

Manuscript Template and Suggestions for Submissions to the Mathematics Teaching-Research Journal. Send Submissions to the Emails Below

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*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. The abstract's alignment should be Justified with auto-hyphenation enabled, also called Fully Justified. **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

STYLE GUIDE

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 headers and footers unchanged. Page numbers will be adjusted during the editorial process.

Title and Authors

Words in the title of the manuscript should be capitalized following the *(Sub) Section Capitalization Rules* found below and written in Blue, Bold, 16 point Times New Roman font. Provide the original spelling of the names of the authors in 12 point Times New Roman font.

Affiliations and Email Addresses

Affiliations and locations of the institutions are mandatory for accepted manuscripts. 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 all authors have the same affiliation. All authors can provide their email addresses or only the corresponding author. If you are choosing a corresponding author, place an asterisk (*) after their name and after their email. Do not share your degree, role, position, or function at your institution.

Content

*Mathematics Teaching-Research Journal (MTRJ) 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 classroom realization corresponding to the research. If the main focus of 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 experiments or interventions and collecting statistical data, make sure to provide motivation for your work, share conceptual descriptions of the experiment or intervention, and describe the framework of your presentation.

The length of the paper without references and appendices should not exceed 20 pages and 10000 words. Visual and Data Elements (detailed below) contribute to your page count, so consider whether they would be better as appendices.

Format the paper in 12-point Times New Roman, single-spaced, fully justified with auto-hyphenation, 0.08" (2mm) space after paragraphs, and no indents. Itemized lists and transcribed conversations should have no extra line spacing. Margins: 1" (25.4mm) left/right and 0.5" (12.7mm) top/bottom. Footnotes: 8-point Times New Roman (for minor clarifications or recommendations only).

All section headers use 12-point Times New Roman: **SECTIONS** are **bold**, ALL CAPS; **Subsections** are bold; *Sub-subsections* are **bold, italics**. Use underlined italics for *emphasis* when defining terms or draw attention

- *Required Sections* – The **S** is for when you have multiple topics in that section. Remove it if you only have one and *never* include the parentheses when submitting.
 - **INTRODUCTION**
 - **LITERATURE REVIEW**
 - **METHOD(S)**
 - **RESULT(S)**
 - **DISCUSSION**
 - **CONCLUSION(S)**
 - **LIMITATIONS** (optional)
 - **FUTURE DIRECTIONS** (optional)
 - **ACKNOWLEDGMENTS**
 - **REFERENCES**
 - **APPENDIX** (optional – skip if you do not have any items to append)
- *(Sub) Section Capitalization Rules*
 - Always capitalize the first word (e.g. As Always...)
 - Capitalize all words of four letters or more.
 - Lowercase minor words of three letters or less, typically conjunctions, articles, and prepositions (i.e. and, but, for, or, nor, the, a, an, as, at, to, of, etc.)
 - Lowercase the second word after a hyphenated prefix (e.g., Mid-, Anti-, Super-, etc.) in compound modifiers (e.g., Mid-year, Anti-hero, etc.).

Section Descriptions

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.

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(s): Depending on the nature of the submission, describe the context, the sample of the proposal or activity, how the data was collected, provide the variables of the analysis, and their

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character (deductive or inductive). Share and analyze students' work. Do not forget the assessment (formal and informal).

Result(s): This section should contain a description of the main findings of research, accompanied by some evidence: transcripts of interviews, written productions, excerpts, etc.

Discussion: Analyze the overall perspective of the development of the activity. Share the difficulties in the course of implementation. Analyze 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 (e.g. how various aspects of the study may influence the results).

Conclusion(s): 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. 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: Share thankful words to people, institutions, or funding sources who made your submission possible. For example: We would like to thank the Didactics Editor, Mónica Arnal Palacián, for her insightful comments and suggestions which helped improving the template.

References: Below is an example of the required reference style. You may copy, paste, and edit these to easily transfer the formatting, or create it in your own document (Single Spaced, Times New Roman, 12pt, Numbered List, Left Aligned at 0", Tab Stop & Indent at 0.5" (12.7mm), and Bracket Separators before each number). If using bibliography tools like EndNote or Zotero, be sure to copy and paste as plain, editable text. 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. All references must be authentic, published, and internationally accessible. References may not exceed 4 pages.**

- [1] Adams, L. (2011). *Learning a new skill is easier said than done*. Gordon Training International. <https://www.gordontraining.com/free-workplace-articles/learning-a-new-skill-is-easier-said-than-done/>
- [2] Afflerbach, P., Pearson, P. D., & Paris, S. G. (2008). Clarifying differences between reading skills and reading strategies. *The Reading Teacher*, **61** (5), (pages 364-373)

- [3] Akinsola, M. K. (2008). Relationship of some psychological variables in predicting problem solving ability of in-service mathematics teachers. *The Mathematics Enthusiast*, 5(1), 79-100. <https://doi.org/10.54870/1551-3440.1088>.
- [4] Ben-Zeev, T. (1995). The nature and origin of *rational errors* in arithmetic thinking: Induction from examples and prior knowledge. *Cognitive Science*, 19 (3), (pages 341–376)
- [5] Bierwolf, R. E., & Frijns, P. (2019). Consciousness, competence, and organizational change. *IEEE engineering management review*, 47 (4), (pages 32-38)

Appendix: For the convenience of the readers, share any questionnaires, contents of tests, worksheets, or collected data not provided in the body of the paper. The content and the quality of the appendix should allow the readers to replicate or implement the experiment, intervention, or worksheets.

Visual and Data Elements

Figures, Pictures, and Flowcharts

Number figures consistently throughout the manuscript and label them as in Picture 1 below. Figures should be mentioned right before or soon after they appear in the text. All figures should be fully created and edited before inserting them into your document. If you create figures within the document itself – use the snipping tool or take a screen shot, then crop your image, reinsert it, and anchor *As Character* with center alignment. **Blur, cover, or otherwise obscure all student faces.**

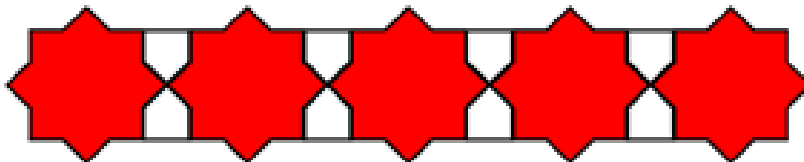


Figure 1: Khateem of Sulaman

Tables

Number tables consistently throughout the manuscript. Tables should be presented right before or soon after they appear in the text. Additionally, Vertical Alignment should be “Up,” and row or column headers should follow the **Sub Section** format. Rules differ slightly for tables featuring qualitative and quantitative information. Content should be Left Aligned for *qualitative tables*, and Center Aligned for *quantitative tables*. Finally, always enable all borders.

D_4	1	r	r^2	r^3	m	mr	mr^2	mr^3
1	1	r	r^2	r^3	m	mr	mr^2	mr^3

r	r	r^2	r^3	1	mr^3	m	mr	mr^2
r^2	r^2	r^3	1	r	mr^2	mr^3	m	mr
r^3	r^3	1	r	r^2	mr	mr^2	mr^3	m
m	m	mr	mr^2	mr^3	1	r	r^2	r^3
mr	mr	mr^2	mr^3	m	r^3	1	r	r^2
mr^2	mr^2	mr^3	m	mr	r^2	r^3	1	r
mr^3	mr^3	m	mr	mr^2	r	r^2	r^3	1

Table 1: The Cayley table for D4

Study Literature	Findings	Evidence
Anjelina et al., (2020)	Most students satisfied the planning indicator of metacognitive abilities but monitoring and evaluation were less achieved.	A descriptive analysis of 28 students in Banda Aceh showed partial achievement in metacognitive indicators
OECD (2023)	Metacognition positively influences mathematics achievement, but overall achievement remains low	Analysis of PISA 2022 data indicated that higher metacognition correlates with better math achievement.
Aminah et al., (2018)	Metacognitive teaching-learning (MTL) improved self-regulated learning but not significantly in logical thinking.	Quasi-experiment with 7- tenth-grade students in Sumedang showed low grades in logical thinking despite MTL.
Supriatna et al., (2019)	Higher learning methods improved problem-solving skills, but overall skills remain low.	ANOVA analysis of grade 5 students in West Kalimantan indicated better skills with advanced methods

Table 2. Study data on metacognitive abilities in Indonesia.

Equations

Equations should be numbered, editable, and written with consistent notation throughout the manuscript, especially if the variables or equations appear in text. This allows for easy reference later by simply using the equations number – i.e. (1). To format them properly, start a new line, insert a formula, follow it with only a space and the formula's number, then create another new line. The Justified Alignment setting should place them on the left and right side of the page. Here is an example:

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We will solve the following integral

$$\int \frac{\sin x}{\cos^2 x} dx = \int \frac{1}{\cos x} \cdot \frac{\sin x}{\cos x} dx \quad (1)$$

by using substitution $u = \cos x$ and by plugging $du = -\sin x dx$, so we have

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

Further,

$$\frac{-u^{-2+1}}{-2+1} + c = \frac{-u^{-1}}{-1} + c \quad (3)$$

and after plugging $u = \cos x$ into equation (3) one obtains

$$\frac{1}{\cos x} + c = \sec x + c. \quad (4)$$

This concludes the example and the chapter with equations.

REVISIONS

After receiving reviews, authors are expected to incorporate all reviewers' comments. By re-submitting the paper, the authors confirm that all reviewers' comments and tracked changes were addressed. In the case of disagreements, the rebuttal should be clearly phrased. In the case the Editors disagree with the rebuttal, a second round of revisions is made. **Authors are encouraged to follow the MTRJ Copy-Edit Checklist before initial submission to improve all readers' review speed.** The re-submission after the reviews should contain a new submission *with* tracked changes.

Copy Editing

After your submission is accepted it will be sent to a copy editor to ensure the published version meets MTRJ standards. The copy editor will correct minor issues at their discretion and issues that risk changing an author's intended message will be noted. The copy edited paper will then be returned and authors are expected to address all of the copy editor's tracked changes and comments. In the case of disagreements, clearly phrase and discuss your preference with the copy editor. The re-submission after the reviews should contain a new submission *with* tracked changes.