ble-blind reviews. Louise thinks we're moving into a direction where it's actually beneficial for an author to know who is reviewing their paper and for the reviewer to know their review will be public. An open-review process can also ensure everyone gets credit; right now, credit is limited to the publisher and author.

Louise says research with negative outcomes is almost as important as positive results. If journals published more research with negative outcomes, we'd learn from what didn't work. It could also reduce how much the research wheel gets reinvented around the world.

Another adjustable practice is the sharing of articles at early preprint stages. Publication of research in a peer-reviewed journal can take a long time because articles must undergo extensive peer review. The need to quickly circulate current results within a scientific community has led to a practice of distributing pre-print documents that have not yet undergone peer review. Preprints broaden the peer-review process, allowing authors to receive early feedback from a wide group of peers, which can help revise and prepare the article for submission. Offsetting the advantages of preprints are author concerns over ensuring their primacy of being first to come up with findings based on their research. Other researches may see findings the preprint author has not yet thought of. However, preprints help researchers get their discoveries out early and establish precedence. A big challenge is that researchers don't have a lot of time to comment on preprints.

What constitutes a journal article could also change. The idea of a research article as printed, bound, and in a library stack is outdated. Digital and online open up new possibilities, such as a living document evolving over time, inclusion of audio and video, and interactivity, like discussion and recommendations. Even the size of what gets published could change. With these changes the current form factor for what constitutes a research article would undergo transformation.

As journals scale up, and new journals are introduced, more and more information is being pushed out to readers, making the experience feel like drinking from a fire hose. To help mitigate this, PLOS aggregates and curates content from PLOS journals and their network of blogs.[1] It also offers something called Article-Level Metrics, which helps users assess research most relevant to the field itself, based on indicators like usage, citations, social bookmarking and dissemination activity, media and blog coverage, discussions, and ratings.[2] Louise believes that the journal model could evolve to provide a more friendly and interactive user experience, including a way for readers to communicate with authors.

The big picture for PLOS going forward is to combine and adjust these experimental practices in ways that continue to improve accessibility and dissemination of research, while ensuring its integrity and reliability. The ways they interlink are complex. The process of change and adjustment is not linear. PLOS sees itself as a very flexible publisher interested in exploring all the permutations research-publishing can take, with authors and readers who are open to experimentation.

For PLOS, success is not about revenue. Success is about proving that scientific research can be communicated rapidly and economically at scale, for the benefit of researchers and society. The CC BY license makes it possible for PLOS to publish in a way that is unfettered, open, and fast, while ensuring that the authors get credit for their work. More than two million scientists, scholars, and clinicians visit PLOS every month, with more than 135,000 quality articles to peruse for free.

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1 collections.plos.org
2 plos.org/article-level-metrics