Guidance on the use of Artificial Intelligence (AI) in research and scholarly writing

The *Journal of Teaching and Learning for Graduate Employability (JTLGE)* supports the ethical and transparent use of artificial intelligence (AI) tools in research and scholarly writing. Our expectations align with the editorial principles outlined in Crawford et al. (2023), *Artificial Intelligence and Authorship Editor Policy: ChatGPT, Bard, Bing AI, and beyond*. [fulltext | PDF]

AI tools, including large language models (LLMs), generative text systems and automated analysis software, can provide useful support for authors. However, the use of AI in scholarly research introduces important considerations relating to authorship, transparency, academic integrity and ethics.

This statement clarifies **what forms of AI use are acceptable**, **boundary conditions**, and **how authors must acknowledge AI accurately**.

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1. Authorship

AI tools cannot be listed as authors. AI systems:

- cannot take responsibility for the integrity or accuracy of the work;
- cannot consent to authorship; and
- cannot contribute original scholarly insight.

Therefore, **non-human contributions do not constitute authorship**.

All listed authors must fully meet authorship criteria: intellectual contribution, accountability, and responsibility for all content.

These expectations are consistent with the Australian Code for the Responsible Conduct of Research and related guidance on authorship (see reference below), which emphasise accountability, intellectual contribution and responsibility for the integrity of the work.

Reference:

Authorship: A guide supporting the *Australian Code for the Responsible Conduct of Research*. National Health and Medical Research Council, Australian Research Council and Universities Australia. Commonwealth of Australia, Canberra.

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2. Acceptable use of AI

AI may be used to support scholarship in ways that **do not replace the intellectual work of the author**, including:

- improving clarity, grammar, structure or style;
- generating alternative phrasings;
- providing suggestions during concept development;
- assisting with the identification of potentially relevant literature;
- summarising author-generated notes on existing literature and suggesting additional sources for the author to review;
- offering pre-review feedback on argument coherence;
- assisting with data organisation or coding, where ethically permissible.

In these use cases, reading and synthesis remain human tasks.

These uses are consistent with the principles that AI can support authors and provide useful feedback and pre-review when used transparently and with scholarly oversight.

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3. Unacceptable use of AI

AI must **not** be used to:

- generate whole sections of text presented as original scholarly output without human authorship, verification, critical engagement and disclosure;
- fabricate references, quotes, data or examples;
- analyse or store identifiable human participant data without explicit ethics approval and participant consent;
- conduct research activities outside the approved ethics protocol;
- replace genuine scholarly engagement with literature, theory or reflexivity;
- generate figures, images, diagrams or tables that present novel analytical interpretations or empirical findings without clear human authorship, verification and disclosure.

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4. Transparency and required acknowledgement

Transparency is **mandatory**. Authors must disclose *all* use of AI tools, including:

- the **name**, **version** of the AI system used;
- the **specific purpose** (e.g., editing, coding assistance, summarising inputs);

- **how the authors verified** AI-generated material (including checking accuracy, sources, and references).

AI-generated references and citations that are inaccurate, incomplete or fabricated constitute a breach of academic integrity, even where AI use has been disclosed.

Authors are responsible for ensuring that **every cited source exists, is correctly attributed, and has been personally consulted by the authors**, regardless of whether AI tools were used.

Authors must clearly disclose all use of AI tools in two places:
(1) in the Acknowledgements on the Title Page, and
(2) within the manuscript itself, where relevant (for example, in the Methods, Introduction or another appropriate section).

Failure to disclose AI use in the required locations may constitute a breach of academic integrity.

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5. Ethical use of AI

Use of AI in data collection, analysis or literature processing must comply with recognised ethical principles (ARC, Australian Code for the Responsible Conduct of Research, 2018), including:

- transparency;
- rigour;
- participant protection;
- Conflict of interest disclosure;
- secure handling of sensitive data;
- adherence to the approved ethics protocol.

If AI tools store data on third-party servers (e.g., ChatGPT), authors **must disclose this to participants** and ensure consent covers such processing.

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6. Where disclosures must appear

Depending on how AI was used:

(a) In the Acknowledgements section

For light touch uses such as language editing, idea generation, summarisation support.

(b) In the Methods section

For uses that contributed to data collection, organisation, analysis, coding or systematic searching.

(c) In the Introduction or relevant section

For article types without a methods section (e.g., practitioner reflections, conceptual pieces).

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7. Examples of acceptable acknowledgement statements

Example 1 – Language editing and clarity

"ChatGPT (OpenAI, GPT-4, accessed [date, month year]) was used to improve wording and sentence structure in early drafts. All revisions were critically reviewed and verified by the authors."

Example 2 – Pre-review feedback

"We used Microsoft Copilot (GPT4.1, accessed [date, month year]) to generate suggestions for improving argument clarity. These suggestions informed subsequent human-authored revisions."

Example 3 – Literature summarisation assistance

"Perplexity.ai (model pplx-70B, [date, month year]) was used to generate preliminary summaries of key papers. The authors independently verified all literature and wrote all analytic text."

Example 4 – Data organisation support

"NVivo AI Assist (Version XX, accessed [date, month year]) was used for preliminary automated coding of de-identified interview data. Final coding and interpretation were conducted by the authors."

Example 5 – Declaring no use of AI

"No AI tools were used in the preparation, writing or analysis of this manuscript."

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8. Editorial screening and compliance

During peer review, editors may request:

- further detail about how AI was used;
- clarification of ethical approvals;

- verification that authors reviewed and validated all AI output.

Submissions found to contain **undisclosed, unverified or unethical AI use** may be rejected.

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9. Summary for authors

JTLGE AI use requirements

- AI **cannot** be an author.
- AI may **support** (not replace) scholarly thinking, writing, or analysis.
- **Full transparency** of AI use is required in acknowledgements or methods.
- Authors must **independently verify all AI-generated material** for accuracy, coherence and scholarly integrity, including text, summaries, paraphrasing, analytic suggestions, images, diagrams, figures, tables or other visual or structural outputs.
- Authors must **independently verify all references and citations**, including confirming that sources exist, are correctly attributed and have been personally consulted by the authors, particularly where AI tools have been used for drafting, summarisation or literature identification.
- Research using AI must have appropriate ethical approval.
- Undisclosed or inappropriate AI use may result in rejection.

Submission of a manuscript to JTLGE indicates that all authors accept full responsibility for the accuracy, originality and integrity of the work, including all references and disclosures related to AI use.