Opinions of Korean science editors on open access policies, editorial difficulties, and government’s support for publishing

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Abstract
The Korean government has supported scholarly scientific journal publishing since 1971 through the Korean Federation of Science and Technologies (hereafter the Federation). To ensure that this funding is used as efficiently as possible, the views of science editors should be considered. This study measured the opinions of Korean science editors on open access policies, difficulties during editing, and the government’s support for publishing. From November 28 to December 10 of 2013, web survey invitations were emailed to 368 journal editors listed by the Federation. The web survey tool SurveyMonkey was used to create a questionnaire that consisted of ten items, including the research category for each journal. Out of the 368 editors, 82 responded to the survey (22.3%). Sixty-nine editors (84.1%) had already accepted the open access or free access policy. Of the 13 editors of journals without open/free access policies, seven hoped to adopt a policy within three years. The most difficult tasks in journal publishing were adding a journal to international databases, operating with an inadequate budget, and recruiting professional manuscript editors. Editors want the Federation to increase budgets to cover full-text extensible markup language production costs, to provide guidelines for adding journals to international databases, and to provide programs for training professional manuscript editors and a plagiarism detection system. Most science editors in Korea have already adopted an open/free access policy. Training professional manuscript editors, using plagiarism detection system, and producing full-text extensible markup language should be considered as important items for journal publishing support from the Federation.

Keywords
Journal publishing; Editor; Manuscript editor; Open access; Publishing cost
Introduction

Of 34 Organization for Economic Cooperation and Development countries, Korea is one of the two in which the government has supported scholarly journal publication. The other country to do so is Japan. Although the government’s support for journal publishing started in 1971 through the Korean Federation of Science and Technology Societies (KOFST), the caliber of many scientific, technical, and medical (STM) journals from Korea has not reached the top tier. In addition, the numbers of STM journals indexed in international citation databases such as Web of Science and Scopus were 108 and 194, respectively, as of March 2015. It is believed that STM journals from Korea have been underestimated in comparison to the international level of science and technology. KOFST supported 431 STM journals in 2015; its annual budget originates from the Korean government and was 5,000,000 US dollars in 2015. KOFST also has the task of assisting in the publication of journals with limited budgets, and editors and KOFST are encouraged to cooperate to promote journals to an international level. In this study, we aimed to provide KOFST with the opinion of editors as measured in an online questionnaire in 2013. To distribute limited funding among societies more efficiently, the opinions of editors were solicited. The viewpoints collated in the survey are expected to be taken into account in the policies of KOFST regarding allocation of funding for STM journal promotion.

Methods

The 368 editors of journals of KOFST member societies were contacted via email to request participation in the survey on November 28, 2013. Survey responses were collected from November 28 to December 10, 2013 using the web tool SurveyMonkey (https:// surveymonkey.com/). The survey questionnaire consisted of the following questions: 1) journal research topic category; 2) participation of journal in open or free access; 3) difficulties in journal editing; 4) support sought from KOFST; and 5) types of support selected from KOFST’s tailored support. Responses were binomial answers. Descriptive analysis was undertaken.

Results

Out of the 368 editors, 82 responded to the survey (22.3%). Respondents were from the following research categories: natural sciences (13 respondents), engineering (13), agriculture (12), medicine and health (27), and multi-disciplinary (2). Of the editors, 69 (84.1%) had accepted or would accept the need for an open access or free access policy. Of the 13 editors of journals without open access policies, seven hoped to adopt a policy within three years. Their reasons for not yet having adopted an open access or free access policy included the inability to create a website, a decline in the society’s income, publishing agreements with commercial printing companies, and the high cost of article processing charges for au-

![Fig. 1. Response of 82 scientific, technical, and medical journal editors in Korea to the question “What are difficulties in journal editing?” surveyed from November 28 to December 10, 2013; Multiple choice is possible. XML, extensible markup language.](http://www.escienceediting.org)
The most difficult tasks in journal publishing were adding a journal to international databases, operating with an inadequate budget, recruiting professional manuscript editors, recruiting peer reviewers, checking plagiarism and duplicate publications, dealing with a lack of submitted manuscripts, accessing high quality English translation and proofreading, manuscript editing, and working with extensible markup language (XML) production companies (Fig. 1). Editors anticipated the following support from KOFST: increase in supporting budgets that could cover full-text XML production costs, guidelines for adding journals to international databases, programs for training professional manuscript editors, and supply of a plagiarism detection system and online submission system (Fig. 2). Editors’ favored tailored supports from KOFST were processes for indexing journal to international databases, full-text Journal Article Tag Suite (JATS) XML production, CrossCheck use, CrossMark, and FundRef XML production (Fig. 3).

**Discussion**

In the survey, 84.1% of STM journal editors accepted open access or free access policies because they wanted the dissemi-
nation and frequent citation of internationally-circulated journals. This portion of open access policy was possible owing to the support to non-profit journal publishing provided by the government and scholarly societies. Since KOFST listed an open access policy as one of the evaluation items, most journals have followed an open access policy. The exact proportion of open access journals from Korea should be analyzed in the near future.

There are several procedures to employ in responding to the editors’ concerns. First, JATS XML, DOI CrossRef XML, CrossRef XML, FundRef XML, CrossCheck (a plagiarism detection program), and construction of a landing webpage can be used or produced with the budget provided by KOFST [1,2]. KOFST has asked academic societies to prioritize expenditures in these production areas, as they reflect recent STM online journal standards. CrossCheck is inexpensive and easy to use if a publisher becomes a member of CrossRef. Second, editors can obtain, from the Korean Association of Science Editors (KCSE) or the Korean Association of Medical Journal Editors (KAMJE), appropriate information and training opportunities on the following topics: professional editing; recent trends in journal publishing; guidelines for editing and publishing according to academic category; information on companies that provide English translation, proofreading, and manuscript editing; selection criteria and processes for inclusion in international indexing databases; activation of journal circulation locally and abroad; editors’ meetings according to academic category; next-generation models of journal publishing and marketing; and reference style according to academic category. Third, while an online submission system has some unavoidable cost, academic societies can employ a company in Korea to construct and maintain such a system at low cost, with a budget from KOFST. In addition to the commercial system, an online system provided by the National Research Foundation of Korea was another choice. Further, KCSE has decided to manage the certificate system of manuscript editors in Korea from 2015 to train and develop professional editors. Well-trained manuscript editors have been needed; however, the supply has not been sufficient because of a lack of training systems. This certificate system may now fulfill the editors’ needs.

An increase in the KOFST budget will be difficult to obtain immediately, as the government budget for research and development is also limited. Nevertheless, researchers and editors should request that the government and National Assembly increase the budget for STM journal publishing. Currently, the portion of support on journal publishing, including social science and humanities is 0.04% out of the government’s research and development budget of 17 billion US dollars in 2015. The following issues will also be difficult to resolve in the short term: the shortage of appropriate peer reviewers, an insufficient number of submitted articles, difficulties in recruitment of editorial board members, and disagreements with publishers (societies). Editorial board and society board members should frequently review these issues. Editors should have leadership and should develop themselves as problem-solving professional editors.

In conclusion, Most STM editors in Korea publish their journals with an open access or free access policy. The key issues for improvement are capacity for XML production, an increased budget, and more training opportunities. KOFST, KCSE, and KAMJE are in an ideal position to help editors with these issues.

Conflicts of interest

No potential conflict of interest relevant to this article was reported.

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