Transparency Principles and Best Editorial Practices: A Case Study of REMAT—*Revista Eletrônica da Matemática*

Greice da Silva Lorenzzetti Andreis

Abstract

Scientific journals serve as an important means for disseminating research across various fields and among researchers from diverse countries. Legitimate journals must prioritize the scientific quality of their publications, as well as be aware of transparency and ethical issues throughout the editorial process. This article presents a case study on the implementation of transparency principles and best editorial practices recommended by the Committee on Publication Ethics (COPE), the Directory of Open Access Journals (DOAJ), the Open Access Scholarly Publishing Association (OASPA), and the World Association of Medical Editors (WAME) in *Revista Eletrônica da Matemática* (REMAT), a Brazilian journal. Through a comprehensive review and application of guidance documents on transparency and best practices in scientific publishing, REMAT's editorial policies were revised, approved by its editorial board, and published on the journal's website. This review influenced the journal's editorial workflow, improving its processes and promoting greater transparency for readers, authors, reviewers, and editors, while reinforcing REMAT's commitment to integrity and ethics in scientific publishing.

Introduction

This article presents a case study on the implementation of transparency principles and best editorial practices

Greice da Silva Lorenzzetti Andreis (https://orcid.org/0000-0002-8674-0223), Federal Institute of Education, Science, and Technology of Rio Grande do Sul, Caxias do Sul Campus, Caxias do Sul, RS, Brazil

in REMAT,[1] a Brazilian scientific journal with 10 years of publications (2015–2025). Established in 2015 and affiliated with the Federal Institute of Education, Science, and Technology of Rio Grande do Sul (IFRS), the journal publishes articles that present original, partial, or final results of scientific research in mathematics education, and in pure and applied mathematics. REMAT is an open access scientific journal operating on a continuous publication model.

One of the priorities of the REMAT editorial board is to ensure that its editorial policies align with the standards expected of journals committed to integrity and transparency in their processes. Accordingly, in 2024, the editorial board revised the journal's policies based on the best editorial practices. The primary documents consulted include: *Guidelines on Good Publication Practice* (GPP),[2] *Principles of Transparency and Best Practice in Scholarly Publishing* (POT),[3] *Ethics Toolkit for a Successful Editorial Office* (SEO),[4] and *Strategic Plan 2025–2028* (SP).[5]

Published in 1999 by COPE, GPP is advisory in nature. With this publication, COPE members hope that the guidelines will be disseminated, endorsed by editors, and refined over time. The document defines topics and outlines possible actions to ensure good practices, including "study design and ethical approval, data analysis, authorship, conflict of interests, the peer review process, redundant publication, plagiarism, duties of editors, media relations, advertising, and how to deal with misconduct."[1p43]

In September 2022, COPE, DOAJ, OASPA, and WAME published the fourth version of POT. Based on the principles of transparency and best practice in scholarly publishing, the document outlines actions to be taken, categorized into 4 dimensions: journal content, journal practices, organization, and business practices.

Published in December 2022, SEO helps editors and publishers identify areas in need of development, promote best practices in scientific publishing, and deal

CONTINUED

with allegations and cases of misconduct. The document indicates the development of guidelines for authors and for reviewers, the development processes to help identify ethical concerns, and the development guidelines for promptly responding to suspected ethical breaches by authors, reviewers, and editors. Instructions and reference sources are provided for preparing these guidelines. POT is indicated as a source for developing such guidelines.

Finally, SP[5] defines 4 strategic priorities for the period 2025–2028: integrity; education; collaboration; and diversity, equity, inclusivity, and accessibility. These priorities address the main current challenges in academic publishing, as well as the growing number of publishers and journals.

Since 1997, COPE provides guidance on best practices for addressing ethical issues in journal publishing. It was founded in 1997 to address breaches of research and publication ethics. A voluntary body providing a discussion forum and advice for scientific editors, it aims to find practical ways of dealing with these issues and to develop good practice.

The authors thought it essential to attempt to define best practice in the ethics of scientific publishing. The COPE guidelines should be useful for authors, editors, editorial board members, readers, owners of journals, and publishers and provides guidelines, flowcharts, discussion papers and a case database on its website to guide ethical publishing.

Over the past 10 years, members of the REMAT editorial board have participated in webinars organized by the CSE and the Brazilian Association of Scientific Editors (ABEC Brasil), as well as in programs such as the CSE Publication Certificate Program and the ABEC Education Program: ABEC Brasil Certification for Scientific Editors. Through these experiences, REMAT editors have gradually developed their editorial policies. In 2024, after studying and discussing the aforementioned documents,[2-5] they began refining the existing policies. Subsequently, new policies were established, including a policy on the use of artificial intelligence. On October 29, 2024, the revised editorial policies were approved by the REMAT editorial board and published on the journal's website on November 6, 2024.

As important as having clear guidelines based on ethical principles is ensuring that these guidelines are well understood by editors, reviewers, authors, and readers. A common challenge faced by scientific journals is the high rejection rate of submissions during the desk review phase, often due to authors' lack of familiarity with the journal's editorial processes. Figure 1 shows REMAT's rejection and acceptance rates, based on a report generated by the journal's publishing system, Open Journal Systems (OJS).

The data in Figure 1 indicate a desk rejection rate of 51% for submissions over the past 2 years. At REMAT, the main reasons for rejection at this stage include failure to conform to the journal's format, failure to submit the "Declaration of Conflict of Interest, Originality, and Authorship," failure to meet the requirement of at least 1 author holding a Master's degree, and submission of manuscripts that fall outside REMAT's focus and scope.

To improve this 51% rate, the REMAT editorial board created the "Authors' Declaration," an expansion of the existing declaration, which will be described in a later section. The aim is to provide all authors with a document outlining the journal's policies, thereby facilitating understanding of REMAT's guidelines and discouraging submissions that do not comply with the journal's rules.

The research was conducted to analyze and document the implementation of transparency principles and best

Trends		
	📅 2022-11-29 — 2024-11-29	▼ Filters
Name	**2022-11-29 — 2024-11-29**	**Total**
Submissions Received	310	1048 (104/year)
Submissions Accepted	80	186 (33/year)
Submissions Declined	326	1013 (63/year)
Submissions Declined (Desk Reject)	195	576 (62/year)
Submissions Declined (After Review)	131	437 (45/year)
Submissions Published	78	346 (35/year)
Other Submissions ❓	7	9
Submissions In Progress	7	9
Imported Submissions	0	0
Days to First Editorial Decision ❓	26	36
Days to Accept	244	243
Days to Reject	28	37
Acceptance Rate ❓	17%	18%
Rejection Rate ❓	83%	97%
Desk Reject Rate	51%	55%
After Review Reject Rate	32%	42%

Figure 1. *Revista Eletrônica da Matemática* trends over the past 2 years (November 29, 2022, to November 29, 2024) and throughout its entire publication period (2015–2024). Source: Open Journal Systems, Statistics, Editorial Activity, Trends; data from November 30, 2024.

editorial practices at REMAT, ensuring that its policies align with international standards of ethics and integrity in scientific publishing. Additionally, it proposes strategies to enhance authors' understanding of editorial guidelines, aiming to reduce the rejection rate at the desk review stage.

Principles of Transparency and Best Editorial Practices

This section presents the key elements extracted from the previously discussed documents,[2-5] which guided the REMAT editorial board in reviewing its editorial policies. Table 1 presents the guidelines on good publication practice, according to GPP, and the status of REMAT before the revision of editorial policies in 2024.

Table 2 presents the principles of transparency and best practices in scholarly publishing, according to POT, and the status of REMAT before the revision of editorial policies in 2024. Each of the 16 items is detailed in the document to assist editors in aligning their scientific journals with best practices.

The SEO recommends developing guidelines for authors and reviewers, establishing processes to identify ethical concerns, and creating protocols for promptly responding to suspected ethical breaches by authors, reviewers, and editors. Each of these topics is related to POT, as shown in Figure 2. Note that the numbering is the same as in Table 2 of this study, allowing for verification of REMAT's status in each of the 4 listed topics.

COPE begins its Strategic Plan 2025–2028 by presenting the ethical principles that should guide researchers, editors, reviewers, and others involved in scientific publishing:

Ethical principles guide and support researchers, editors, reviewers and others involved in publication ethics to do their work responsibly and transparently. These principles are here to:

- Make sure research is accountable
- Prevent misconduct
- Help others repeat the research ('reproducibility')
- Protect people

Table 1. Guidelines on Good Publication Practice,[2] and the status of *Revista Eletrônica da Matemática* (REMAT) before the revision of editorial policies in 2024.

Guidelines	Status of REMAT before November 2024
Study design and ethical approval	Did not require any statement or documentary proof of ethical approval from research ethics committee for studies involving humans or animals
Data analysis	Did not require or indicate the disclosure of research data; did not provide actions for cases of data fabrication and falsification
Authorship	Authorship contribution adopted by REMAT has followed CRediT[6] specification system since 2021
Conflicts of interest	Since 2021: requires authors to submit a conflict of interest statement; reviewers instructed to declare any conflicts of interest
Peer review	Since the journal's creation, 2015: • Double-blind peer review process[1] • Authors not required to provide lists of potential reviewers • Acceptance rate and publication time monitored semiannually • Until 2024, reviewers filled out evaluation form with specific questions about the manuscript, which helped the editor in making editorial decisions
Redundant publication	Did not have specific guidelines for redundant publication, but did not accept papers already published in other journals
Plagiarism	Has provided guidance on plagiarism since creation; since 2021: has used similarity checking tools
Duties of editors	Editors make decisions regarding the acceptance/rejection based on clear criteria of importance, originality, clarity, relevance to the scope of the journal, and consideration of peer review evaluations; submitted manuscripts confidential; until 2024, did not have specific policy outlining responsibilities of the editors
Media relations	Did not have a media policy
Advertising	Did not have an advertising policy
Dealing with misconduct	Did not have a policy for handling cases of misconduct

CONTINUED

Table 2. Principles of Transparency and Best Practices in Scholarly Publishing (POT),[3] and the status of *Revista Eletrônica da Matemática* (REMAT) before the revision of editorial policies in 2024.

POT No.	POT Name	Status of REMAT before November 2024
1	A journal's name is unique	In all communications, uses full name along with the e-ISSN number to prevent readers and authors from confusing it with other journals
2	The website protects users and has high professional standards	Website uses the HTTPS protocol and the Open Journal Systems system for publishing; text is clear; site has its own design and clearly displays focus and scope, target audience, types of manuscripts accepted, authorship criteria, and e-ISSN number
3	The publishing schedule is clear and kept to in practice	Publication frequency is clearly stated on website (continuous publication); publication schedule is strictly maintained
4	Preservation of the journal content is clearly indicated	Hosted on the *Portal de Periódicos do IFRS*; periodic backups by IFRS; portal is part of the *Preservação Digital de Periódicos Eletrônicos Brasileiros da Rede Cariniana – Rede Brasileira de Serviços de Preservação Digital*; The Cariniana Network is part of the Lots of Copies Keep Stuff Safe (LOCKSS) program at Stanford University
5	Copyright terms for published content are clear	Copyright terms are displayed on webpage of published article
6	Licensing information; is in the policy and on published articles	Creative Commons Attribution 4.0 International License (CC BY 4.0) adopted; licensing terms are indicated on website and in full text of published articles
7	Publication ethics policies are available	• Since its creation, has adopted policy on intellectual property • Starting in 2021, implemented policies on authorship and contributorship following the CRediT6 specification system and began requiring authors to submit conflict of interest statement • Until 2024, did not have policies on complaints and appeals, allegations of research misconduct, data sharing and reproducibility, ethical oversight, postpublication discussions, or corrections and retractions
8	The peer review policy is clear	Since its creation, has provided detailed information on website about peer review process; states all manuscripts undergo double-blind peer review, evaluation process conducted by an Associate Editor, reviewers are external experts, and explains decision-making and who is involved in process; submission/acceptance/publication dates included in full text of articles
9	Charges or registration required for access to articles are clear to readers	Content is freely accessible to all
10	Journals clearly state ownership and management	Provides information on website stating journal is managed by IFRS
11	Editorial board members are experts in the journal's subject area	Editorial board consists of experts in fields of mathematics and mathematics education; full names/affiliations of its members provided on journal website and periodically reviewed
12	Journals provide contact information and full editor details	Provides full names/affiliations of editors and editorial office contact information, including complete postal address, on journal website
13	Any charges relating to manuscripts are clear to authors	Website states no submission, processing, or publication fees are charged to authors
14	Journals clearly state all revenue sources	Website states all funding received comes from IFRS
15	Journals have a transparent advertising policy	Did not have an advertising policy
16	Marketing to authors is appropriate, targeted, and unobtrusive	Does not engage in direct marketing activities, but until 2024, this information was not available on website

CONTINUED

• Help guide decision-making when complex issues come up

They apply to all parts of research. For example, manuscript preparation, submission, peer review, publication, and correction of academic work.[5p4]

This citation highlights the importance of ethical principles in scientific publishing, emphasizing their role in ensuring responsibility, transparency, and integrity at all stages of the research process. In addition to preventing misconduct, these principles promote research reproducibility and the protection of those involved. SP[5p4] reinforces these aspects by addressing topics already covered in GPP, POT, and SEO, including research ethics, plagiarism, authorship and contributorship, peer review, allegations of misconduct, data, postpublication review, and conflicts of interest. Together, these elements underscore the need for clear guidelines for authors, reviewers, and editors, ensuring ethical practices from manuscript preparation to potential postpublication corrections.

Methodology

A case study was chosen for this research based on the conditions mentioned in Yin: "(a) the type of research question posed, (b) the extent of control an investigator has over actual behavioral events, and (c) the degree of focus on contemporary as opposed to historical events."[6p5] Based on these conditions, the research strategy adopted was the case study, as we aimed to investigate *how* and *why* good editorial practices should be implemented. Additionally, the

Figure 2. Committee on Publication Ethics COPE checklist.[4p32]

study does not require control over behavioral events and focuses on contemporary issues, such as the movements for open science, ethics, and transparency in scientific publishing.

REMAT was selected as a representative case to explore the process of adapting to best editorial practices because it is a recent journal in the process of consolidation within the academic community, and also because it has an editorial team committed to ethics and integrity in scientific publishing and avoiding the characteristics of predatory journals. In addition to enhancing the journal's reputation through this research, it is hoped that the description of this process will serve as a foundation for other scientific journals at an earlier stage.

To review REMAT's editorial policies, the journal's editorial board conducted a study of GPP, POT, SEO, and SP. The board members were already familiar with the topics covered in these documents, but through this research, they conducted a thorough review of all the editorial best practices recommended in them. Subsequently, the board defined the policies and processes to be improved in the journal.

When finalizing the aforementioned policies, as a form of review, AI ChatGPT,[7] based on the GPT-4 architecture, was used. This tool has been progressively improving with each version, and one factor contributing to this progress is the increasing use of data to train its "parameters," which can be seen as adjustments that enhance its performance. These parameters include the model's "weights," which are numerical values that control how the model processes input and generates results[8] In this context, AI contributed as a tool in the process of updating existing policies and parameterizing new ones to meet the principles of transparency and best practices in scholarly publishing. It should be noted that the policies were reviewed and created by REMAT editors based on specific knowledge of best editorial practices, acquired through training or reading on the subject, as well as their experiences in publishing.

Once finalized, the texts of each policy were submitted to ChatGPT-4 to identify essential points. For each policy, the tool provided both positive aspects and areas for improvement. The latter were analyzed by the editors, who assessed their relevance and appropriateness, as well as the manner in which they were presented in the policy.

Finally, the revisions were submitted to the REMAT editorial board, approved, and published on the journal's website. In October 2024, an oral presentation was given at the ABEC Meeting 2024 about this process.[9]

The translation of this article from Portuguese to English was done using Google Translate, with a review by ChatGPT-4.
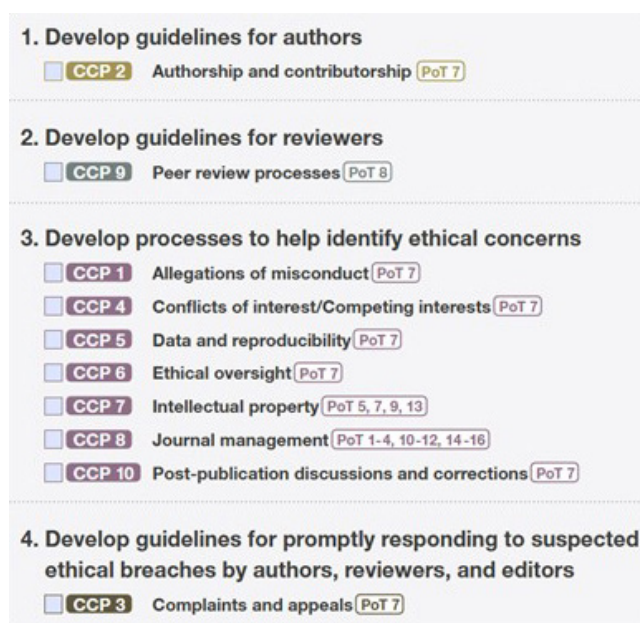
Case Study: Adaptation of REMAT's Editorial Policies

This section presents the restructuring of REMAT's editorial policies, carried out in accordance with the principles and practices outlined in GPP, POT, SEO, and SP. Table 3 (online only) displays the additions made to REMAT's editorial processes. It is worth noting that, over the past 10 years, REMAT has adopted several best editorial practices, which are listed in Tables 1 and 2 and can be viewed in full on the journal's website (https://periodicos.ifrs.edu.br/index.php/REMAT/editorial_policies).

It can be observed that REMAT made several revisions to its policies in pursuit of good editorial practices. In Table 3, both new policies and small additions to existing policies are noticeable. This differentiation is explained below. By analyzing the second column of Table 3, it is clear that 10 principles out of the 16 proposed GPP were considered, and that 66% of REMAT's new practices align with the POT 7 principle. Therefore, the main changes involved the principle of ethics in publishing. Furthermore, the third column shows that the final version of REMAT's editorial policies encompasses all 16 principles from POT.

Regarding allegations of misconduct, COPE[4] recommends that journals establish a clearly defined process for addressing such allegations, both pre- and postpublication. Furthermore, journals should allow discussions about publications and have mechanisms in place for correcting or retracting articles already published. In addition, in the event of complaints against the journal or its editorial board, journals must present policies that clearly describe how the process is conducted. While REMAT remains attentive to cases of misconduct and maintains good communication between authors and editorial team (editors and reviewers), it has addressed these issues more specifically by creating the Allegations of Misconduct Policy, the Post-Publication Discussions and Corrections Policy, and the Complaints and Appeals Policy.[10] Due to concerns about the use of AI in scientific publications, REMAT also developed the Artificial Intelligence Use Policy, providing guidance to its authors and editorial team on how to use it responsibly and avoid misconduct. These policies are mentioned in Table 3, with the main information, and are fully available on the journal's website.

By the end of 2024, REMAT required its authors to submit a declaration of manuscript originality, in addition to declaring authorship, contributorship, and conflicts of interest. COPE recommends that journals clearly present policies that ensure transparency regarding who contributed to the work and how they contributed, specifying authorship and contributorship. Furthermore, journals must clarify the processes for managing potential disputes between authors. COPE also suggests that journals be prepared to address conflicts of interest identified before or after publication. Another important aspect for editors is ethical oversight. COPE recommends that participants' consent be verified for the publication of results and that authors maintain ethical conduct throughout the research. Additionally, it must be ensured that there was ethical conduct with vulnerable populations, ethical handling of research involving animals and human subjects, and appropriate treatment of confidential data. REMAT addressed these aspects through the revision of the Authorship and Contributorship Policy, the Conflicts of Interest/Competing Interests Policy, and the creation of the Ethical Oversight Policy.

Another good practice recommended by COPE is that journals should adopt policies on data availability to allow for the reproducibility of research, enabling its validation and the reuse of data. In this regard, REMAT created the Data Sharing and Reproducibility Policy to guide its authors on this practice.

With regard to intellectual property, COPE advises that journals should have policies that clearly describe copyright and publishing licenses. Furthermore, it should be clarified what prepublications may prevent consideration by the journal, as well as what constitutes plagiarism and redundant/overlapping publication. Additionally, costs to authors and readers must be transparent. These guidelines were addressed with the update of the Intellectual Property Policy, and a key change to highlight is that, as of September 2024, copyright belongs to the authors. The Allegations of Misconduct Policy also provides guidance on plagiarism and redundant/overlapping publication.

With the Management Policy, REMAT clarifies the responsibilities of the entire editorial team. According to COPE, it is recommended that journals have a well-defined and implemented infrastructure. Training the editorial team is also important, as it contributes to the efficiency of the services provided by the journal. Furthermore, the journal must inform its policies, processes, and the software used for management, as well as other tools adopted, to ensure an efficient editorial flow. These items are detailed in the Digital Archiving and Preservation Policy, Publishing System, Interoperability Protocol, Promotion, Indexers, Promoters, Associations, Persistent Identifiers, Bibliometric Indicators, and Digital Preservation.

Finally, COPE recommends that peer review processes be well-defined and transparent. Furthermore, it suggests that journals provide training for editors and reviewers and establish policies on peer review, as well as processes for handling conflicts of interest, appeals, and disputes that may arise during the peer review process. In this regard, REMAT updated the Peer Review Process Policy.

CONTINUED

(Continued from p. 73)

Returning to the issue of the high manuscript rejection rate at REMAT during the desk review phase, starting in 2025, REMAT will require the submission of the Authors' Declaration along with the manuscript for evaluation. The declaration includes:

- Declaration of originality
- Declaration of authorship and contributorship
- Declaration of research approval by a Research Ethics Committee, if applicable
- Declaration of conflicts of interest/competing interests
- Declaration of data availability for reproducibility
- Declaration of the use of AI
- List of all REMAT editorial policies (full text)
- Signature of all authors

With these adjustments, starting in 2025, authors will be required to submit 3 mandatory documents: the manuscript, the Authors' Declaration, and a text review statement (in Portuguese, English, and Spanish) issued by a professional in the field.

Final Considerations

This case study documents the progress made in implementing transparency principles and best editorial practices recommended by COPE, DOAJ, OASPA, and WAME at REMAT. The revisions to the journal's editorial policies have not only improved its processes but also increased awareness among readers, authors, reviewers, and editors regarding its workflows and the critical role of ethical research practices, along with the journal's commitment to ethical reviewing and publishing.

Furthermore, these revisions reinforce REMAT's dedication to the ethical publication of scientific research, evidenced by its ongoing efforts to ensure that authors are better informed about the journal's guidelines. Changes such as the expansion of the authors' declaration and the inclusion of guidelines on the use of AI reflect REMAT's adaptation to the contemporary demands of scientific publishing. Although this study did not explicitly address the consequences of failing to meet these ethical standards, it is important to recognize that noncompliance can undermine the journal's credibility, negatively affect the trust of the academic community, and result in sanctions, such as being listed as a predatory journal or having articles retracted.

Acknowledgment

References and Links

1. https://periodicos.ifrs.edu.br/index.php/REMAT
2. https://www.citiprogram.org/citidocuments/PABI%20Columbia/gp.pdf
3. https://doi.org/10.24318/cope.2019.1.12
4. https://doi.org/10.24318/AkFpEBd1
5. https://publicationethics.org/about/what-we-do/strategic-plan
6. Yin RK. Case study research: design and methods. 3rd ed. Sage Publications; 2003.
7. https://openai.com/index/introducing-gpts
8. https://doi.org/10.54675/EWZM9535
9. Andreis GSL, Arcaro, K, Boff DSB, Paula MC, Milhomens DMM, Silva MJ. Políticas editoriais da Revista Eletrônica da Matemática: uma revisão a partir dos princípios COPE. Proceedings of the ABEC Meeting; São Paulo, Brazil, 2024. https://doi.org/10.21452/abecmeeting2024.246
10. https://publicationethics.org/about/what-we-do/our-story/core-practices