Breaking the Mould and the Birth of a New Journal: Online Educational Research Journal

Peter Tymms, Sean McCusker, Richard Remedios and Carole Anderson
Durham University

Abstract

Academic journals are evolving and proliferating but despite their success there is much room for improvement. The traditional paper based model is expensive, constrained by space, exclusive and beset with problems of refereeing and publication time. The newer on-line journals go some way to dealing with these issues but they fail to capitalise on the possibilities opened up by the web.

This paper launches a new journal Online Educational Research Journal (OERJ) which is free, unconstrained by space and accessible to all. It takes a novel approach to refereeing allowing discussion online and deals with the shortage of refereeing by requiring authors to reciprocate. A key feature of the journal is that papers are guaranteed to be published albeit anonymously in the first instance. After receiving the ratings and comments of referees which will go online the paper becomes onymous unless the author chooses to withdraw.

Introduction

Numerous online journals are available to academic researchers and the numbers of journals are increasing steadily. It is estimated that the typical compound growth rate is around 3.3% per annum (Mabe and Amin 2001, Mabe, M. 2003). There are now about 25,000 scholarly peer reviewed journals with a global turnover of £3 billion. About 90% are available on line and 10% are open access (Corbyn 2009). Given this scale it is quite reasonable to wonder what sense there is in producing a new journal. This article sets out the need for a new approach and how the embryonic journal aims to fulfil that need. It starts by setting out the difficulties surrounding the present journal system and then the ways in which those difficulties can be addressed.

Problems with existing academic journals

We see five difficulties with existing academic journals
1. **Cost**: Many journals are expensive. The British Educational Research Journal (BERJ), for example, costs £984 a year for an institution to receive hard copy and access on-line. A well-stocked library needs hundreds of such journals and even though they can make deals with publishers the costs are still very high. The costs of the journals have been rising at a dramatic rate. "Prices have risen faster than inflation since the 1970's, and four times faster since 1986." (SPARC 2004) and as a result many universities, including high profile ones are taking action (SPARC 2004). This seems surprising as it is becoming easier and quicker to produce printed and on-line material; the ability to edit electronically, to move information around; to print; and the cost of paper have all been deceasing, and one has to wonder why the prices are rising so dramatically. Further some publishers make surprising charges. Springer operate their "Open Choice" scheme in which the authors pay to have their article made available to all for $3000 (University Libraries 2004). Of course, some professional organisations do receive financial rewards, but such links are not without criticism. Peter Murray-Rust a reader at Cambridge University comments: "*We have lost the distinction between a scientific society and a*

scientific publisher and that, I think, is a very serious one." (Corbyn 2009 p33). Although some (just some) editors are rewarded financially and meals are sometimes (just sometimes) paid for editorial boards the real profits go to the publishers. Some might argue that academics are paid by their universities to do this work and they are indeed expected to do scholarly work and their reputations depend on publishing and being involved with the publishing process but a balance has been lost. Richard Smith, former editor of the British Medical Journal opines: "*Journals are getting rich off the back of science without, I would argue, adding much value*" (Corbyn 2009 p 34)

2. **Limited size**: The traditional academic journal in its paper-based format and the inevitable restricted number of issues per year has been around for a long time. BERJ now produces six issues a year with around 8 articles per issue. It could be argued that limited space is good in that it forces a discipline on the field and ensures that only good quality articles get published. But whilst there may be reason to restrict the length of articles why restrict the number? Education Policy Analysis Archives (http://epaa.asu.edu/epaa/) varies the number of papers published in each edition quite dramatically from 73 on 2004 to 23 in 2008 presumably on the quality of submissions rather than the space available.

3. **Ownership**: Journals are written by academics; edited by academics; and the authors then hand over the copyright after which the journals and articles are sold back to the academics. This seems to be an odd cycle.

4. **Refereeing**: Marsh et al. (2008) have shown that the reliability of the judgment of academics' work by their peers is worrying low (around 0.2). The usual instruction to reviewers is that they should try and make a decision either way resulting in a decision being made to publish the article or not. However, during the review process, there is usually some disagreement between reviewers and authors. Occasionally such reviewing disputes appear in special issues or as a series of papers but in the most part, rarely do we get to see the claims and counter-claims made for each journal review. This review process seems to miss a trick. If inter-reviewer reliability is as low as Marsh suggests, then once a paper is reviewed, it would be useful if authors and other interested parties could enter the debate to comment openly on the published paper. Walsh et al. (2000) provides evidence to suggest that the quality of reviews improves when they are open as does the feedback to authors.

5. **Time**: Journals can take a long time to publish articles, sometimes years, although we note that in some areas publication is now very rapid because of online journals and in the case of some it is possible to jump the queue if the article is relevant to the moment.

Many of the problems outlined here have been solved or can be solved using ordinary online journals and they are very widely available and software is available to run such journals (www.arl/sparc/core/index?page=h16). And there is a growing movement for open source material and particularly to make sure that all articles are available in the public domain (Lakhani & Hippel 2002, Willinsky 2005, Hedlund et al 2004). However, there are still difficulties and many online journals simply replicate the paper based approaches online without capitalising on the possibilities. The present journal aims to build on the approaches of successes such as YouTube (**YouTube**.co.uk) and to integrate this with academic publishing.

Solutions to problems and a way forward

Many academics have seen the value of online journals and also of open access, but these moves, whilst important, don't capitalise on some of the advantages which are possible from Internet approaches. There are also some aspects peculiar to Educational research which can hopefully be addressed and the sections below address the major issues and the ways in which the journal aims to tackle them.

Cost

Provided academics are prepared to take ownership, they should be able to run journals themselves in considerably less time than that which is needed to run a paper based journal owned by an independent private organisation. Online Educational Research Journal (OERJ) will be free to all.

Limited size

No limit is being put on the number of articles which OERJ will publish within a specified time period. Clearly that are upper limits dictated by the size of servers and the capacity of readers to check material before an article goes online (see next section) but we are not anticipating problems and will look for solutions if the happy circumstances arise where we have difficulty coping with the volume of submissions.

Appropriate material

Submitted articles which are related to education research and which comply with a simple set of rules (http://www.oerj.org/faces/aboutoerj.jsp) will be published rapidly and anonymously before any response is received from a reviewer. But the article will have been checked by a reader to ensure that it complies with the rules including that it is respectful of others (not racist, sexist, ad hominem, etc.)

Ownership (copyright)

The authors of articles have full ownership of the articles and no form transferring rights will be required by OERJ.

Availability of referees

When submitting an article the author agrees to referee three papers. Although there is some room for manoeuvrability in deciding which papers are refereed by which authors it is expected that authors will referee some work outside their immediate field of expertise. At first sight that may not seem to be sensible but it has two clear advantages. Firstly, this will ensure that the journal will not have a shortage of reviewers and secondly it will help to ensure parity across domains. The mechanisms set out in the next section will help quantify the extent to which there is any problem whilst also pointing to ways in which any issues can be dealt with at a later stage.

Responses to referees

A key feature of the journal will be the right of reply. After comments and ratings have been provided the author will be able to respond and it is hoped that this facility will generate an online discussion. At the same time, whilst the referee will give ratings he or she will not be able to decide if an article is published or not. As noted above the article will be published anonymously initially. It will become onymous after refereeing unless that author decides to withdraw it.

Time to publication

There will be no delay in publication other than the time taken for readers to check the article's suitability.

Features of Online Educational Research Journal (OERJ)

Key aims

OERJ seeks to open up the process of academic publication, and to allow new routes for research findings to reach researchers and practitioners.

Technical Details

oerj.org is a Java-based web application running on Apache Tomcat communicating with a MySQL database.

The interface design borrows from established and successful interactive Web 2.0 applications such as YouTube ™ http://www.youtube.com, Many Eyes (http://manyeyes.alphaworks.ibm.com/manyeyes) and Swivel (http://www.swivel.com). The primary advantage of such an interface is its familiarity. There should be very little learning time associated with use of the e-journal.

WEB 2.0 technologies are used, to allow a wider discussion and exploration of research findings and to encourage building and sharing understanding.

Ease of use

The whole on-line process has been designed to be intuitive. Design principles have taken into account that not all users will have experience of on-line reviewing systems. The aim is that the technology should be essentially straightforward to engage the casual user and encourage community membership.

Critique and discussion

The key strength of the technology used to run OERJ lies in the affordances it provides for sharing. Users are encouraged to investigate, critique and discuss research as it is carried out. Each publication has an associated discussion /comment thread in which users can respond to each other or to the original paper. This facility enhances and extends the scope for feedback to the authors of the paper and most effectively, gives the authors an opportunity for rebuttal or discussion. It is hoped that

the more informal format of these threads will generate discussions with their analogue in the collaborative atmosphere of conferences rather than the more adversarial environments of academic journals.

Have your paper rated

Publications can be organised by popularity, publication date and rating score. The facility to sort by rating begins to address some criticisms which may be levelled at the journal with regard to the quality of the reviews. Whilst the lack of expert opinion may be a sticking point for some, the consensus view will nevertheless provide a useful tool for evaluating the quality or at least popularity of the piece. Such approaches have been used successfully with YouTube and ManyEyes where they are a valuable means of social intercourse.

Immediate publication

The immediacy of the publication process means that users will be engaged at the leading edge of current research, and allows rapid feedback to researchers creating a more formative environment in which research can be developed. This should lead to faster implementation and trialling of new findings and researchers and practitioners can keep up to date with the latest research.

For researchers, this rapid feedback channel allows a more reactive approach to research and development. It allows the development of an adaptive research culture where the scope to 'fail fast' and 'fail often' provides good feedback channels for development and research planning.

Conclusion

The editors are confident that the speed and ease with which an article appears, the fact that ownership remains with the author(s), no limitations except those of good manners, will make the journal a success and that the open discussion boards will make the whole process highly enjoyable.

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