

Instructions to Contributors for the *Asian Journal of Biology Education*

The Asian Journal of Biology Education (Asian J. Biol. Educ.) is published electronically by the Asian Association for Biology Education (AABE).

The Journal is on the AABE website: <http://www.aabe.sakura.ne.jp/>

Objectives of the *Asian J. Biol. Educ.*

The main objectives of the Journal are as follows:

- To publish proceedings of AABE conferences;
- To promulgate results of research into the teaching, learning and assessment of biology;
- To present investigatory, experimental, and novel teaching/learning techniques suitable for use in teaching biology;
- To update educators on the advances in biology;
- To review resources for teaching biology;
- To comment on the current policy developments affecting the biology education, especially in the Asian-Pacific region.

The Journal attaches considerable importance to research that is applicable to educational practice. Articles relevant to primary, secondary, tertiary, vocational, adult, and continuing education will be considered. Authors should remember that the Journal has a wide-ranging and international readership hence all papers should contain a clear description of the settings to which they relate.

The Journal seeks to publish papers presented at a biennial conference of AABE by AABE members and other articles submitted by both AABE members and non-members.

Categories

Papers can be in six categories:

1. **Review:** this category aims to provide a link between scientific research findings and the classroom. The aim is to provide teachers with up to date information on key areas. The reviews should give a clear and concise summary of a biological or educational topic. Articles for this section are intended to review educational topics relevant to a biology curriculum. Articles based on biological topics or those of relevance to the management and design of curricula are also of interest. Theoretical or discussion papers which are intended to deal with key points relevant to biology education may be suitable for this section.
2. **Research Paper/Research Note:** these will form the main body of the Journal and may be case studies into any aspect of education practice. Their importance will be introduced against the background of a critical review of the relevant literature. The methods and results will be described along with both conclusions and implications for future research and teaching practice. In addition to full research papers, "Research Notes" will be acceptable. Research Notes are intended to be a short paper which report novel findings worthy of urgent publication. Research Note does not require an abstract and the demarcation between sections may not be clear.

3. **Practical Report/Practical Note:** this section aims to give practical advice. Papers should clearly describe a laboratory or classroom-based exercise or fieldwork which can be related to biological curriculum. The exercise described should have been trialed within an educational setting. This section may also include descriptions of other innovations and developments, such as the use of teaching aids and the implementation of software packages. The emphasis will be on the nature of the practice, a clear description of the implementation procedure, and an evaluation of its success. The full papers are desirable to contain an abstract, introduction, methodology (materials and methods), results, discussion, and references. Authors are recommended to present details of the suppliers listed in the materials section. Short articles (Practical Notes) which describe a novel teaching/learning aid are of interest. Such manuscripts do not require an abstract, and the demarcation between sections may not be clear.
4. **Country Report:** this section aims to give readers the latest information about science/ biology education in the Asian and neighboring countries.
5. **Biological Resource:** this section aims to give information about biological science research whose results are considered to be useful for resources of biology education at a certain level of education. The author(s) should refer to how the results or the research itself are useful for biology education at that level.
6. **Miscellaneous Article:** the other articles which give some information about biology education, teaching aids, printed and electronic references, etc. will also be included in this category. These will generally not be refereed. Abstracts of the papers presented by oral or poster at the latest AABE conference will automatically be published.

Editorial organization and reviewing process

The Editor-in-Chief is appointed by the Executive Committee of the AABE and has final responsibility for all editorial decisions. The Editorial Board processes all manuscripts that are received.

When a manuscript is received the Editor-in-Chief will first judge whether its content falls within the scope of the AABE Journal. Manuscripts that are simply to confirm previous work, are too highly specialized, or are felt not to be of interest to the general readership of the Journal will be returned without review. At least two members of the Editorial Board will be involved in these decisions.

After this preliminary review, the manuscript of a paper categorized as "Review," "Research Paper," "Practical Report" or "Biological Resource" will be sent to two referees to ensure that the paper is applicable to biology education and that the science and/or educational research is sound. The review process is completely anonymous. Referees are selected based on their competence in specialized areas of biology and education. If referees disagree, or if in the opinion of the Editor the paper has not been sufficiently considered, it will be sent to a member of the Editorial Board to aid in arbitration.

If the manuscript is returned for revision the author should reply to the specific recommendations in a covering letter stating how each point has been addressed. If any recommendations have been disregarded the reasons should be given. The revised manuscript should be re-

turned to the Editor-in-Chief within three months, after which it will be considered a new submission and will undergo the full review process.

Submission of manuscripts

Sending files

Only electronic submission is acceptable. Manuscripts should be sent by e-mail to Dr. Nobuyasu Katayama (katayama@u-gakugei.ac.jp), the Editor-in-Chief, *Asian Journal of Biology Education*.

Formats

MS-Word document files are preferable, but we can accept MS-Excel spreadsheet document files and Acrobat PDF files.

Authors should ensure that the paper meets the guidelines listed below for the preparation of manuscripts. Manuscripts including Tables and Figures (not including the first cover page) should not exceed the number of pages given below:

Review: 12 pages, Research Paper: 12 pages, Research Note: 6 pages, Practical Report: 12 pages, Practical Note: 6 pages, Country Report: 12 pages, Biological Resources: 8 pages, other articles: 4 pages.

Authors are requested to indicate which category above the paper fall into among the six mentioned.

Presentation of manuscripts

All contributions must be in English and be as succinct as possible. They should not be under consideration by any other journal. Authors should emphasize the educational setting and the relevance to biology education or environmental education. Papers should contain a clear description of the context to which they relate, and should show the relevance of the results and insights in both their specific setting and in any general setting to which they may also relate.

The manuscript should be typed on A4-sized page using single line spacing (ca. 42 lines/page) throughout. The recommended font is 11 point, Times New Roman. The margins should be 2.5 cm wide and pages numbered consecutively.

Cover page layout

The first page will be a cover sheet and should include:

- (1) A title which clearly describes the content of the manuscript;
- (2) The name(s) and affiliation(s) of the author(s) – the author for correspondence with his/her address and e-mail address should be clearly indicated;
- (3) A running title of no more than 50 characters including spaces;
- (4) Up to seven key words;
- (5) A brief description of the article (less than 200 characters).

The second page

The second page should contain the title of the paper, and an abstract (more or less 200 words). In order to ensure anonymous and fair refereeing, the name(s) or affiliation(s) of the author(s) should not be indicated on the second and following pages.

A manuscript which is categorized into Miscellaneous Article does not need the cover page. The

title, the name(s) and affiliation(s) of the author(s), the corresponding author's address and e-mail address, a running title, and key words should be included in the first page and the abstract is not necessary.

General notes

Footnotes and appendices

Footnotes are discouraged except the cover page, and all material should be placed in the main body of the text. If notes are required they should be numbered sequentially and placed at the end of the paper. Appendices may be used if they are essential to understand the manuscript.

Units, symbols, abbreviations and nomenclature

The International System of Units (SI) should be used throughout. All symbols or abbreviations should be defined when first used. Full stops are not used after unit symbols. For biological nomenclature the use of scientific names is recommended. If desired, the common name of the organism should be shown in parentheses after the recommended name. For chemical nomenclature the rules of the International Union of Pure and Applied Chemistry (IUPAC) should be followed.

Tables

Tables should be numbered consecutively. Each table with its number, heading and any footnotes should be embedded in the text where it should most naturally occur. The table caption or heading should be self-explanatory. The width of a table should be less than 16 cm.

Figures

Graphs, line drawings and photographs should be numbered consecutively. Each figure with its number and caption should be embedded in the text where it should most naturally occur. The journal will accept color pictures. The width of a figure should be less than 16 cm. If you have any queries, please consult with the Editor-in-Chief.

- Line illustrations

Graphs and drawings must be presented to a high professional standard. It is desirable to prepare each figure in one cluster. Because of the requirements of editorial treatment, every figure should be prepared to be edited easily by the MS-Word software.

- Photographs

Photographs must be clear, good quality black and white or color pictures, and JPEG-formatted. The vertical/transverse proportion should not be changed from the original. Any lettering required should be printed directly on the photograph by the author. The insertion of a scale on the photograph is preferable to a statement of magnification in the caption.

References

References must be selected thoughtful by considering whether it is indispensable for the paper. It is expected that the references will be easily accessible to a wide range of educators. Therefore, inaccessible materials, such as unpublished manuscripts, unpublished documents and newspaper articles, are not appropriate for the references. All references cited in the text should be listed in the Reference section at the end of the paper. All references in the list should be cited in the text, too.

References in the text should be given as follows:

Pell and Wörman (2009) or **(Pell and Wörman, 2009)**. Papers with three or more authors should be cited as **Vlaardingerbroek et al., 2014**. When an author has published two or more papers in one year, the references should be distinguished by referring to **Hedde et al. (2007a)** and **Hedde et al. (2007b)**, etc. Where more than one reference is given at the same point in the text, they should be listed chronologically.

The reference list should be arranged alphabetical order by the family names of the first authors and should include the author's initials and the full title of the paper. Titles of journals must be given in full, followed by the volume number, and the first and last page numbers in full:

Vlaardingerbroek, B., Neil Taylor, N. and Bale, C. (2014) The problem of scale in the interpretation of pictorial representations of cell structure. *Journal of Biological Education* 48: 154-162. DOI: 10.1080/00219266.2013.849284

References to books and monographs should include in the order as follows: author or editor, year of publication, title of book, edition, chapter, and/or page reference (if desired), publisher and town of publication. For example:

Alberts, B., Johnson, A., Lewis, J., Morgan, D., Raff, M., Roberts, K. and Walter, P. (2014) *Molecular Biology of the Cell*, 6th ed. Garland Science, NY. U.S.A.

Waterman, M. (2012) Actions and opportunities: a North American perspective on undergraduate biological education for social and sustainable development. In: Kim, M. and Diong, C. H. (eds.) *Biology Education for Social and Sustainable Development*, pp. 29-39. Sense Publishers, Rotterdam, Netherlands.

Web-based resources should be included in the reference list. These should include the name of website and corresponding webpage, its address (URL), and date of access to or date of retrieved from:

Science and Plants for Schools (SAPS). SAPS – Technical notes for copper germination practical. In: *How Science Works - Copper Pollution from Mines*. <http://www.saps.org.uk/secondary/teaching-resources/135> <accessed: March 15, 2015>.

U. S. Environmental Protection Agency. Species Information. In: *Pesticides: Endangered Species Protection Program* <http://www.epa.gov/oppfead1/endanger/species-info.htm> <retrieved: 15/03/2015>

Prior to the submission, authors should confirm whether each website can be accessible by the shown URL through the Internet, because sometimes readers cannot access the corresponding webpage by using the indicated URL.

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