

Learned Publishing (2003)16, 91–94

Introduction

The internationalization of scientific journals has already been considered in academic circles worldwide.¹ The senior assistant president of Ei (Engineering Information), Mr Peter C. Katz, has noted that among the 11 criteria for judging whether a journal can be categorized as 'international' are the following: being an English-language journal, carrying out a thorough internationalized peer-review programme and being cited by internationally important indexing services.^{2,3}

Nearly 200 English-language academic journals are currently published in China, and these have taken the first steps towards internationalization,⁴ but what to do next is more difficult, as, so far, there are no ready-made international peer-review guidelines to follow.

Peer review is one of the hottest topics in academic journal circles throughout the world.^{5,6} For example, the Association of Learned and Professional Society Publishers (ALPSP) and the European Association of Science Editing (EASE) launched a sampling investigation (the 'ALPSP/EASE Peer Review Survey') of over 200 journals around the world in Oct–Nov 2000, and released its results in Oct 2000 on the ALPSP website (www.alpss.org.uk). The ALPSP/EASE investigation was designed to help editors reach agreement on a peer-review system, and then to create a set of feasible guidelines for it.

Establishing an international peer review processes for the English-language *Journal of Zhejiang University SCIENCE*

The need for international peer review for the development of the journal

The English-language *Journal of Zhejiang University SCIENCE [JZU(S)]* was first published in 2000, and is now covered by

An international peer-review system for a Chinese scientific journal

Zhang Yuehong (Helen)

Managing Editor, Journal of Zhejiang University SCIENCE, Zhejiang University Press

Yuan Yachun

Zhejiang University Press

Jiang Yufei

Journal of Zhejiang University SCIENCE

© Zhang Yuehong, Yuan Yachun and Jiang Yufei 2003

ABSTRACT: *The characteristics and requirements of a world-class journal were considered in establishing a rigid peer-review system for scientific papers submitted for publication in the English-language Journal of Zhejiang University SCIENCE [JZU(S)] from 2002 onward. Four hundred and thirty-five contributions were received between January and December 2002, and these were sent for pre-publication review to appropriate leading scientists in the USA, the UK, Ireland, France, Canada, Australia, Austria, Germany, New Zealand, the Netherlands, Finland, Poland, Portugal, Italy, Israel, Spain, Greece, Belgium, Sweden, Switzerland, Japan, Singapore, Slovakia, India, Greece, the Czech Republic, Mexico, Hong Kong, Macao and Taiwan. Our experience showed that such an international peer-review system plays an important part in ensuring the high quality of a journal's contents and in helping it achieve an international reputation.*



Zhang Yuehong
(Helen)



Yuan Yachun



Jiang Yufei

international indexing services, such as CA, Ei Compendex, INSPEC, AJ, CBA, ZBJ, BIOSIS and CSA. In August 2001 we received an evaluation report from the Institute of Scientific Information.^{7,8} We were being asked by our peers in academic journal circles and the experts from the indexing institutes if JZU(S) had implemented international peer review. We realized that its absence was a weakness – a weakness shared by other English-language academic journals in China. To resolve the problem, we formally established a peer-review system on 1 Jan 2002. Four hundred and thirty-five contributions were received between Jan and Dec 2002 and these underwent pre-publication review by at least one reviewer from China (who must not be from the same institute as that of the writer) and one or two abroad. The papers may undergo a third or even a fourth review. In brief, treating each contribution seriously and impartially to ensure the high quality of the journal's contents is now one of the guiding principles of our journal. In Table 1 the rejection rates for papers submitted in 2000, 2001 and 2002 are compared. By the end of 2002 the rate had increased to 57%.

The processes in detail

Choice of ideal reviewer

The choice of reviewer is usually made on the recommendation of our Editorial Board members, as they are all experts in their own field and know the special qualifications of their peers. However, they are overloaded with the rapidly increased contributions and so another route is to ask the writer to recommend three–five foreign experts from his references and to supply us with their email or postal addresses.

The reviewing method

After one or two reviewers in China and abroad have been chosen, the editors will usually request the reviewers by email to deliver their review online, which is rapid and efficient. However, some review requests are still sent by fax or post (see Table 2).

Ninety per cent of replies from foreign reviewers were sent by email, 5% by fax and

Table 1 The paper rejection rate of JZU(S) from 2000 to 2002

Submissions	2000	2001	2002
Total papers received (no.)	280	298	435
Papers rejected (no.)	93	130	248 ^a
Rejection rate (%)	33	44	57 ^a

^aThese figures will increase as not all the papers received in 2002 have yet been fully reviewed.

Table 2 Statistics on the journal's international peer-review system from January to December 2002

No. of contributions (Jan–Dec)	No. of reviews sought from abroad	Proportion sent for review by email (%)	Proportion sent for review by post (%)
435	496	95	5

5% by post. So far we have we have received 255 international peer-review reports (excluding the reports from the Chinese mainland).

Time limit for review

The time limit for review is about 20 days. As many as 65% of foreign reviewers sent their completed review to us within 20 days. Most reviewers are willing to review papers for us, and respond promptly to our letter of request. From the 255 reports received, we found the reviewing time to average 19 days; the shortest time was four days. On that basis the reviewing process is not a significant delay to rapid publication.

Manuscripts for pre-publication review are sent to reviewers over the world

Ever since our journal started its international peer-review system, over 400 papers submitted to us have been sent to the USA, the UK, Ireland, France, Canada, Australia, Austria, Germany, New Zealand, the Netherlands, Finland, Poland, Portugal, Italy, Israel, Spain, Greece, Belgium, Sweden, Switzerland, Japan, Singapore, Slovakia,

the reviewing process is not a significant delay to rapid publication

India, Greece, the Czech Republic, Mexico, Hong Kong, Macao and Taiwan – i.e. 30 destinations; these are listed in decreasing order of the numbers of papers sent. Sixty-nine per cent were sent to the USA, the UK and Japan.

The importance of an international review system

A powerful means of improving the standard of submitted research and of ensuring the high quality of the journal

The expert reviewers chosen demand high standards and review seriously and impartially, always giving their evaluation in about 500–800 words. Some have even helped to redesign the graphs in the papers for the writers; some have discussed difficult and complex problems with authors and encouraged them to express their opposing views. Such reviewers personify the belief that there should be no national boundaries in science and that the truth can only be revealed in argument.

At the beginning, many authors were nervous about their papers going abroad for international review, but receiving a thorough review widened their outlook and made them realize that such a review could be of very great help to them. For young writers in particular, a review can provide useful guidance to the conduct of research. In some cases reviewers, by searching indexes, have noticed that some authors have effectively republished an article without any major change in content and also that some authors have even stolen the ideas of others, and have made up a new article based on the work of another with only minor changes of data. In such cases reviewers have supplied the indexing results and the evidence of the earlier articles for us editors to make the final decision. International peer review has identified several such cases and has enabled us to prevent the publication of plagiarized material. Exposing plagiarism in this way has also had a strong warning effect and has doubtless discouraged other authors who might have been tempted. We have noticed that some contributors, once they have become aware of

the policy of thorough peer review of manuscripts, have requested the return of their submitted papers for revision, and further checking. By such means international peer review serves to protect and enhance the reputation of JZU(S).

International reviewing and the journal's reputation

Coverage by indexing services is, of itself, not enough to ensure the international spread of a journal.⁹ What is more, the subscriptions for English-language academic journals from China are becoming smaller and smaller with the sluggish global economy. To survive and develop in such a difficult situation, international peer review seems also to be a promising means of promoting circulation of the journals: it helps to raise awareness among international experts of the level and trends of scientific development in China, and it is a mechanism by which authors and reviewers can exchange academic ideas.

In accordance with international norms, reviewers are not paid for their work so the only way we can show our appreciation for their great support is to give them a year's free subscription to the journal. Doing that kills two birds with one stone, as it not only expresses our gratitude, but also helps the international scientific community to get to know our journal.

International peer review also shows us and our authors that there is indeed some distance between the level of scientific development of China and that of the rest of the world. From the total evaluation reports of the reviewers, we can see that only 10% of the papers could be considered as excellent; 20% were good; 15% were between good and moderately good; 25% were between moderate and poor; and 30% were very poor. In particular, the standard of English is often below reviewers' expectations, with some papers or passages being incomprehensible. A good English-language journal intended to present the scientific achievement of a country and to be a forum for promoting international academic exchange must first of all be in good English (which is now effectively the international

there should be no national boundaries in science

*our reviewers
are a vital
element in
improving the
journal*

medium of communication) and thus understandable to all readers and especially to the reviewers entrusted with appraisal of the journal's contents. The ability to express themselves in presentably good English is a common problem for Chinese scientists, who must improve their English writing skills so that their papers can find appreciative readers in international academic circles.

Every new measure needs practical application to prove its worth. Our journal editors have learned something from efforts to establish an international peer-review system, but more problems and difficulties will confront us in the future.

Our reviewers are a vital element in improving the journal. We would like to take this opportunity to give our heartfelt thanks to reviewers in China and abroad for their help. To express our deepest appreciation to these kind scientists, we have printed the list of international peer reviewers in the last issue of *JZU(S)* for 2002.

References

1. Cai Yuling. On internationalization of scientific journals. *Acta Editologica* 2002:14(1), 49–51 (in Chinese, with English abstract).
2. Katz, P.C. *Ei Compendex* standards for selecting journals. *Ha'erbin Industrial University Journal* 2001:3(6), 872–4 (in Chinese).
3. Kata, P.C. Briefing for journal editors and regarding selection criteria for inclusion in *Ei Compendex*: characteristics of world-class journal. *Engineering Information*. New York, Elsevier, 2001, p. 10.
4. Zhang Yuehong (Helen), Wang Shen and Li Jiang. The English-language academic journals of China: trends and developments. *Learned Publishing*, 2002:15(2) Apr, 149–52.
5. ALPSP/EASE/ALSSS joint seminar. Best practice in peer review. *European Science Editing* 2001:27(2), 34–6.
6. ALPSP/EASE peer review survey in Oct–Nov 2000 (www.alpsp.org).
7. News Note: English journal from China. *European Science Editing* 2001:27(2), 44.
8. Zhang Yuehong (Helen). *Journal of Zhejiang University (SCIENCE)*: a new journal for the 21st century. *Learned Publishing* 2002:15(1) Jan, 59–62.
9. Kaser, R.T. Getting it: the added value of helping users find information. *Learned Publishing*, 2002:15(1) Jan, 33–42

Zhang Yuehong (Helen)
Managing Editor, *JZU(S)*
Zhejiang University Press

Yuan Yachun
Zhejiang University Press

Jiang Yufei
JZU(S)
20 Yu-gu Road
Hangzhou 310027, China
Email: jzu_s@mail.hz.zj.cn