Improving public peer review accessibility and reuse

Europe PMC perspective

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Public peer review landscape

Growth in open peer review materials

Peer reviews were added as a Crossref content type in Nov 2017. As of Apr 2022 there are ~250,000 peer reviews registered with Crossref DOIs. The majority of peer review providers* are publishers, many of whom use the Publons peer review platform.

Ways to share peer review materials

There are a variety of ways publishers are exposing journal article peer reviews (see below)*. Additionally, there is a great diversity in approaches even within a single route, for example using content types other than ‘peer-review’ when registering DOIs with Crossref.

Preprint peer reviews

There are at least 30 organisations** conducting peer review of preprints. These evaluations are being distributed in various ways, including as overlay journals. A little under half are included in Sciety, an aggregator of preprint peer reviews, and just over a quarter register DOIs.

What is possible

- Good quality metadata
- Common taxonomies
- Linking persistent identifiers (PIDs)
- Centralised resources
- Community buy-in

What is missing

- Consistent metadata fields cross-methods
- Complete metadata in machine readable format
- Convergence on sentiment ratings

Recommendations

- Good quality metadata
- Common taxonomies
- Linking persistent identifiers (PIDs)
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- Community buy-in

Complete machine readable metadata for peer review materials

Type
- Recommendations
- Reviews
- Comments
- Author response

Contributors
- Author/ORCID
- Institution/ROR
- Role (reviewer, author, editor)
- Journal/platform/community

Timeline
- Date of review/response
- Version applicable
- VoR publication

Sentiment
- Recommend
- Recommend with suggested revisions
- Refute/Disavowal

Centralised sources

Metadata and links to reviews available from a small set of centralised sources enables Europe PMC to retrieve the information and display it consistently across all content indexed.

How to get there

What is on the Europe PMC roadmap

- User research: what information about peer reviews do readers want to see?
- Investigate DocMaps and Sciety: what material can we retrieve and display?
- Investigate Crossref and DataCite: what metadata can we retrieve and display?

What is missing

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Recommendations

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