

Manuscript Template and Suggestions for Submissions to the Mathematics Teaching-Research Journal. Send submissions to the emails below.

Małgorzata Marciniak¹, Bronisław Czarnocha²

¹LaGuardia Community College of the City University of New York, USA, ²Hostos Community College of the City University of New York, USA <u>MTRJ.submissions@gmail.com</u>

Abstract: This is a sample template to help authors with the submission style and content. Recall that above the affiliations are numbered with subscripts and matched with the authors. In case of the same affiliation no subscripts are present. Keep the abstract in italics, Times New Roman 12 points. Do not exceed 200 words. In the abstract describe the topic of the paper, its motivation and objectives. Explain briefly the reasoning of the research method. Provide a hint of results and conclusions. Send your submission to both editors to the emails provided above. By making the submission the authors affirm that the manuscript is not under the review in another journal. But once the manuscript is published the authors are allowed and encouraged to give greater visibility to their work by disseminating their work electronically (in institutional repositories or on their own websites).

Keywords: include 3-5 keywords to place the paper in the literature

INTRODUCTION

In general, the style of MTRJ resembles the APA style. Here in the template, we reflect on the appearance and content of the submission. The headers and footers are provided here to help the authors manage the positions of pictures and tables on the pages. Please keep the heathers and footers unchanged. Page numbers will be adjusted during the editorial process.

In the Introduction include your motivation or justification of the proposal. Present the research problem, other studies or a learning problem of students in your classroom. Set up the objectives. Create a roadmap paragraph containing the structure of the submission.

This content is covered by a Creative Commons license, Attribution-NonCommercial-ShareAlike 4.0 International (<u>CC BY-NC-SA</u> <u>4.0</u>). This license allows re-users to distribute, remix, adapt, and build upon the material in any medium or format for noncommercial purposes only, and only so long as attribution is given to the creator. If you remix, adapt, or build upon the material, you must license the modified material under identical terms.





Words in the title of the manuscript should be capitalized and written in Calibri Light (Headings) bold, 16 points. Provide the original spelling of the names of the authors in Times New Roman 12 points.

Affiliations and email addresses

Affiliations and locations of the institutions are mandatory for accepted manuscripts and email addresses are encouraged, at least the address of the corresponding author(s). In case of multiple authors with multiple affiliations provide superscripts as in the example above. The order of the authors can be either alphabetical or arranged based on authors' contribution to the manuscript. In the affiliations, remove the superscript if only one author wrote the paper or if multiple authors have the same affiliation. All authors can provide their email addresses or only the corresponding author. Avoid sharing your degrees, the role, position, or function at your institution.

CONTENT

Mathematics Teaching-Research Journal primarily accepts the submissions which contain both research components and classroom teaching component. If the main focus of the submission is research, then we expect a description, and preferably classroom realization corresponding to the research. If the main focus if the submission is teaching, then we expect some connection to research topics in the profession. Both aspects: teaching and research should be present in the submission.

While working with experiment or intervention and collecting statistical data make sure to provide motivation for your work, share conceptual description of the experiment or intervention, describe the framework of your presentation.

The length of the paper without references and appendices should not exceed 20 pages and 10000 words.

Literature Review

Structure the review by the fundamental pillars of the research area. Quote international studies, not only local authors. Balance between classic studies and the most current ones. Should not exceed 10-20% of the pages of the entire submission. We strongly encourage all authors to search through MTRJ archives and make connections with previous journal publications.

Method





Depending on the nature of the submission, describe the context, the sample of the proposal/activity/, how the data was collected, provide the variables of the analysis, and their character (deductive or inductive). Share and analyse students' work. Do not forget the assessment (formal and informal).

Results

This section should contain a description of the main findings of research, accompanied by some evidence: transcripts of interviews, written productions, excerpts,

Revisions

After receiving reviews, the authors are expected to incorporate all reviewers' comments. By resubmitting the paper, the authors confirm that all reviewers' comments were addressed. In case of disagreements the rebuttal should be clearly phrased. In case the Editors disagree with the rebuttal, the second round of revisions is made. The re-submission after the reviews should contain three documents:

- a new submission without tracked changes,

-a new submission with tracked changes,

-a matrix of corrections containing four columns: the page and line number, the old text, the reviewers' comments, and the new text (or the rebuttal).

EQUATIONS

Equations should be numbered, editable and written in with consistent notation. Their style should be consistent throughout the manuscript, especially if the variables or equations appear in text. Here is an example of a text with equations.

We will solve the following integral

$$\int \frac{\sin x}{\cos^2 x} dx = \int \frac{1}{\cos x} \cdot \frac{\sin x}{\cos x} dx \tag{1}$$

by using substitution u = cosx and by plugging du = -sinx dx, so we have

$$-\int \frac{du}{u^2} = -\int u^{-2} du.$$
 (2)

Further

$$-\frac{u^{-2+1}}{-2+1} + c = -\frac{u^{-1}}{-1} + c \tag{3}$$

and after plugging u = cosx into equation (3) one obtains

$$\frac{1}{\cos x} + c = \sec x + c. \tag{4}$$





This concludes the example and the chapter with equations.

TABLES

Number tables consistently throughout the manuscript and label them as in Table 1 below. Tables should be mentioned preferably right before or soon after they appear in the text.

D_4	1	r	<i>r</i> 2	<i>r</i> 3	т	mr	mr^2	mr^3
1	1	r	<i>r</i> 2	<i>r</i> 3	т	mr	mr^2	mr^3
r	r	<i>r</i> 2	<i>r</i> 3	1	mr^3	т	mr	mr^2
<i>r</i> 2	<i>r</i> 2	<i>r</i> 3	1	r	mr^2	mr^3	т	mr
<i>r</i> 3	r3	1	r	<i>r</i> 2	mr	mr^2	mr^3	т
т	т	mr	mr^2	mr ³	1	r	<i>r</i> 2	r3
mr	mr	mr^2	mr^3	т	<i>r</i> 3	1	r	<i>r</i> 2
mr^2	mr^2	mr^3	т	mr	<i>r</i> 2	r3	1	r
mr^3	mr^3	т	mr	mr^2	r	<i>r</i> 2	<i>r</i> 3	1

Table 1: The Cayley table for D4

PICTURES

Number pictures consistently throughout the manuscript and label them as in Picture 1 below. Pictures should be mentioned preferably right before or soon after they appear in the text.



Figure1: Khateem of Sulaman

DISCUSSION

Analyse the overall perspective of the development of the activity. Share the difficulties in the course of implementation. Analyse each variable taken into account in the methodology. Share the results of your work and relate them to the literature review. Review the objectives set up at the beginning of the study. Make attempts to reflect on topics interesting to teachers, for example: how various aspects of the study may influence the results.





CONCLUSIONS

The conclusion should take up the objectives that were stated in the introduction. If an objective was not achieved, reasons should be given as to why it was not possible to achieve it. It is important at this point to indicate the limitations encountered or possible limitations if the study were to be replicated. It is recommended to mention future perspectives.

Reflect in detail on how the results of the study will change your teaching in the future.

This concludes the main aspects of the style of the Mathematics Teaching-Research Journal. Write conclusions beyond numerical statements. Interpret numerical results in the light of conceptual description of the experiment or intervention. Simply calculating the average and the standard deviation of students' test results is not enough to justify the submission.

Acknowledgments

We would like to thank the Didactics Editor, Mónica Arnal Palacián for her insightful comments and suggestions which helped improving the template. In the section with Acknowledgments share thankful words to people, institutions or funding sources.

Below is a sample style of the references. Place cited references in the text. Do not place references not cited. We strongly encourage all authors to search through MTRJ archives and make connections with previous journal publications.

References

[1] Csikszentmihalyi, M. (1990) Flow: The Psychology of Optimal Experience, Harper & Row

[2] Ford, J. (2018) Blended team-based learning with standard-base grading in a calculus classroom, *Mathematics Teaching -Research Journal Online*, Vol **10**, N-3-4

[3] Keysers, C. (2010). Mirror Neurons, *Current Biology* **19** (21), (pages 971–973) doi:10.1016/j.cub.2009.08.026

[4] Koestler, Arthur. (1964) The Act of Creation. Penguin Books, New York

[5] Russell, S. H., Hancock, M. P., McCullough, J., (2007) The pipeline: Benefits of undergraduate research experience, *Science*, **316** (5824), (pages 548-549)

[6] Wallas, G. (1926). The Art of Thought, New York: Harcourt Brace

This content is covered by a Creative Commons license, Attribution-NonCommercial-ShareAlike 4.0 International (<u>CC BY-NC-SA</u> <u>4.0</u>). This license allows re-users to distribute, remix, adapt, and build upon the material in any medium or format for noncommercial purposes only, and only so long as attribution is given to the creator. If you remix, adapt, or build upon the material, you must license the modified material under identical terms.





APPENDIX

For the convenience of the readers share the questioners, contents of the tests, worksheets or collected data if not provided in the body of the paper. The content and the quality of the appendix should allow the readers to repeat the experiment, intervention or use the worksheets.

