Development Strategies for Scientific Journal Editors in the New Media Era: Postprint

Authors: Tang Hua, Liu Bin, Zhang Jing

Date: 2023-10-08T00:00:00+00:00

Abstract

This article analyzes the existing problems of scientific journal editors, summarizes the new requirements for them in the new media era, and proposes pathways for their professional development. Traditional scientific journal editors, constrained by conventional thinking and work patterns, inadequately prioritize new media and lack proficiency in new technologies and innovative capacity. In the new media era, scientific journal editors should possess the ability to integrate online and offline platforms, innovate converged products, and master new media technologies. Their competencies can be enhanced through offering new media literacy courses tailored to the professional characteristics of scientific journal editors, actively participating in new media-related activities within the publishing industry, acquiring cutting-edge information and technologies, and strengthening performance evaluation of editors in new media aspects. It is imperative to enhance scientific journal editors' mastery of new technologies; they should increase their emphasis on applying new technologies in the new media era, improve their comprehensive competencies and innovative abilities, continuously explore sustainable development pathways for scientific journals, and contribute to promoting journal quality improvement.

Full Text

Development Strategies for Science and Technology Journal Editors in the New Media Era

Tang Hua, Liu Bin, Zhang Jing
China Pharmaceuticals Magazine, Chongqing 400014

Abstract: This article analyzes existing problems among science and technology journal editors, summarizes new requirements for editors in the new media era, and proposes pathways for their professional development. Traditional science and technology journal editors, constrained by conventional mindsets and

work patterns, often fail to prioritize new media and lack proficiency in emerging technologies and innovative capacity. In the new media era, science and technology journal editors must possess online-offline linkage capabilities, innovative capacity for integrated products, and mastery of new media technologies. Enhancement pathways include offering new media literacy courses tailored to the characteristics of science and technology editorial work, actively participating in new media-related activities within the journal industry to grasp cutting-edge information and technologies, and strengthening assessment mechanisms for editors in new media competencies. The urgency of improving editors' mastery of new technologies cannot be overstated; editors must heighten their emphasis on applying new technologies in the new media era, enhance their comprehensive competencies and innovative capacity, continuously explore sustainable development paths for science and technology journals, and contribute to improving journal quality.

Keywords: new media; science and technology journals; editors; development strategies
Classification Code: G624
Document Code: A
Article ID: 1671-0134(2021)11-100-03
DOI: 10.19483/j.cnki.11-4653/n.2021.11.030
Citation Format: Tang Hua, Liu Bin, Zhang Jing. Development strategies for science and technology journal editors in the new media era [J]. China Media Technology, 2021(11): 100-102.

In recent years, the rapid development of mobile internet and intelligent media technologies has accelerated the intelligent and digital transformation of traditional publishing. The swift popularization of 5G technology, integrated publishing, and intelligent algorithms, coupled with the high-speed evolution of new media technologies, has ushered in a completely new era of new media [1]. These technologies have transformed the fundamental modes of daily operations and external communications for traditional journals, enhancing work efficiency, expanding dissemination scope, and strengthening promotional efforts, thereby revolutionizing the ecological environment in which traditional science and technology journals operate [2]. Faced with this constantly changing media landscape, traditional science and technology journals can only maintain their footing and achieve sustainable development by keeping pace with the new media era, strengthening their command of new media technologies, and pursuing continuous innovation. Editors constitute the critical factor in this transformation, and cultivating editors who can adapt to the new media era represents a current priority for science and technology journals [3-4]. This article analyzes the problems confronting traditional science and technology journal editors in the new media era, summarizes the new requirements for these editors, and proposes pathways for their professional enhancement.

1. Existing Problems of Traditional Science and Technology Journal Editors

1.1 Insufficient Attention to New Media Due to Traditional Thinking

Traditional text editing in China boasts a long history traceable to the Xia and Shang dynasties, having left a glorious mark on the development of human society and made indelible contributions to human civilization. New media, by contrast, only emerged in the 1990s and did not develop rapidly until the early 21st century—merely over two decades ago. The contrast between the two resembles a wise elder facing an energetic youth; if the former persists in traditional thinking patterns, it will easily ignore, belittle, or disregard the latter, failing to genuinely recognize its value. This traditional mindset, combined with institutional constraints and resource limitations, means that guiding editors to change their conventional thinking and embrace emerging work methods and promotional approaches requires considerable time.

Moreover, most science and technology journals are administered by government agencies as public institutions, such as research institutes and universities, with editors receiving fully allocated funding for their salaries. Some supervisory departments have not formulated specific development plans or clear objectives for their subordinate journals, leading certain editors to become complacent after acquiring basic editing skills sufficient for their jobs. This satisfaction with the status quo discourages further learning, diminishes work passion, and eliminates motivation for pioneering initiatives, resulting in insufficient attention to new media as an emerging phenomenon.

1.2 Lack of New Technology Proficiency Due to Traditional Work Methods

Traditional science and technology journal editors operate within relatively singular work patterns. Industry planning has historically focused on cultivating competent editors by emphasizing fundamental knowledge and practical skills in publishing, thereby assisting authors in producing excellent academic works and enhancing journal quality and academic standards. Consequently, editors' daily work centers on refining, polishing, and elevating manuscript content—tasks that can be adequately accomplished using paper or Word documents, leaving little room for new technologies and providing editors with minimal motivation to explore them.

Long-term engagement with print media has rendered many science and technology journal editors insensitive to new technologies and has eroded their ability to rapidly master them. Subconsciously, most traditional editors harbor resistance toward new technologies; even when attempting to learn, their unfamiliarity with the field and lack of practice prevent them from achieving proficiency with new communication tools, technologies, and platforms within a short timeframe. Additionally, many editors remain confined to their fixed work patterns and have yet to fully comprehend new media as an emerging medium. Science and

technology journals have long maintained dominant positions in their respective fields through accumulated attention and influence, making it extremely difficult to shift editorial development thinking in a timely manner. Institutional constraints further complicate this transformation.

2. New Requirements for Science and Technology Journal Editors in the New Media Era

2.1 Online-Offline Linkage Capability

New media primarily includes internet platforms such as email, editorial management systems, and microblogs, as well as WeChat and online video platforms. In the new media era, proficient application of new technologies to acquire, process, and transmit information through these channels has become an essential skill for science and technology journal editors. Most journals have already adopted online editorial platforms for daily operations and have begun using new media forms like microblogs and WeChat for promotion and publicity, thereby enhancing journal influence [6].

The speed and efficiency of new technology processing have also imposed new demands on traditional editors, requiring them to further elevate their professional competence and capabilities, including political cognition, language proficiency, and academic judgment. As information disseminators, editors must possess keen political awareness and adhere to correct political orientation to ensure proper guidance of public opinion and value orientation. As language professionals, editors should strengthen their writing skills, as only elegant and fluent scientific papers can attract more readers and gain authors' appreciation. The cornerstone of a science and technology editor' s work is solid academic knowledge; only through continuous consolidation and learning can editors make effective judgments about primary source materials.

On the foundation of solid professional competence, proficient use of new technologies represents the embodiment of online-offline linkage capability in the new media era—a skill that science and technology journal editors should gradually integrate and master. By identifying new topics, capturing key points, and focusing on hot issues through new technologies, editors can apply these insights to their editorial processes and subsequently promote and publish content through new media channels. This simultaneously expands journal influence and attracts higher-quality submissions, creating a virtuous closed-loop cycle.

2.3 New Media Technology Mastery Capability

Traditional science and technology journal editors'technical skills primarily manifest at the manuscript processing level, with editorial expertise focusing on peer review, copyediting, proofreading, and finalization workflows. Academic expertise emphasizes the scientific validity of arguments, correctness of concepts, rationality of methodologies, accuracy of data, and standardization of terminol-

ogy, ensuring data authenticity, scientific soundness, and accurate description to facilitate positive scientific communication.

In the new media context, science and technology journal editors should leverage internet platforms for information retrieval to accurately and promptly locate professional information and data, thereby identifying current hotspots and focal points. Actively interacting with readers on online platforms stimulates reflection, enhances reading interest, and attracts more high-quality submissions. Such engagement can also inspire editors' own creativity, enabling reasonable planning of future work and content. Furthermore, editors can establish intelligent platforms that enable comprehensive analysis of manuscript-related information while processing submissions and reviews, laying foundations for building expert databases, author databases, and reader databases. These specialized databases facilitate better solicitation and organization of manuscripts.

Editors' innovative capabilities have traditionally concentrated on scientific information innovation and journal column innovation. Journals must keep pace with scientific frontiers to timely and accurately communicate innovative theories and latest research findings, thereby demonstrating their value. Column design must align with journal missions and disciplinary characteristics while developing distinctive, recognizable sections to capture reader attention and secure a position in the journal landscape. In the new media era, editors' innovative capabilities must expand to include integrated product innovation—requiring them to re-create, disseminate, and promote existing print products using modern technologies to achieve multiple and diverse developments of a single work, continuously enriching and 立体化品牌 (three-dimensionalizing) the brand. For instance, when a submitted article addresses profound topics or aligns closely with current hotspots, editors should immediately contact authors to develop series of thematic reports, subsequently promoting these articles through WeChat public accounts, journal websites, and official microblogs to fully exploit single products, enrich their connotations, diversify their manifestations, and ultimately improve journal quality and expand influence.

Only by breaking through the limitations of traditional print media, connecting various communication channels, upholding a reader-service philosophy, addressing contemporary needs, guiding market trends, and maximizing the use of new technologies within permissible scopes can editors maintain their position in an era of continuously evolving processing technologies and work patterns. This requires actively exploring deep integration methods while inheriting traditional editorial advantages.

3. Enhancement Pathways for Science and Technology Journal Editors

3.1 Offering New Media Literacy Courses Tailored to Editorial Work Characteristics

Starting from the source, industry supervisory departments should recognize the inevitability and importance of new media and actively organize universal new media literacy courses tailored to the characteristics of science and technology journal work. These courses should become part of editorial discipline construction, covering practical skills such as new media tool usage (e.g., materials sourcing, editing, layout, and image beautification for public account operation), editorial ethics in media literacy to enhance ethical cultivation and strengthen learning of relevant laws and regulations, and guidance on new media work methods for editors to integrate new media concepts into all aspects of editorial work.

The National Press and Publication Administration' s online training courses for propaganda cadres explicitly include a "New Media and Digital Publishing" section covering "Digital Content and Creative Thinking," "Editorial Transformation in the Mobile Internet Environment," and "New Media and Network Public Opinion Guidance Capability Enhancement." Through credit incentives and centralized online instruction, these courses have enhanced editors' professional competencies to a certain extent, achieving sustainable educational continuity.

3.2 Actively Participating in New Media-Related Activities in the Journal Industry to Grasp Cutting-Edge Information

New media-related activities in the journal industry include training workshops, seminars, and relevant skills competitions. Industry associations such as the China Association for Science and Technology Journals of Universities and the China Editology Society for Science and Technology Journals have organized numerous large-scale new media seminars in recent years, inviting multiple industry experts to share their expertise. Science and technology journal editors should actively participate in these high-level academic exchange activities to understand frontier information and industry dynamics from a learning perspective, studying effective integration and development practices from outstanding journals. Listening to expert lectures stimulates learning enthusiasm, clarifies work directions and goals, and helps establish preliminary frameworks for future work. Communicating with peers enhances understanding of new media, identifies personal gaps, and enables targeted improvements that elevate editorial competence and, by extension, journal quality.

Journal editor skills competitions typically include written and speech-based formats, covering current affairs, language, punctuation, industry standards, and other foundational editorial knowledge, as well as proficiency in new technologies and models in the editorial field. These competitions assess editors'

professional capabilities, language expression skills, and mastery of new media technologies, promoting individual career growth while advancing collective progress across journals and demonstrating current technological development trends. Participants learn from each other' s strengths, fully display editorial qualities, demonstrate excellent professional standards, and build a talent reserve for the industry' s future development [8].

3.3 Strengthening Assessment of Editors in New Media Aspects

In the aforementioned national online training courses for propaganda cadres, new media-related courses can be designated as mandatory credits, with increased class hours, expanded new technology content, and enhanced post-course examinations with higher passing thresholds. This encourages editors to proactively master new media content and skills, fostering a positive learning atmosphere characterized by "asking when uncertain, studying when unfamiliar, and researching when unclear."

Relevant departments can also introduce professional qualification examinations related to new media and new technologies, with science and technology journal editorial units using final examination results as one basis for annual performance evaluation. This strengthens editors' learning consciousness, standardizes learning processes, and advances new media technology proficiency among science and technology journal editors [9]. Simultaneously, editors can identify their own weaknesses, select appropriate learning methods, and apply for exemptions from relevant new media examination items by presenting completion certificates, consciously improving their knowledge systems during the editorial process and continuously maintaining high-level professional expertise.

In 2019, the China Association for Science and Technology, the Publicity Department of the CPC Central Committee, the Ministry of Education, and the Ministry of Science and Technology jointly issued the "Opinions on Deepening Reform to Cultivate World-Class Science and Technology Journals," which states that science and technology journals carry human civilization, assemble scientific discoveries, and lead scientific and technological development, directly reflecting national scientific competitiveness and cultural soft power. The document proposes promoting collaborative industry-academia development, aggregating high-quality resources, innovating communication mechanisms, and enhancing the scaled and intensive operation of science and technology journals [10]. Against this backdrop, the urgency of improving editors' mastery of new technologies cannot be overstated. Science and technology journal editors must heighten their emphasis on applying new technologies in the new media era, enhance their comprehensive competencies and innovative capacity, continuously explore sustainable development paths for science and technology journals, and contribute to improving journal quality.

References

[1] Sun Q. Innovative paths for digital publishing industry development in the "intelligent media" era [J]. Communication and Copyright, 2019(4): 84-85.
[2] Lu B, Tan P, Wu X. Enhancing crisis awareness and improving the literacy of science and technology journal editors in the new media era [J]. Acta Editologica, 2017(S2): 127-128.
[3] Li Y. Role positioning and capability enhancement of academic journal editors in the media convergence era [J]. Research on Transmission Competence, 2020(1): 128-129.
[4] Ma M. Role positioning of academic journal editors in the media convergence era [J]. New Media Research, 2017(1): 110-111.
[5] Yuan C, Tian L, Qi X. Innovation and development strategies for academic journals under integrated media background [J]. Publishing Wide Angle, 2021(6): 56-58.
[6] Xiao N. On media literacy of news editors in the new media era [J]. Editorial Friend, 2014(9): 56-59.
[7] Fan M. Transformation path of journal editors' work mode under new media environment [J]. Communication and Copyright, 2020(8): 61-62.
[8] Zhao Q. Discussion on the promoting effect of editor skills competition on young editors' professional growth [J]. Publishing Wide Angle, 2021(4): 48-50.
[9] Cui J, Sheng J, Tan G, et al. Cultivation of editors' new media literacy [J]. Acta Editologica, 2014(7): 970-974.
[10] China Association for Science and Technology, Publicity Department of the CPC Central Committee, Ministry of Education, et al. Opinions on deepening reform to cultivate world-class science and technology journals [EB/OL]. (2019-08-16) [2021-05-16]. http://www.cast.org.cn/art/2019/8/16/art_{{{79}}_{{100359}}}.html.

Author Biographies:
Tang Hua (1966-), male, Chongqing, intermediate professional title, research interests: application of information technology in journal publishing and content dissemination, editorial ethics in pharmaceutical papers;
Liu Bin (1971-), male, Sichuan, senior editor, research interests: science and technology journal publishing practice;
Zhang Jing (1979-), female, Chongqing, editor, research interests: training models for science and technology journal editors.

(Responsible Editor: Zhang Xiaojing)

Note: Figure translations are in progress. See original paper for figures.