the time since, I have become much more familiar with OA publishing, in part through a formal career development plan to develop my skills in open-science practices, as outlined in my ongoing early career grant funded by the Institute of Education Sciences, National Center for Special Education Research. This formal aim has pushed me to continue to build my knowledge in this area through consulting with colleagues and attending open science-focused "unconferences" and webinars. In this process, self-archiving my work has become a more regular part of my pre-publication downloads of my work, posting to EdArXiv and sharing preprints on social media has expanded my community of researchers and practitioners with similar interests beyond the physical spaces of my institution and academic conferences. Furthermore, linking preprints in my vitae has been advantageous for grant applications, annual faculty reviews, and other evaluations of my work.

Although I (Jesse Fleming) was apprehensive about posting my first preprint online, I quickly learned there are many benefits to self-archiving manuscripts-especially for early-career researchers. Self-archiving manuscripts increases accessibility and makes it easier to share my work with others. For example, I now link preprinted studies into my

conference presentations and posters, enabling others to access the manuscript. I also include links to preprints on my CV and email signature for easy access. This was especially helpful when I finished my Ph.D. program and entered the job market. Despite much of my independent or first-authored research being under review at the time, search committees could read and evaluate my work because it was publicly available on a public archive. Self-archiving also helps me to promote my work. I often share my preprints on social media and professional networking sites to increase visibility and impact. These online prints can be cited and downloaded before formal publication in a journal.

I (Danika Pfeiffer), also an early-career researcher, self-archive my work on my own website that I created for free using Google Sites. This allows both researchers and clinicians to access my work without paying for it. This is particularly important in the field of speech-language pathology, where many clinicians face paywalls when trying to access the latest research to inform their clinical practice. Self-archiving my work on my own website was especially helpful when I was on the job market, because I could provide one link for my vitae and all my publications. As an assistant professor, I now also provide additional open materials on the website that others might find helpful, such as applications to professional programs I've been accepted to and funded grant applications. In addition, I also have started uploading preprints on a public archive and have recently started a new collaboration by reading a preprint on a topic in my research area and contacting the authors. In the preprint, the authors mentioned interest in conducting a qualitative follow-up study, and qualitative analysis is my area of expertise. I emailed the authors asking about a potential collaboration and we are now working on several manuscripts together. It has been a great way to expand my professional network, and I'm grateful for the opportunity to collaborate on such meaningful work.

I (Tamara Kalandadze), a Norway-based middle career researcher, self-archived a postprint of one of my paywalled articles several years ago, while I was doing my PhD, and the advantages of making that article OA (e.g., all colleagues and students having access to the peer-reviewed paper) were clear to me. Since then, I've self-archived postprints of all my articles and book chapters that could be legally shared. I've seen many benefits of making my work freely accessible to everyone. For example, many of our masters students in special education combine their studies with work and, as discussed earlier in the paper, they need access to the evidence they can base their practices on. In Norway, self-archiving postprints in an IR is done through university libraries. Researchers need to first upload the article we want to self-archive at CRIStin, a national register for scientific publications, then a librarian needs to approve that the article can be shared. Depending on my affiliation, I've self-archived my work in two different repositories, DUO and Brage, as several Norwegian universities currently have their own archives/repositories. A new IR that all Norwegian universities will use will be made available soon. I look forward to this because having one system will make archived scientific work easy to access. As for preprints, I usually publish them on a public archive like PsyArXiv at the same time I submit them to a journal. As already mentioned by my co-authors, preprinting articles is a great way to disseminate our work early, and we can see our papers downloaded and cited before they are published. I usually include preprints in grant applications as well and this, I hope, will be even more beneficial as the appreciation of open-science practices increases among funders.

I (Bryan Cook) have been self-archiving most of my papers on EdArXiv for a few years now. Making my work open to everyone just seemed like the right thing to do and I found that it is not that difficult. I have now begun to identify clearly what version of the paper is being posted (e.g., a preprint that has not gone through peer review, a postprint that has undergone peer review and has been accepted for publication) on the cover page, as well as update preprints to postprints when the paper is accepted for publication (and providing a citation and DOI to the published article). I've been pleased to see that most of the papers I've self-archived have been downloaded many hundred times (some >1,000 times) and imagine many of those downloads are from people who would not otherwise have access to the papers. I've also self-archived one paper that was never submitted for peer review. Adelson et al. (2019), a paper that provides recommendations for funders, professional societies, journal publishers and editors, and individual researchers

to make scholarship in special education more transparent and open, came out of a meeting of journal editors in special education. Although never submitted for publication, the print has been downloaded from EdArXiv 1,397 times and cited 22 times according to Google Scholar (as of February 20, 2025). Without self-archiving, the paper would have never been disseminated. I've also experienced how self-archiving can accelerate the pace of science. My co-authors and I have twice been contacted by colleagues who had decided to replicate our work after reading self-archived preprints (two separate studies). In both cases, teams of independent researchers were able to begin replicating our research before the study was published in print because of self-archiving.

CONCLUSION

OA publishing is one way to provide access to research to those outside of academia without journal subscriptions. Authors have many choices for publishing OA, including diamond, gold, hybrid, bronze, and green (i.e., self-archiving) OA. Self-archiving allows authors to share versions of their manuscripts in a free and legal way on public archives, IRs, and personal websites. We have provided step-by-step guidance for engaging in self-archiving with the aim of helping authors determine where, when, and how to self-archive their work as well as examples of how we have engaged in OA publishing to illustrate the self-archiving process and its benefits. We encourage authors to consider engaging in OA publishing to democratize access to the research base, which, in turn, can help reduce the research-to-practice gap.

COMPETING INTERESTS

The authors have no competing interests to declare.

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REFERENCES

About CC Licenses. (n.d.). https://creativecommons.org/share-your-work/cclicenses/

Adelson, J. L., Barton, E., Bradshaw, C., Bryant, B., Bryant, D., Cook, B. G., Coyne, M. D., deBettencourt, L., DeHaven, A. C., Dymond, S. K., Esposito, J., Farmer, T. W., Flake, J. K., Gage, N. A., Kennedy, M. J., Kern, L, Lane, K. L., Lee, D. L., Lembke, E. ... Troia, G. A. (2019, February 18). A roadmap for transparent research in special education and related disciplines. https://doi.org/10.35542/osf.io/sqfy3

- Bourne, P. E., Polka, J. K., Vale, R. D., & Kiley, R. (2017). Ten simple rules to consider regarding preprint submission. *PLoS Computational Biology*, *13*(5), e1005473. https://doi.org/10.1371/journal.pcbi.1005473
- Brock, J. (2018). Bronze open access supersedes green and gold. *Nature Index*. https://www.nature.com/nature-index/ news/bronze-open-access-supersedes-green-and-gold
- Chan, L., Cuplinskas, D., Eisen, M., Friend, F., Genova, Y., Guedon, J.C., Hagemann, M., Harnad, S., Johnson, R., Kupryte, R., La Manna, M., Rév, I., Segbert, M., de Souza, S., Suber, P. & Velterop, J. (2002, February 14). *Budapest open access initiative*. Retrieved from https://www.budapestopenaccessinitiative.org/read
- Cook, B. G., Fleming, J. I., Hart, S. A., Lane, K. L., Therrien, W. J., van Dijk, W., & Wilson, S. E. (2022). A how-to guide for open-science practices in special education research. *Remedial and Special Education*, 43(4), 270–280. https://doi.org/10.1177/07419325211019100
- Cook, B. G., Lloyd, J. W., Mellor, D., Nosek, B. A., & Therrien, W. J. (2018). Promoting open science to increase the trustworthiness of evidence in special education. *Exceptional Children*, 85(1), 104–118. https://doi. org/10.1177/0014402918793138
- Cook, B. G., McClain, S., Corr, F., Waterfield, D. A., Welker, N. P., Fleming, J. I., Wilson, S. E., & Therrien, W. J. (2024). Pushing past the paywall: Accessing open peer-reviewed research. *Teaching Exceptional Children*. Advance online publication. https://doi.org/10.1177/00400599241257436
- Cook, B. G., & Therrien, W. J. (2017). Null effects and publication bias in special education research. *Behavioral Disorders*, 42(4), 149–158. https://doi.org/10.1177/0198742917709473
- Crow, R. (2002). *The case for institutional repositories: A SPARC position paper*. The Scholarly Publishing and Academic Resources Coalition. https://www.arl.org/sparc/IR.ir.html
- Crüwell, S., van Doorn, J., Etz, A., Makel, M. C., Moshontz, H., Niebaum, J. C., Orben, A., Parsons, S., & Schulte-Mecklenbeck, M. (2019). Seven easy steps to open science: An annotated reading list. *Zeitschrift für Psychologie*, 227(4), 237–248. https://doi.org/10.1027/2151-2604/a000387
- El Amin, M., Borders, J. C., Long, H. L., Keller, M. A., & Kearney, E. (2023). Open science practices in communication sciences and disorders: A survey. *Journal of Speech, Language, and Hearing Research*, 66(6), 1928– 1947. https://doi.org/10.1044/2022_JSLHR-22-00062
- Fleming, J. I., & Cook, B. G. (2022). Open access in special education: A review of journal and publisher policies. *Remedial and Special Education*, 43(1), 3–14. https://doi.org/10.1177/0741932521996461
- Fleming, J. I., Wilson, S. E., Hart, S. A., Therrien, W. J., & Cook, B. G. (2021). Open accessibility in education research: Enhancing the credibility, equity, impact, and efficiency of research. *Educational Psychologist*, 56(2), 110– 121. https://doi.org/10.1080/00461520.2021.1897593
- Fu, D.Y & Hughey, J.J. (2019). Meta-research: Releasing a preprint is associated with more attention and citations for the peer-reviewed article. *eLife*, 8, e52646. https://doi.org/10.7554/eLife.52646
- Hadad, S., & Aharony, N. (2023). Researchers' perceptions, patterns, motives, and challenges in self-archiving as a function of the discipline. *Journal of Librarianship and Information Science*, 09610006221146768. https://doi. org/10.1177/0961000622114678
- Huang, C. K., Neylon, C., Montgomery, L., Hosking, R., Diprose, J. P., Handcock, R. N., & Wilson, K. (2024). Open access research outputs receive more diverse citations. *Scientometrics*, 129, 825–845. https://doi. org/10.1007/s11192-023-04894-0
- Kalandadze, T., & Hart, S. A. (2022). Open developmental science: An overview and annotated reading list. *Infant* and Child Development, e2334. https://doi.org/10.1002/icd.2334
- Kathawalla, U. K., Silverstein, P., & Syed, M. (2021). Easing into open science: A guide for graduate students and their advisors. *Collabra: Psychology*, 7(1), 18684. https://doi.org/10.1525/collabra.18684

- Kelly, J. M. (2013). Green, gold, and diamond?: A short primer on open access. Jason M. Kelly: Publications, Research, Projects, and Teaching. https://jasonmkelly.com/2013/01/27/green-gold-and-diamond-a-short-primer-on-open-access/
- Klein, M., Broadwell, P., Farb, S. E., & Grappone, T. (2019). Comparing published scientific journal articles to their pre-print versions. *International Journal on Digital Libraries*, 20(4), 335–350. https://doi.org/10.1007/s00799-018-0234-1
- Long, H. L., Drown, L., & El Amin, M. (2023). The effect of open access on scholarly and societal metrics of impact in the ASHA journals. *Journal of Speech, Language, and Hearing Research, 66*(6), 1948–1957. https://doi. org/10.1044/2022_JSLHR-22-00315
- Merton, R. K. (1973). The normative structure of science. In Storer N. W. (Ed.), *The sociology of science: Theoretical and empirical investigations* (pp. 267–280). University of Chicago Press.
- Morrison, H., Borges, L., Zhao, X., Kakou, T. L., & Shanbhoug, A. N. (2022). Change and growth in open access journal publishing and charging trends 2011–2021. *Journal of the Association for Information Science and Technology*, 73(12), 1793–1805. https://doi.org/10.1002/asi.24717
- Moshontz, H., Binion, G., Walton, H., Brown, B. T., & Syed, M. (2021). A guide to posting and managing preprints. *Advances in Methods and Practices in Psychological Science*, 4(2). https://doi.org/10.1177/25152459211019948
- Normand, S. (2018). Is diamond open access the future of open access? *The iJournal: Student Journal of the University* of *Toronto's Faculty of Information*, 3(2), 1-7.
- Odom, S. L., Hall, L. J., & Steinbrenner, J. R. (2020). Implementation science research and special education. *Exceptional Children*, 86(2), 117–119. https://doi.org/10.1177/0014402919889888
- Pennington, C. (2023). A student's guide to open science: Using the replication crisis to reform psychology. Open University Press.
- Piwowar, H., Priem, J., Larivière, V., Alperin, J. P., Matthias, L., Norlander, B., Farley, A., West, J., & Haustein, S. (2018). The state of OA: A large-scale analysis of the prevalence and impact of open access articles. *PeerJ*, 6, e4375. https://doi.org/10.7717/peerj.4375

Sherpa Services. (n.d.). http://sherpa.a c.uk/romeo

- Tennant, J. P., Waldner, F., Jacques, D. C., Masuzzo, P., Collister, L. B., & Hartgerink, C. H. (2016). The academic, economic and societal impacts of Open Access: An evidence-based review. *F1000Research*, 5, 632. https://doi. org/10.12688/f1000research.8460.3
- van Dijk, W., Schatschneider, C., & Hart, S. A. (2021). Open science in education sciences. *Journal of Learning Disabilities*, 54(2), 139–152. https://doi.org/10.1177/0022219420945267
- Vaughn, K. (2023). *Institutional repository: ODU digital commons*. Old Dominion University Libraries. https://guides. lib.odu.edu/ir
- Watson, C. (2022). Rise of the preprint: how rapid data sharing during COVID-19 has changed science forever. *Nature Medicine*, *28*(1), 2–5. https://doi.org/10.1038/s41591-021-01654-6
- White House Office of Science and Technology Policy. (2022, August 25). Memorandum for the head of the executive departments and agencies. https://www.whitehouse.gov/wp-content/uploads/2022/08/08-2022-OSTP-Public-Access-Memo.pdf
- Young, J. S., & Brandes, P. M. (2020). Green and gold open access citation and interdisciplinary advantage: A bibliometric study of two science journals. *The Journal of Academic Librarianship*, 46(2), 102105. https://doi. org/10.1016/j.acalib.2019.102105

