Open refereeing

John Harnad argues that introducing payment for referees and making their names public would improve the quality and credibility of peer review

Most scientists would agree that there remains a need for credible, peer-reviewed scientific journals. Yet the increasing volume of submissions and burgeoning online journals of questionable quality are contributing to a deterioration in the efficiency and credibility of the peer-review process. Journal editors, who are faced with the task of finding qualified referees who can provide reliable reports in a timely way, know that the system is becoming increasingly dysfunctional. No mechanism exists to assure that the anonymous, unrewarded and unrecognized work of refereeing is completed with integrity.

The availability of experts willing to perform peer review as a “service to the community” is diminishing and many view the assurance of quality that refereeing claims to provide with scepticism. The increasing reluctance of scientists to accept the job of reviewing is contributing to delays in the processing and dissemination of scientific work. The absence of any mechanism to assure reliability also raises further doubts about the process.

Is it realistic to continue to rely on a system based on unpaid, unacknowledged voluntary services, provided anonymously, with no objective mechanism to assure quality? Publishers may reply that they can rely on the notion of “service to the community” to assure an adequate supply of referees. After all, the referee might be the one who is anxious next time to have their own paper processed in a competent and timely fashion. But this assurance is contradicted by evidence of deteriorating quality and reliability of reviews provided, plus increasing delays resulting from the need to pass from one potential referee to another before receiving a credible report. Is it reasonable to try to maintain such a system when rapid dissemination is already adequately assured, free of charge, by public repositories?

Counting the costs

In all other instances of consultation that require a high degree of expertise and substantial investment of time, reasonable compensation for the work done is viewed as normal and essential. Why should this not be the case for referees in a scientific journal? At the very least, some positive inducement is needed to assure the continuing willingness of experts to perform the task, but a balancing mechanism is also needed to assure timeliness and reliability.

Even modest compensation to referees may raise concerns that such a system is open to abuse, with some individuals trying to take advantage of it by accepting the work without bothering to invest the time and effort needed to complete it with integrity. A strong deterrent to inadequate evaluation is, however, easily built into the process by the use of “open refereeing” – by publishing the name of the referee together with the article. This also provides a remedy for other shortfalls in the current system.

Assigning credit, together with the safeguard of accountability, would benefit all sides. Recognition of work done may be of particular value to younger scientists, who must rely on such indicators for career advancement. Providing at least modest compensation for the time and effort required would make experts more willing to accept an otherwise thankless task. More importantly, making refereeing an open, verifiable and properly rewarded activity would serve to improve its quality and enhance credibility.

Recognition of work done may be of particular value to younger scientists

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There will certainly be concerns about the loss of anonymity in such a system. Being anonymous is currently viewed as essential so that referees are not put under unwarranted pressure. Without any positive reward for providing their services, adding the risk of possible negative repercussions from being identified would make referees unwilling to accept the task. But such services, without recognition or reward, are rendered doubtful if the provider is absolved of any accountability. Not paying or recognizing referees may save on costs, but it also undermines the credibility of peer review, which is supposed to be the main “value added” distinguishing journals from preprint repositories.

There is no real need for anonymity, however, after peer review has been completed, if an article is accepted and published. At that point, the author is unlikely to feel disgruntled and is no longer in a position to apply untoward pressure. If the paper is rejected, the referee remains anonymous. Referees who nevertheless feel they might be vulnerable to adverse consequences should be allowed to remain anonymous, with the understanding that they will not be paid. Under these conditions it is likely that most referees would accept having their name posted, provided it appears only after the paper has been accepted for publication.

The combined benefits of rewarding referees while holding them to account would provide a more credible assurance of reliable peer review. But how would this affect the economics of journal production? As a rough estimate, it may be necessary to devote something like 20% of the total production costs of an article to remunerating the referee. A reasonable analysis should make it clear, however, that the resulting benefits amply justify the additional costs.

Raising the standards of quality control would improve the credibility of the journal, as well as the efficiency of processing. Both the reward and recognition would make the referees more willing to accept the task, and do it with integrity and within a reasonable time. By better fulfilling the expectations of authors and the scientific community, a journal can enhance its reputation for quality, which might even lead to increased readership and circulation.

Compensation

Should referees be offered rewards?