## *Article type (Research, Perspective, Teaching Tools)*

Article Title

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1 Department, Institution, Country  
2 Department, Institution, Country

3 Department, Institution, Country

4 Department, Institution, Country  
   
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**Abstract english:** Insert abstract text here. All contributions must include an English language abstract (up to 300 words), in addtion to an abstract in the language of the article if this is Norwegian, Swedish or Danish (up to 300 words). Authors can also choose to include an abstract in any Nordic language (up to 300 words).

**Abstract other language:** Sett inn samandraget her. Alle bidrag må ha eit samandrag på engelsk (høgst 300 ord), i tillegg til eit samandrag på språket artikkelen er skriven på dersom dette er norsk, svensk eller dansk. Dersom forfattarane ønskjer kan dei òg inkludere eit samandrag på eit anna nordisk språk.

Keywords:

word1, word2, word3, word4, word5 (3-5 keywords are recommended)

# Section heading

## Sub-section heading

### Third Section heading

# About the journal

## Article template

The section headings have three levels (style Heading 1, Heading 2, and Heading 3). The main text (style Normal) is in the font Aptos, size 12, and has a line spacing of 1. The main text is block adjusted. The main text (style Normal) is in the font Aptos, size 12, and has a line spacing of 1. The main text (style Normal) is in the font Aptos, size 12, and has a line spacing of 1.

A new paragraph has an indent of 0.5.

Table and Figure captions have font Aptos, size 12, *italic* (style Table & Figure description), with ***Table*** and ***Figure*** in bold. All figures and tables should be numbered, and referenced in the text (Figure X, Table Y). We recommend font Aptos, size 11, left aligned, for text in tables (see Table 1).

### Text structure and word limit

The Nordic Journal of STEM Education mainly publishes **Research articles** (ideally up to 6000 words, however longer papers may be considered if warranted by interest and quality of the contribution), but we will also consider **Perspective articles** (up to 3000 words), and **Teaching tools** (up to 2500 words). See author guidelines for more information about the article types.

# Article types

## Research article

**Research articles** can follow the authors’ desired format, but modified IMRAD (in which the Discussion clearly articulates implications for Nordic STEM higher education) is recommended. Suggested word limit: 6000, but longer contributions may be considered.

Specifically, these contributions should include, and will be reviewed based on:

* An evidence-based, theoretically grounded rationale for the work described
* A clear research question or testable hypothesis
* Sound methodology that can be replicated based on the information provided
* Data that align with the stated question or hypothesis
* Conclusions that are justified based on the data presented
* Findings that advance our understanding of teaching and learning in Nordic STEM higher education

## Perspective article

**Perspective articles** areopen format, but should clearly articulate a current challenge or emerging issue relevant to Nordic STEM higher education. These contributions can be categorized as opinion pieces, calls to action, summaries of recent developments in the field, or book reviews. The authors should use enough citations to provide relevant context, but ideally the literature cited would be limited to 20 sources. Suggested word limit: 3000.

## Teaching tools

**Teaching Tools articles** are open format, but should briefly state a challenge for educators, offer a solution (e.g., specific teaching activity or innovation) that has been tested by the author(s), and provide some evidence of effectiveness or critical analysis. Key to these contributions is their immediate utility to educators, thus the authors should provide sufficient information and resources to allow others to try the recommended activity themselves. Literature cited should be carefully chosen and limited to approximately 20 sources. Suggested word limit: 3000.

## Assessment rubrics

All assessment rubrics can be found on the journal web page. Table 1 shows and example of a table format, with the rubrics for assessing the quality of a research paper contribution.

Table 1. Rubrics for assessing the quality of the research paper contribution

|  |  |  |  |
| --- | --- | --- | --- |
|  | Insufficient | Good | Excellent |
| Aim and problem | The contribution is insufficiently motivated and the question or problem formulation is incomplete or missing. | The question or problem is clearly formulated and the contribution is reasonably contextualised. | The question or problem formulation is clearly articulated and the contextualisation is relevant. The contribution has the potential to stimulate pedagogical discussion or development in higher education. |
| Scholarly contextualisation | The connection to proven experience or research is missing or vague. | The contribution is connected to research or proven experience. | The contribution is explicitly situated and supported in relevant research or proven experience via clear reference to theories, approaches, and communities. |
| Method | Methods or approaches are not sufficiently accounted for or are not appropriate to the research question or target group. | The contribution describes appropriate methods and approaches but lack sufficient information to be replicable. | Methods or approaches are described and motivated relative to the question or problem formulation of the contribution. Methods are replicable. |
| Findings | The accounts of results and data are  missing or critically insufficient. | Results and data are accounted for in relation to the question or problem formulation. | Results and analyses of data are related to and develop the aim, the question or problem formulation, the methods, as well as the research and experience. |
| Discussion and reflection | The results or experiences are not analysed or discussed in relation to the question or problem formulation. | The contribution contains discussion or reflection relative to the question or problem formulation. | Results and experiences are discussed in relation to the question or problem formulation. Critical connections or recommendations for future study are developed. The discussion contributes to a broader understanding of teaching and learning in Nordic STEM higher education. |
| Communication | The contribution fails to argue and communicate in one or several of the following: audience adaptation, language, structure, or reference handling. | The contents of the contribution are well communicated and argued for. It is audience-adapted for accessibility in terms of language as well as structure. The contribution applies the APA style for referencing. | The content is well communicated and audience-adapted for accessibility in terms of language as well as structure. The argumentation is convincing and adapted in order not to exclude relevant groups. The contribution applies the APA style for referencing. |

# Acknowledgements

Acknowledgements section use heading 1, but is not numbered.

# References

References section use heading 1, but is not numbered. Use APA style for referencing (see this useful resource: <https://apastyle.apa.org/style-grammar-guidelines/references/examples>). Font Aptos, size 10, paragraph formatting: hanging indent 0.5.

# Appendix/Appendices

Acknowledgements section use heading 1. Appendices should be numbered and referred to in the main article text (Appendix X).