

WILEY

Peer review glossary

Peer review is at the heart of scholarly publishing. It ensures that manuscripts are rigorously vetted, refined, and ultimately trusted by the research community. This glossary aims to clarify the key terms and ideas that shape modern peer review — making it easier for authors, reviewers, and editors to understand the process and put best practices into action.

Core terminology of peer review

Peer review:

A process in which experts evaluate the quality and validity of a manuscript before publication, ensuring its rigor and relevance.

Peer review integrity and publication ethics:

A commitment to upholding honesty, confidentiality, and professional conduct on the part of everyone involved in the peer review process.

General terminology

Conflict of interest:

A situation where professional judgment concerning a primary interest, like research validity, may be influenced by secondary interests, such as financial gain.

Editorial decision:

Whether a manuscript has been accepted, rejected, or sent back for revision, typically determined by reviewer comments.

Decision letter:

A formal notification sent to the corresponding author.

Journal guidelines and scope of the journal:

Rules, expectations, and subject focus to inform authors and reviewers.

Editor, handling editor and editor-in-chief:

Subject matter experts who oversee submissions, select reviewers, and make final decisions.

Manuscript (editorial) feedback:

Comments and suggestions from reviewers and/or editors aimed at improving the manuscript's clarity, rigor, and quality.

Editorial board:

A team of subject matter experts with research experience that supports a journal's editorial processes.

Pre-screening:

Initial checks before formal review to ensure that a manuscript meets basic journal submission requirements for format and content.

Reviewer guidelines:

Instructions reviewers must follow when completing a review.

Reviewer invitation:

The process of selecting and inviting reviewers.

Review metrics:

Performance indicators, such as length of time to complete review and number of reviews completed.

Review process:

Steps in evaluating a paper (this includes determining if the research is a good fit for the journal).

Scientific rigor and replicability

Standards in the scientific community by which researchers ensure methods and results can be replicated and reported reliably.

Turnaround time:

The length of time it takes for a paper to go through the peer review process.



Outcomes of peer review

Acceptance:

The manuscript meets all requirements and is approved for publication.

Revision (minor or major):

Request for the author to make changes to the manuscript.

Rejection and/or manuscript transfer:

The work isn't suitable or needs major improvements beyond the journal's scope, and/or the author is offered the opportunity to transfer their manuscript to another journal for consideration.

Types of peer review

Collaborative peer review:

Refers to a broad variety of approaches in which a team of people work together to undertake the review. One format is to have two or more reviewers work together to review the paper, discuss their opinions and submit a unified report. Another approach is to have one or more reviewers collaborate with the author to improve the paper, until it reaches a publishable standard.

Fast-track review:

A peer review process conducted on an accelerated timeline to expedite publication, often used for time-sensitive research.

Open review:

A review process wherein the identities of authors and reviewers are disclosed.

Post-publication review:

Evaluation of articles that occurs after they are published. This allows for ongoing feedback and commentary from the research community.

Single, double and triple anonymized review:

Variations on hiding reviewer and author identities.

Single anonymized review:

The reviewer knows the author's identity, but the author does not know the reviewer's identity.

Double anonymized review:

Neither the reviewer nor the author knows each other's identity.

Triple anonymized review:

Neither the reviewer, the author, nor the editor knows the author's identity.

Transparent peer review:

A process by which peer reviewers' reports, authors' responses, and editors' decision letters are published alongside accepted articles. This process supports journals using single or double anonymized review and may or may not include the names of the reviewers.

Emerging trends and technologies

AI-assisted peer review and automated quality checks:

Tools that use artificial intelligence to support human judgment to identify quality and integrity issues.

Data and code review:

The process of reviewing algorithms or code to identify potential biases and ensure the integrity of computational methods used in research.

Preprint peer review:

Early critique of drafts before formal journal submission.

Conclusion

Peer review will keep evolving as new technologies and ethical guidelines emerge. But its essence remains unchanged: supporting research integrity, refining ideas, and advancing our collective knowledge — one reviewed manuscript at a time. By staying informed about these terms and practices, we can all play our part in a robust, fair, and forward-thinking scholarly community.

WILEY