



KORKYT ATA
UNIVERSITY



Approved»
Chairman of the Board –Rector
of Korkyt Ata Kyzylorda University
Karimova B.C.
October 30 2023y

PROVISION

Publication of articles in the «Topical issues of teaching mathematics, physics
and information Sciences Journal»

Kyzylorda, 2023

Information about the document

1. Developed by the Editorial and Publishing Division.
2. Approved and activated by the Chairman of the Board-Rector of Korkyt Ata Kyzylorda University from « October 30 2023 by order 430-9



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Definitions and Abbreviations

This Regulation uses the following abbreviation:

Korkyt Ata Kyzylorda University - Kyzylorda University named after Korkyt Ata.

MRNTI - international rubricator of scientific and technical information

GRNTI - Code of State Categories Scientific and Technical Information

DOI Digital Object Identifier, Идентификатор цифрового объекта.

• General provision

This provision on the publication of articles in the journal “Topical Issues in Teaching Mathematics, Physics and Computer Science” defines the rules for preparing for publication of scientific articles in the journal “Topical Issues in Teaching Mathematics, Physics and Computer Science”, registered in the Ministry of Culture, Information and Public Development of the Republic of Kazakhstan. Certificate of re-registration of periodicals, news agencies and online publications KZ80VPY00067265 from 31.03.2023.

Developed in accordance with:

- requirements for scientific publications to be included in the list of publications recommended for publication of the results of scientific activity, approved by Order 20 of 12 January 2016 Footnote. Item 2 - in the edition of the order of the Minister of Education and Science of Kazakhstan from 30.04.2020 170 (effective from 01.01.2021); with amendments made by the order №7 of the Minister of Science and Higher Education of Kazakhstan from 09.01.2023 (effective 10 calendar days after the date of its first official publication).

2. Editorial politics and direction of the journal

«Topical issues of teaching mathematics, physics and information sciences» journal is published 4 times a year and contains information about scientific works of national and foreign scientists.

Tasks of the Editorial politics of «Topical issues of teaching mathematics, physics and information sciences» journal:

The objectives of the Editorial Policy of the journal "Topical issues of teaching mathematics, physics and information science":

- to contribute to improving the quality of scientific research, identifying scientific potential for the introduction of advanced scientific achievements;

- to provide scientists and young researchers with the opportunity to publish the results of their research;

- to draw attention to the most relevant promising areas in the field of mathematics, physics, and information science.

-to ensure collaboration and involve leading domestic and foreign scientists in publications, to establish an exchange of views between researchers;

- establish and strictly observe the relationships of all parties (editors, authors, reviewers) based on compliance with publication ethics requirements;
- the authors are responsible for the factual materials provided in the articles;
- the manuscripts accepted for publication are not returned to the authors.

Materials that have received a negative review and are rejected by the journal are not published and are not returned to the authors. The editorial office does not store rejected materials.

3. Ethics requirements for publication

All parties involved in the process of preparing materials for publication in the journal - authors, expert commission, reviewers, members of editorial office - should follow the following requirements for publication ethics.

The editorial office of the journal takes into account the best practices of reputable international journals when analyzing articles. In order to ensure the high quality of scientific publications, the editorial office is working to prevent the use of plagiarism in the publication of articles, incorrect data, providing unsubstantiated information, etc. The editorial office, as well as those involved in publishing, must comply with the rules and standards of ethics adopted by the international community and take all necessary measures to prevent such actions. The editorial office will never support illegal actions (plagiarism, manipulation, distortion) and will make every effort to prevent such actions.

The Editor-in-Chief may consult with members of the editorial office and reviewers when making a decision, who shall be guided by the following rules:

- do not disclose information about the submitted manuscript to anyone except the author, reviewers, potential reviewers, other editorial consultants and, if necessary, the publisher.
- do not discriminate in the evaluation of the authors' submissions;
- not to disclose without necessity information about the materials accepted from authors, except authors, reviewers;
- take reasonable measures to identify and prevent the publication of articles in which the research has been improperly conducted, knowingly discourage, prevent such violations;
- consider facts or allegations of improper research behavior;
- be prepared to publish corrections, clarifications, rebuttals and apologies where necessary.

In the publishing process authors are guided by the following rules:

- to work in full compliance with current legal requirements regarding libel, copyright, legality and plagiarism;
- to provide reliable results of the work done on the original study and an objective discussion of its significance.
- contain enough content to ensure a review of the work. False or deliberate erroneous statements may cause material to be rejected or a published article to be refuted;

- submitting the manuscript simultaneously to another edition is considered immoral and improper. The author must not submit to the magazine an article previously published in other publications;

- guarantee the complete originality of the presented material. If other authors' works or statements are used, relevant bibliographic references or excerpts must be provided;

- Avoid plagiarism in any form. The article must have at least 80% text originality for publication.

- Adhere to self-citation rules. Specifically, if elements of the material have been previously published in another article, including in the journal "Topical issues of teaching mathematics, physics, and information sciences," the author is obligated to reference the earlier work. Authors are recommended to limit self-citation to 0–10%.

- Limit the number of co-authors for a single article to no more than five people.

- Disclose information about funding and any third-party interests that could be perceived as influencing the results or interpretation of the manuscript.

- Notify the journal's responsible editor about significant errors or inaccuracies in their work and ensure ongoing communication with the journal editor to facilitate article removal or correction, if necessary.

- Articles authored by editorial office members may be published at a rate of no more than one article per issue.

The number of articles by one author in a single journal issue must not exceed two (2), whether written independently or collaboratively.

4. Review of scientific articles submitted to the editorial office

Review of manuscripts of scientific articles for publication of journal «**Topical issues of teaching mathematics, physics and information sciences journal**» are carried out in order to maintain a high scientific and theoretical level of publication and selection of the most valuable and relevant (perspective) scientific works.

The Reviewers may reject the materials and require the author(s) to bring them in accordance with the requirements of the scientific articles.

In order to ensure the quality of published materials and respect for copyright, all received materials are checked for borrowing. The verification of the program is carried out by the responsible employee of the university - «root administrator of the system», and only then are sent for review.

The authors, who send their articles for publication in the journal «Topical issues of teaching mathematics, physics and information sciences journal», express their consent to the publication of the article, to the placement of metadata of the article (full name author's and places of their affiliation, annotations, keywords, bibliographic list) in public access to the journal's website on the Internet, to transmit the text of the article (including links, bibliographic information, etc.) to persons and organizations to whom the information is obligatory, or to others in order to allow citation of the publication and to increase the index of citation of authors and journal, and confirm that the submitted articles were not published in other journals or submitted for publication in other journals.

The editorial office keeps a record of the passing of manuscripts procedure of expert evaluation and review.

The author uploads (according to the instructions) through the site of the journal <https://pm.korkyt.edu.kz> scientific article. The editorial board under the supervision of the chief editor checks the compliance to the scientific direction of the article submitted to the editorial office, and a decision is made on the acceptance or rejection of the article.

The responsible secretary checks the accepted articles in the program of antiplagiarism, after checking their compliance with the requirements specified in the technical design according to the instructions for authors. (The verification requirement in the program Antiplagiarism is fully described in the Rules of use of the system «Antiplagiarism».) The article, whose authenticity exceeds 80%, is sent for review.

The review procedure is carried out through the online submission and review system of articles, through «blind review» by a separate electronic site.

Reviewers are guided by the following rules:

- to work in full compliance with the editorial politics of the journal, taking into account the actual legal requirements regarding libel, copyright, legality and plagiarism;

- not to use unpublished materials obtained from submitted manuscripts for examination in personal research without written consent of the author;

- comply with review deadlines agreed with the responsible editors;

- notify the responsible editors and exclude yourself from the review process, feeling incompetent to review the research presented in the manuscript, or believing that a speedy review of the manuscript will be impossible.

- to consider any material received for review as a confidential document, not to disclose its contents and not to discuss with any persons other than responsible editors;

- to give an objective assessment of the materials submitted for review. Reviewers should express their opinion clearly and reasoned.

- to draw the attention of the editors-in-chief of the series to any significant similarities or coincidences between the manuscript in question and any other published work.

The review procedure includes the following steps:

1. The article is sent for review to the Doctor of Sciences, the Candidate of Sciences or PhD, whose scientific specialization is most close to the subject of the scientific article.

2. The review period may vary depending on the specific situation, but not more than 2 working weeks.

3. The reviewer cannot be the author or co-author of the peer-reviewed work, as well as the scientific supervisors of the candidate academic degree, PhD degree and employees of the department in which the author works. Reviews are discussed by the editorial board and serve as a basis for acceptance or rejection of manuscripts.

4. The review should objectively assess the scientific article and contain a comprehensive analysis of its scientific and methodical advantages and disadvantages. The review is based on the standard proposed revision (Annex 1).

In the review should be briefly evaluated:

- general scientific level of work;
- the title and its correspondence to the content of the article;
- relevance of the topic;
- scientific novelty,
- the practical significance of the presented conclusions;
- work structure;
- debating and/or incorrect provisions;
- the positive aspects or shortcomings of the article are noted, what corrections and additions should be made by the author;
- the reviewer's opinion on the possibility or impossibility of publishing the manuscript is stated.

Copies of the content of the review shall be communicated to the author(s) within a week after the editorial office received the expert opinion.

The article sent to the author for revision must be returned in the corrected form within 10 days with the corrections marked in the article.

The editorial board reserves the right to reject the articles in case of inability or unwillingness of the author to take into account the wishes of the editorial board.

The originals of the reviews are kept in the editorial office of the journal «**Topical issues of teaching mathematics, physics and information sciences journal**», for one year, including to be made available to competent authorities upon request.

5. Manual for authors of manuscripts

Ready scientific work for publication in the «Topical issues of teaching mathematics, physics and information sciences» journal can be submitted by the author (authors) through the system of online submission of articles on the site <https://pm.korkyt.edu.kz>, using special instructions. The article should be written in Word format in Windows 10 in Times New Roman font (an article not written in

accordance with this requirement will not be accepted automatically(Annex 2)). Language of publications Kazakh, Russian, English.

Presenting the text of the article for publication in the journal, the author guarantees the correctness of all information about himself, the absence of plagiarism and other forms of wrongful borrowing in manuscripts, the proper design of all borrowings of the text, tables, schemes, illustrations.

The purpose of the journal “Topical issues of teaching mathematics, physics and information sciences” is to publish carefully selected papers on fundamental sections of mathematics, physics, informatics on pedagogical directions.

All articles undergo the peer review procedure. Materials submitted for review are selected on the basis of novelty and general importance. All published articles are open and accessible. Standard article sections are Introduction, , Material and methods, Results and discussion, Conclusion/findings, Gratitude (if available), and List of references (section titles remain unchanged).

The journal does not publish materials that do not fit the topic, those published by the authors in other publications work with spelling, mathematical, and other uncorrectable errors, as well as conclusions and hypotheses that contradict established scientific facts.

The citation list in the article should contain only peer-reviewed literature sources, information sources that assign the DOI index according to the article structure.

Author's materials reflecting the results of scientific research in the article should contribute to the development of fundamental sections of mathematics, mechanics, computer science to which the material has been prepared. The text of the manuscript should be designed so that readers could understand the goals and objectives of the research, theory and methodology, the results obtained by the author, and the author's contribution to the development of a particular area of scientific knowledge. The author's conclusions should be justified and should not be based on or summarize known results. The text of the manuscript should be written in an academic scientific style and literate language. Completely copied and defined copied terms should be explained. It is recommended to avoid ambiguity in the interpretation of basic concepts and to avoid two meanings.

Structure and design of the article:

1. The size of the article ranges from 6 to 12 pages (without a list of references and annotations).

1. Description of the scheme of the article (page - A 4, book orientation, indents are calculated with respect to the left top and bottom sides page margins- 2.5 cm, with right - 2.0 cm, Standard font : type - Times New Roman, size (font) - 12):

- the IRSTI index is the first line at the top left <http://grnti.ru>.
- DOI index (provided by the editorial office);
- Title of article – with capital letters, alignment on the center in bold, size (font) 12.

- Initials and last name of author(s) - alignment on the center in bold, size (font) – 11 the number of authors of the article shall not exceed five.

- Full name of the organization, city, country (if the authors work in different organizations, the same number should be placed next to the author's surname and the corresponding organization name). Next, provide the email addresses of each author and their ORCID numbers. Format: text alignment – center; font style – italics; font size – 11.

- **Annotation** should be written in the original language and in two other languages. For authors of the near and far abroad, the annotation should be in Russian and English. The version in Kazakh must be prepared by the journal's editorial office. Requirements: (word count: 150-200; the annotation must not contain references to the literature, font size: 11).

- **Key words** (in kazakh, russian, english from 5 to 10 words/phrases) size (font) - 11.

- **Main text** (12 font, line spacing - 1, indentation of red line#- 1.25 cm)

- Structure of the text:

3) **Introduction:** rationale for the selection of the topic; relevance of the topic or problem; definition of the object, subject, objectives, tasks, methods, approaches, hypotheses and meanings of the research.

4) **Research materials and methods:** They should consist of a description of the materials and the progress of the study, as well as a full description of the methods used. This section describes how the problem was studied: detailed information without repeating previously published procedures; identification of the equipment (software) and description of materials used, with mandatory novelty in the use of materials and methods. Tables and figures should be placed after they are mentioned.

Each illustration should be followed by a caption (font size – 11). Drawings should be clear, clean, not scanned. The titles of figures and tables, should be in bold font size 11. The indicators of the table should be formatted in font size 11.

4) The article numbers only those formulas that are referenced in the text. All abbreviations and acronyms, with the exception of well-known ones, must be deciphered at the first mention in the text.

5) **Results and discussion:** an analysis and discussion of the obtained research results are provided.

6) **Conclusion/Findings:** A summary and conclusion of the work at this stage; confirmation of the truth of the statement made by the author. The findings should be used to generalize the results of the research in a particular scientific field, with a description of suggestions or possibilities for further use. Information about the financial support of the work should be provided at the end of the article.

7) **References** (font size – 11, at least 15 references). The list of references should be provided in two versions: the first in the original language, and the second in Latin transliteration, using Latin letters (<https://translit.ru/>). The list of citations in the article should include sources that correspond to the scientific direction of the article, with a DOI (or URL) index (example - Appendix 2). The

reference number should be numbered in vertical brackets according to the citation.

The style of the list of references in Russian and Kazakh in accordance with the requirements according to GOST P 7.0.100 – 2018 "Bibliographic record. Bibliographic description. General requirements and rules of compilation".

8) Information about the authors: (should include the full name(s) of the author(s), full name of the organization, city, country, contact details: phone, email, Orcid ID) in three languages. If the author does not have an Orcid ID, they must register for an Orcid ID at the following link: <https://orcid.org/>.

9) If the submitted articles meet the journal's requirements, an anti-plagiarism check will be performed. The article, whose originality exceeds 80%, is sent for consideration to the editorial office. And the article below 80% is sent to the author to supplement (The cost of the first test of the article on originality in the program of antiplagiarism - 1500 tenge, when the same article is re-checked - 1000 tenge). After a positive review, the article is accepted for publication in the journal and the author is sent a notice of payment. The author must send the receipt of payment to the Editorial Office (<mailto:matphin-vestnik@korkyt.kz> , khabarshy@korkyt.kz).

Article cost: The cost of one article in the «Topical issues of teaching mathematics, physics and information science journal» is 5000 tenge.

The editorial office of the journal provides 3 days for each author to review their articles before publishing the final version of the PDF version on the website of the University "Topical issues of teaching mathematics, physics and information sciences journal" <https://pm.korkyt.edu.kz/kz> and on the Crossref website <https://apps.crossref.org/>. The final version of the journal will be published on the website after accepting the authors' reviews, responses, etc. The authors' notifications are not accepted and the editorial office is not responsible for subsequent identified errors.

Payment details

University address: 120014, Republic of Kazakhstan, Kyzylorda, Aiteke bi st., 29a.

Ministry of Science and Higher Education of the Republic of Kazakhstan

JNSC Kyzylorda University named after Korkyt Ata

JSC Halyk Bank of Kazakhstan.

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Head of the Editorial
and Publishing Department


 Abuova N.A. 30.10.23
signature date

AGREED:


Member of the board, Vice-Rector
for Research and International
Relations

 Buribayeva M.A. 30.10.23
signature date

Chief editor

 Omarov K.A. 30.10.23
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Head of International
Relations Department

 Almakhanova G. 30.10.23
signature date

«Topical issues of teaching mathematics, physics and information sciences journal» reviewing the article submitted to the republican scientific methodical journal

REVIEW

Article title:	
Reviewer: Full name, academic degree and title, position	
Date:	

Content evaluation

Study object

<input type="checkbox"/>	Formulated clearly and accurately
<input type="checkbox"/>	Should be defined more clearly
<input type="checkbox"/>	Not clear, should be reformulated
Reviewer's comment:	

Theoretical foundations and explanations

<input type="checkbox"/>	The author expresses an original point of view
<input type="checkbox"/>	There are enough links to previous studies
<input type="checkbox"/>	Lack of links to other studies
<input type="checkbox"/>	The theoretical background is missing or unclear
Reviewer's comment:	

Information and data provided

<input type="checkbox"/>	New, original
<input type="checkbox"/>	Expand and supplement already known information
<input type="checkbox"/>	Repeat already known information
<input type="checkbox"/>	Obscure
Reviewer's comment:	

Research method

<input type="checkbox"/>	Well grounded and consistent
<input type="checkbox"/>	Insufficiently substantiated, should be reconsidered
<input type="checkbox"/>	Method unclear
<input type="checkbox"/>	Not required for this kind of work
Reviewer's comment:	

Problem solving and analysis of results

<input type="checkbox"/>	Very well grounded
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	Reasonable enough
	Poorly grounded, should be revisited
	Not clear and / or too abstract
	Descriptive work
Reviewer's comment:	

Evaluation form

Name

	Clear and precise
	Should be revised
Reviewer's comment:	

Language style

	A great
	Free enough
	Understandable
	Hard to understand
Reviewer's comment:	

Tables, graphs, etc.

	Acceptable
	Should be revised
	Missing / not required
Reviewer's comment:	

List of used literature

	Acceptable
	Should be edited
Reviewer's comment:	

Annotation

	Acceptable
	Should be edited
	Should be revised
Reviewer's comment:	

Conclusions

	Publish as provided
	Accept with minor changes
	Accept with significant changes
	Reject as it stands, but with the possibility of re-filing
	Reject without the possibility of re-filing

Reviewer's comment:

DIGITAL ENRICHMENT OF MATHEMATICS EDUCATION

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Annotation. The research work is aimed at studying the methodology of teaching mathematics, the impact of digital transformation in education on the culture of teaching the subject. The object of the study is the methodology of teaching mathematics, the purpose of which is to study the disciplinary features of digital resources that are widely introduced into the educational process, as well as their impact on the educational process. The article describes some questions of the inclusion of digital resources in the subject of mathematics in accordance with the new requirements of education and their use in the teacher's practice.

Keywords: digitalization of education, teaching math, educational digital resource.

Introduction. The main wealth of modern society and the source of its change and continuous development is human capital. In general, "human capital" refers to a set of individuals who have the knowledge and qualifications, skills, and abilities necessary to perform a type of activity in a complex social and economic environment and who have established their own interests and value system.

Methods and materials. Previous research in this area has revealed the following findings: in addition to universal digital resources in the learning process, there is a rich collection of subject-specific digital solutions.

Research materials and methodology. The survey results were analyzed using the Excel spreadsheet features of the MS Office package

Research results and their discussion. The following activities can be observed based on the details of the lesson control sheets.

The sample of pictures and tables

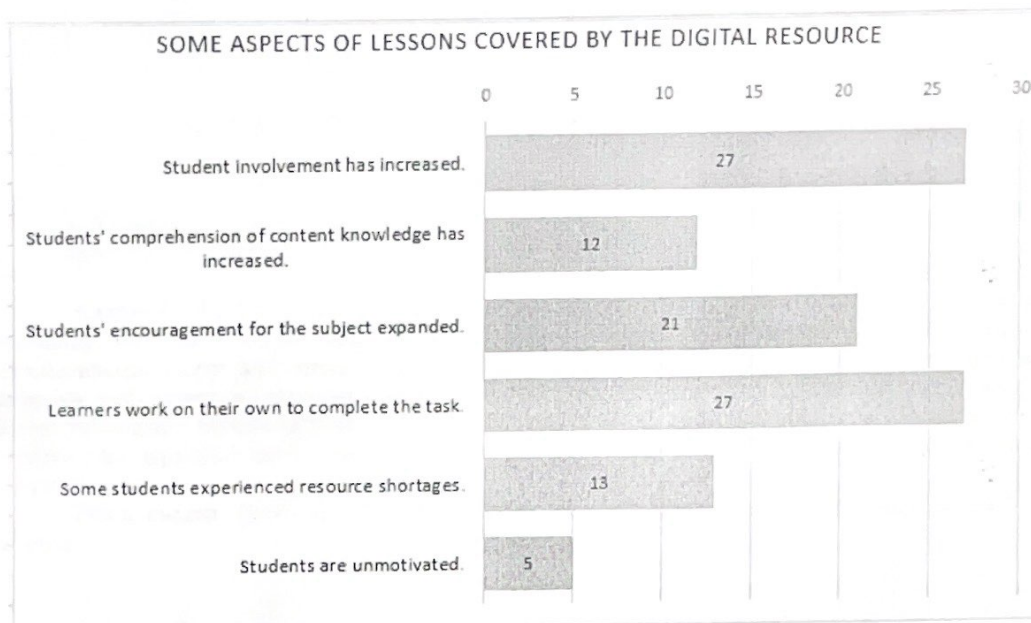


Figure 1 – The Digitally Illuminated Lesson's Aspects

Conclusion. According to the findings of the research, some level of digital transformation is taking place in all stages of mathematical education in the current state of education.

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ЦИФРОВОЕ ОБОГАЩЕНИЕ ОБУЧЕНИЯ МАТЕМАТИКЕ

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Аннотация. Исследовательская работа направлена на изучение методики преподавания математики, влияния цифровой трансформации образования на культуру преподавания предмета. Объектом исследования является методика обучения математике, целью которой является изучение особенностей цифровых ресурсов, широко внедряемых в образовательный процесс, а также их влияние на образовательный процесс. В статье рассмотрены некоторые вопросы интеграции цифровых ресурсов в предмет математики в соответствии с новыми требованиями образования и их использования в практике учителя.

Ключевые слова: цифровизация образования, обучение математике, образовательный цифровой ресурс.

МАТЕМАТИКАНЫ ОҚЫТУДЫ ЦИФРЛЫҚ БАЙЫТУ

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²Қорқыт Ата атындағы Қызылорда университеті, Қызылорда қ., Қазақстан Республикасы

Аңдатпа. Зерттеу жұмысы математиканы оқыту әдістемесін, білім беруді цифрлық түрлендірудің пәнді оқыту мәдениетіне әсерін зерттеуге бағытталған. Зерттеу нысаны математиканы оқыту әдістемесі болып табылады, мақсаты оқу процесіне кеңінен енгізілген цифрлық ресурстардың ерекшеліктерін, сонымен қатар олардың оқу процесіне әсерін зерттеу болып табылады. Мақалада білім берудің жаңа талаптарына сәйкес математика пәніне цифрлық ресурстарды кіріктіру және оларды мұғалім тәжірибесінде пайдаланудың кейбір мәселелері қарастырылған.

Тірек сөздер: білім беруді цифрландыру, математиканы оқыту, білім берудің цифрлық ресурсы.

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Information about the authors