

Peer Review In the AI Era

1 Initial Screening Stage

- Editors check formatting, word count, and ethical statements.
 - Some publishers use AI tools to assist with language checks, but academic value is still judged by humans.
- Tip: Do not directly use AI translation. Cover letters must be written by a human.

Peer Review In the AI Era

2 External Review Stage (Peer Review)

- Reviewers evaluate methodology, data, and ethical compliance.
- According to COPE (2023), reviewers are prohibited from inputting manuscripts into AI tools due to confidentiality.
- Tip: AI may help draft responses to reviewers, but do not directly submit AI-generated responses without revision.

Peer Review In the AI Era

3 Review Timeline & Common Decisions (Bornmann, 2011)

- Minor revision → acceptance
- Major revision → acceptance
- Reject

Peer Review In the AI Era

4 Final Editorial Decision

Editors synthesise reviewer comments and decide: accept / revise / reject.

- Increasingly, editors check whether AI usage has been transparently disclosed (ICMJE, 2023).
- Tip: Clearly disclose AI use in the “Methods” or “Acknowledgements” section.

Peer Review in the AI Era: New Opportunities & Challenges

Initial Screening

Editors may use AI for language/format checks, but scientific content is judged by humans.

3

External Review

Reviewers may not input manuscripts into AI tools (COPE, 2023) due to confidentiality.

Final Decision

Editors pay close attention to AI disclosure transparency.

Peer Review in the AI Era: New Opportunities & Challenges

Common Issues

Reasons for Desk Rejection

Heavy AI translation traces
Formatting errors
Missing ethical statements

3

Challenges in Peer Review

Reviewers suspect AI ghostwriting and request clarification.

Editorial Considerations

Academic merit
Compliance and transparency of AI disclosure

Peer Review in the AI Era: New Opportunities & Challenges

Best Practice Tips

Initial Review

- AI can be used for language checks, but:
- Must be proofread by humans
- Must be disclosed

External Review

Use AI only for drafting responses → author revises → human checks.

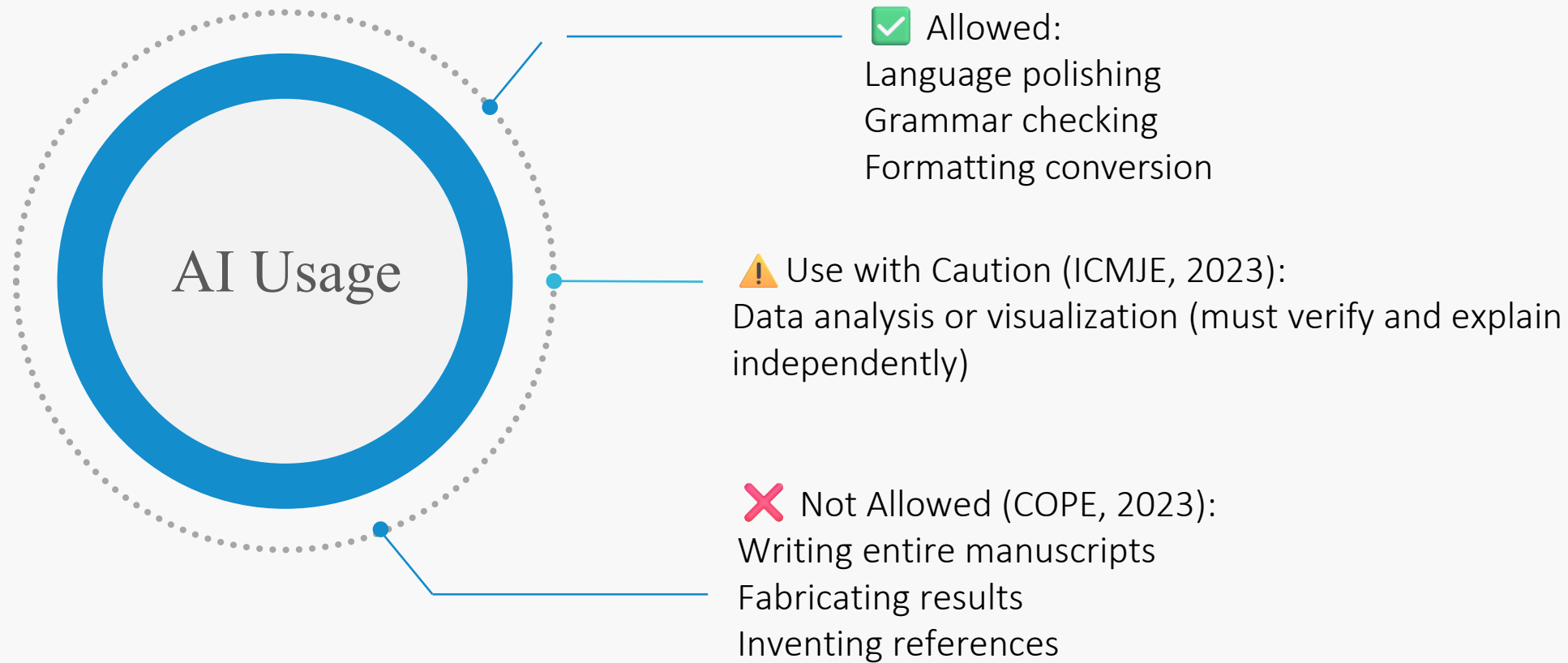
Final Review

Include an AI usage statement to increase editorial trust.

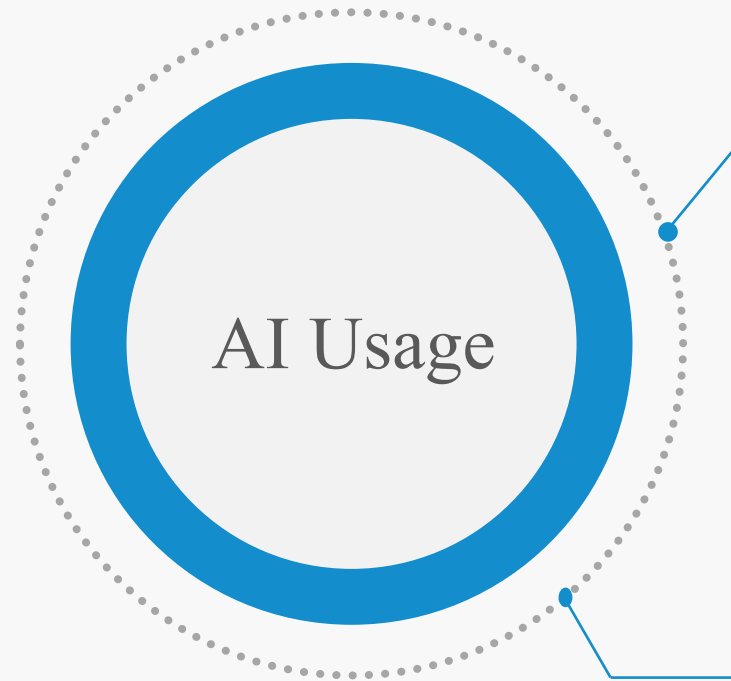
4

AI Usage Compliance Guidelines

How Authors May Use AI



AI Usage from the Reviewer's Perspective



AI Usage

Confidentiality Principle (COPE, 2023)
Manuscripts are confidential and may not be
uploaded to public AI tools.

Accountability Principle (ICMJE, 2023)
AI cannot take responsibility for review comments. Reviewers bear
full responsibility.

Publisher Policies on AI

Common requirements (Elsevier, Springer Nature, Taylor & Francis, 2023):

- AI cannot be listed as an author.
- AI use must be transparently disclosed in Methods or Acknowledgements.
- AI-generated figures/illustrations must be labeled and verified by authors.

Publisher Policies on AI

International Guidelines:

ICMJE (2023): AI has no authorship status and must be disclosed.

COPE (2023): Authors bear final responsibility; AI collaboration must not be concealed.

Case Warning:

Some papers were retracted due to fabricated references generated by AI (Day & Gastel, 2020).

AI Policies at Hong Kong Universities

Overall trend:

“Cautious permission + clear disclosure”

Common requirements:

AI may be used as assistance but must be declared.

AI is generally prohibited in exams and assessed coursework.

Students and researchers are fully responsible for AI outputs.

(HKU, 2023; CUHK, 2024; PolyU, 2024)

(HKU, 2023; CUHK, 2024; PolyU, 2024)

AI Policies at Hong Kong Universities

Example Scenarios:

✓ Acceptable:

Using AI to polish language in a research manuscript.

Disclosure example:

“Some language polishing was assisted by AI tools, with all final revisions made by the authors.”

⚠ Data Responsibility:

If AI generates statistical charts, authors must verify all data.

Errors remain the author's responsibility.

✗ Violation:

Submitting AI-generated answers in exams or assignments.

Equivalent to cheating or plagiarism.

AI Best Practice Recommendations

Transparency

Include a disclosure statement in Acknowledgements.

Human Verification

All AI-generated text and data must be manually checked.

Data Sensitivity

Do not upload unpublished data to AI platforms.

Internal Checklist

Researchers may create an “AI Usage Declaration Form” before submission.

AI Application

Scenario	Compliance	Reference
Language polishing	Allowed	Springer Nature, 2023
Logic/format checking	Caution	ICMJE, 2023
Data analysis	Caution + verify	ICMJE, 2023
Full manuscript writing	Prohibited	COPE, 2023
Reviewer using AI	Prohibited	Taylor & Francis, 2023

AI Editing vs Human Editing

Aspect	AI Editing	Human Editing
Speed	Fast	Slower but targeted
Language Level	Grammar & fluency	Academic style & discipline-specific
Accuracy	Risk of hallucinated references	Professional verification
Ethical Risk	Disclosure & plagiarism risk	Follows publishing ethics
Interaction	No contextual understanding	Interactive feedback
Best Use	Draft polishing	High-quality journal submission

领取课后习题与课件

请扫码添加客服微信



分享直播到朋友圈可获奖励



微信客服：
EVERYAUTHOR



微信搜一搜



Every Author

成功服务客户所属机构：



關注我們



EveryAuthorPub



EveryAuthor



www.everyauthorpub.com



搜索everyauthor

直播账号



EveryAuthorPub



扫一扫二维码，关注我的视频号



为什么要在学术
会议上做演讲?



学术会议生存指南

为什么要在学术会议上做演讲?

Why do We Need to Make the Conference Presentation?



**EVERY
AUTHOR**
Supporting brave
new authors

Reference

Benos, D. J., Kirk, K. L., & Hall, J. E. (2003). How to review a paper. *Advances in Physiology Education*, 27(1-4), 47–52. <https://doi.org/10.1152/advan.00057.2002>

Belcher, W. L. (2019). *Writing your journal article in twelve weeks: A guide to academic publishing success*. University of Chicago Press.

Bornmann, L. (2011). Scientific peer review. *Annual Review of Information Science and Technology*, 45(1), 197–245. <https://doi.org/10.1002/aris.2011.1440450112>

Chinese University of Hong Kong. (2024). Policy on the use of AI tools in academic work.

COPE. (2023). Ethical guidelines for the use of AI in scholarly publishing. Committee on Publication Ethics.

Day, R. A., & Gastel, B. (2020). *How to write and publish a scientific paper*. Cambridge University Press.

Reference

Hong Kong Polytechnic University. (2024). AI and academic integrity guidelines.

Elsevier. (2023). Statement on the use of generative AI in scholarly publishing. Elsevier Ltd.

ICMJE (2023). Recommendations for peer review integrity in the AI era.

Noble, W. S. (2017). Ten simple rules for writing a response to reviewers. PLoS Computational Biology, 13(10), e1005730. <https://doi.org/10.1371/journal.pcbi.1005730>

Springer Nature. (2023). Springer Nature policy on the use of AI in scientific writing. Springer Nature Publishing Group.

Reference

Taylor & Francis. (2023). Taylor & Francis position statement: Use of AI tools in writing, peer review, and publication ethics. T&F Group.

University of Hong Kong. (2023). Guidelines on the use of generative AI in teaching and learning.

Ware, M. (2008). Peer review: Benefits, perceptions and alternatives. Publishing Research Consortium. Retrieved from <https://publishingresearchconsortium.com>

Zuckerman, H., & Merton, R. K. (1971). Patterns of evaluation in science: Institutionalization, structure and functions of the referee system. *Minerva*, 9(1), 66–100. <https://doi.org/10.1007/BF01553188>

謝謝聆聽

Q & A