## Protocols and Challenges to the Creation of a Cross-Disciplinary Journal

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In 2006, the Online Journal of Rural Research and Policy (OJRRP) was launched. The publication is an example of the ability of academia to create narrowly defined scholarly journals aimed at a small, targeted readership while relying on a meagre budget. This article discusses the factors that fostered the creation of hundreds of online-only journals, as well as providing a case study of the creation of OJRRP and the long-term implications of online cross-disciplinary publications. Areas covered include sponsorship, editorial board, editorial staff, software, link rot, code, promotional activities, tracking and supporting usage, and, perhaps most importantly, long-term sustainability. The OJRRP experience is presented along with lessons learned in each area.

Keywords: Online Journal of Rural Research and Policy, narrowly defined, scholarly journals, born-online, cross-disciplinary, sustainability, editorial boards, academic ranking

#### INTRODUCTION

Online academic journal publishing is not new—not, at least, in Web years. And, as is always the case with online activity, in less than two decades online publishing has grown from innovation to common acceptance and from subscription-driven to open access. The convergence of cheap electronic archived storage space and open-access software platforms—amid what appears to be an endless rise in print journal costs—has produced an explosion of new online journals. In fact, it is not unreasonable to suggest that the publishers' death-like grip on access to academic research at the end of the millennium¹ is one of the significant factors that has fuelled the rapid rise in online journals since. These new journals have forever changed the nature of academic publishing,

for good or ill. In a very real and literal way, every academic department within every university now has the ability, if it so desires, to sponsor its own journal addressing its own focus and serving its own well-defined, exceptionally small readership. And, perhaps even more importantly, professors with cross-disciplinary research foci need not remain 'on the farm' in their separate departments and single-topic journals but can branch out to create new subject-defined publications that ignore artificial academic boundaries. Yet, it remains to be resolved whether this ability to publish will result in a net positive outcome over time. That is, simply because one *can* publish a narrowly defined publication, such as one dedicated to issues in the Great Plains, does it automatically follow that one *should* create such a publication? With the lowering of the economic barriers to the creation of online journals, might other, more philosophical questions arise?

The purpose of this article is to outline the growth of online academic journals, the factors spurring that growth, and the ability we now have to create journals that appeal to researchers interested in cross-academic fields of study, as encouraged by a number of authors.<sup>2</sup> This cross-discipline publishing freedom will be illustrated via a case study of an online journal launched in 2006, the *Online Journal of Rural Research and Policy (OJRRP)*. The article will also address the issue of sustainability, sometimes a forgotten element in the rush to establish new journals: What happens when the funding, interest, or energy behind a new journal fades?

THE RISE OF ONLINE ACADEMIC ONLINE JOURNAL PUBLISHING In a comprehensive examination of academic journals, the Association of Research Libraries (ARL) tracks the presence of online publications, including the method of delivery. The January 1991 edition of the *ARL Directory of Electronic Journals* reported 110 journals online. By 1998, that number had jumped to more than 6000,<sup>3</sup> and by 2007, the ARL reported that 60 per cent of 20,000 peer-reviewed journals were available online in some form.<sup>4</sup> A major cataloguer of journals, EBSCO, noted in May 2010 that almost 23,000 of its academic journals and newsletters were available online, through either library subscriptions or open access.<sup>5</sup>

The trend since the 1990s has also included a shift away from publishers offering both print and online access to a strictly Web-based publishing system, partly, it appears, in response to the behaviour of those using the

research. 'The users have voted—and they want the convenience of electronic [access].' Richard Johnson and Judy Luther go on to cite research reinforcing the notion that not only do the economics favour online publishing, younger researchers also prefer electronic to print. 'Scholarship, particularly in science, is becoming increasingly born-digital and networked digitally,' according to Mike Ware, who describes a conversation with a librarian at a large research library: 'The librarian concluded [from a study he had conducted] that on present trends, there would be little demand for print journals within five years.'

And whereas the common thinking favours higher use among younger faculty, this pattern may also be changing rapidly to include older faculty. A study published in 2002 by researchers at Drexel University showed a significant preference for online over print among graduate students, but less adoption among faculty. Two other researchers, tracking acceptance among faculty, found a much higher rate, which they attribute to the round-the-clock availability of research materials:

Our in-depth interviews with faculty indicate a high degree of comfort with electronic access to journal literature. The scholars we spoke with clearly recognized the convenience of 24/7 access from home or office. Like many librarians, most faculty would prefer to retain print just in case, but when confronted with forced choices, the overwhelming majority either supported more electronic access at the cost of print retention or felt unequipped to make this choice.<sup>9</sup>

The logic of journal publishing was based, in part, on the idea of economies of scale: several articles bundled into one journal issue. The delivery of those articles was accomplished as efficiently as possible by bundling several into one platform: print. If delivery is strictly however, electronic, is there a need to create 'issues' containing several loosely connected articles, related to each other only by a discipline? Add to this that researchers do not search by journal issue but, rather, search by relevant article (which was still the case prior to online publishing), and the rationale for a print journal is largely nullified, as is the need to bundle online articles into 'issues.'

Hal R. Varian's 'The Future of Electronic Journals,' presented at a conference at Emory University in April 1997 (and published online a year later), described the evolution of online journals within a supply-and-demand model. As demand for easy access to published research increases, so will the need for more journals in which to publish new

research. As the amount of research and, thus, the number of publishable articles increases, so may the demand for more journals. And as the economic barriers to establishing new journals online drop, it is likely that more will be created, especially relative to the appearance of new print journals.<sup>10</sup> This ease of publishing, as we will see later, may not always be optimal.

In many ways, prior to the advent of online journals, the physical space required by university libraries to store print journals was as much a challenge as the cost of purchasing the subscriptions. As noted in UNIverse Consortium report in 1999,

Money is not the sole problem however. Increases in the volume of publications and the formats that they come in means that, even if they wanted to, libraries could not attempt to build comprehensive collections in their area without extensive physical and financial resources. These developments have led to a change in the way libraries view their collections and the services they provide. Essentially, libraries are considering 'just-in-time' access to information [via interlibrary loan], rather than 'just-in-case' collection [via actual in-house copies].<sup>11</sup>

Perhaps as a response to lack of local access, 'just-in-time' interlibrary loan (ILL) use by scholars has grown significantly since World War II. As libraries worldwide faced the pressures of tight acquisition budgets and equally tight storage space, more and more emphasis was put on increasing the efficiency of ILL. In recent years, new software made it possible for rapid electronic transfer—sometimes within just a few hours—of an article from a distant library to the requesting researcher's desktop computer. In fact, many researchers today need not set foot in their university libraries to retrieve research materials. This is certainly an issue for university libraries and their sustainability, but it is not an issue for this article.

To no small extent, the ability to access essentially all information, no matter what library holds the original document, calls into question the decades-old standard of including the size of the library's holdings in the rankings of institutions. The larger the library—the thinking was—the 'better' the university, 12 though that measure may be fading. 13 The holdings of a library were used to attract the best and the brightest: 'The ability . . . to attract top-flight researchers depends on the size of the

collection of the library. Threats to cancel journal subscriptions are met with cries of outrage by faculty.' Yet university libraries in recent years have consistently faced increased journal costs just to hold on to what they had, with little or no room to add new titles. Indeed, to this day faculty committees dealing with university library budgets invariably struggle over which journals to keep (as many as possible), which to add (only a few), and which to delete (more and more every year). Every academic department and school has its arguments that any cuts would be dire and threaten the quality and quantity of their research. And some academics claim a sort of elitism: their works, or so the argument goes, cannot be properly represented online; they must be in print—though the rationale is often one of tradition rather than actual physicality.

Some of the issues outlined at a Stanford University Libraries colloquium addressing the online journal movement in 2006 were

- the rise in cost of academic journals of 215 per cent between 1986 and 2003, compared with a 68-per-cent rise in the consumer price index over the same period
- the charging by for-profit journal publishers of three times the per-page cost of not-for-profit journals
- the free online access offered by 73 per cent of all articles in all journals and 100 per cent of the peer-reviewed articles in four leading economics journals<sup>15</sup>

Notably, two years before the Stanford colloquium, that university's faculty senate had passed a resolution encouraging faculty to factor in the price of a journal when considering where to publish their research. The colloquium itself was described as a response to the 'crisis in journal pricing.' 16

#### THE SIREN'S SONG:

## ECONOMIC ADVANTAGES OF ONLINE PUBLISHING

Yes, researchers prefer online journals for their ease of search and access. But new online journal publishers may also be motivated by the comparatively low costs. These low costs can be found not only in the elimination of printing but also in the reduced costs of handling manuscripts. Using electronic communication with authors can cut costs within the editorial system by half. In addition, electronic publishing results in savings in library shelf space, lower costs to monitor holdings,

and the ability to store accompanying support documents, such as images, data sets, and audio/video files. These cost savings are significant, as outlined by Varian.<sup>17</sup>

The reduced costs associated with establishing an online academic journal not only lower the barriers to new publications within one academic field but also make it possible to draw together research from a variety of fields. For example, under the old system of journal publishing, the academic discipline of researchers determined their options for publication; that is, researchers interested in the life cycles of organisms within gulfs and seas would be required to publish only in the general journals in their academic field. The lower costs associated with new online journals would make it possible for a journal to be created dedicated, for instance, to researching the life cycles of organisms within gulfs and seas, regardless of whether that research focuses on geography, geology, biology, or even medicine or history. Furthermore, as suggested by Ernest Boyer, such 'freedom to associate' outside the departmental boundaries would lead to a new perspective on learning and research. 18 And, as noted by Carole Palmer, 'disciplines may be adequate for coordinating teaching activities within a university, but they are misleading simplifications of research areas and the intellectual domains that sustain them.' In fact, Palmer concludes that 'there is no overlay of technology that can permeate the organizational, intellectual, and linguistic barriers that constrain the flow and exchange of information across disciplines.'19 The incestuous nature of some disciplines creates false barriers, barriers that are more form than function, such as those that separate the theories of political science from those of mass communications.

The challenge to the turf barriers that are part of all universities is also a challenge to departments within a university to value research that crosses multiple disciplines. Without such flexible thinking and a unwillingness to step away from the old model of a central core of 'believers' all walking in lockstep, a journal—any journal—faces marginalization. Yet the calls for academics to step away from the artificial boundaries that separate campus departments are becoming—if not stronger—certainly more frequent.<sup>20</sup> Indeed, the very recent surge toward the creation of university research commons is a reflection of the intrinsic desire on the part of universities and academics to talk to each other across disciplinary lines.<sup>21</sup> If we also blend into the discussion an

application of Chris Anderson's long-tail theory,<sup>22</sup> we can imagine the tides of academic publishing and cross-disciplinary discussions seeming to move apart (more specialized) and together (more cross-disciplinary) at the same time.

The very nature of online publishing makes matters of subject definition, subscription demands, and even article length non-factors. These new online publications need not be concerned that a very narrowly defined journal might attract very few readers compared to larger journals, or that a subject area may require extremely long and, thus, expensive articles. Online academic freedom allows groups considering the launch of a new publication to weigh its value outside the traditional cost—benefit model associated with print journals. Based on their digital nature, online cross-disciplinary journals are of equal value whether accessed by 100 readers or by 10,000.

#### THE COST TO PUBLISH: A COMPARISON

The average cost of publishing an academic journal article in paper form has been estimated at between \$1000 and \$8000. This cost compares to an online cost of as little as \$75 per article.<sup>23</sup> As Andrew Odlyzko points out,

Two factors make free electronic journals possible. One is advances in technology, which make it possible for scholars to handle tasks such as typesetting and distribution that used to require trained experts and a large infrastructure. The other factor is a peculiarity of the scholarly journal system that has already been pointed out above ... Technology is making their [scholar editors'] tasks progressively easier. They could take on new roles and still end up devoting less effort to running the journal system than they have done in the past.<sup>24</sup>

Such an extreme difference between online costs and print costs is perhaps the biggest factor driving the migration to Web-only journals. As Andy Grove points out, when the most expensive part of a business's operation is reduced by a factor of ten, we are past the point of hanging on to old economic models; it is time to take a very hard look at the rationales buried within the original operational plans.<sup>25</sup> As Odlyzko notes, online publishing compared to print publishing is a reduction of two orders of magnitude, a very powerful incentive to change.<sup>26</sup>

Given this environment of lower financial barriers for new journals, one might expect the creation of more and more exquisitely defined journals, as could be predicted indirectly by Anderson's long-tail theory.<sup>27</sup> Minimal publishing costs might open the door to more cross-disciplinary journals and to academics who, in the past, faced significant barriers to their research. As noted in a 2004 report on publishing of digital government (DG) document research,

Survey results indicated that DG researchers do experience problems publishing their work in traditional disciplinary journals. More than half of the respondents reported that they often experienced difficulty identifying suitable journals in which to publish their work, encountered reviewers who do not sufficiently understand DG issues, and were forced to disaggregate multidisciplinary research into disciplinary elements in order to be published. As a result, respondents gave roughly equal endorsement to two publishing strategies that they felt would further their own publishing agendas as well as promote the visibility, legitimacy, and influence of DG as a field of research. These strategies included organizing DG special issues in existing disciplinary journals and creating a new journal dedicated to digital government research. The vast majority of respondents said they would submit articles to these sources, would serve as reviewers and editorial board members for a new journal, and would also organize special issues in existing journals.<sup>28</sup>

# THE (LOW) VALUE OF CROSS-DISCIPLINARY ONLINE RESEARCH TO TENURE COMMITTEES

The suggested bias of traditional journals against multidisciplinary research, combined with the rising costs of print journals, seems an irresistible argument for more cross-disciplinary online publications.<sup>29</sup> Yet there remains significant uncertainty among traditional, generally older, tenure-committee members that online journals and cross-disciplinary publications can carry the 'weight and gravitas' of print journals focused on one field of study.<sup>30</sup> This constitutes an ongoing challenge for authors seeking to publish online. The print-driven standards that make an academic journal important and respected revolve around acceptance rates and, frankly, tradition. The idea that a journal is of more value because it rejects a high number of submissions has been a

subject of great discussion over the years.<sup>31</sup> And while it may be too early to declare the concept 'quaint,' it is not unreasonable to suggest that the power of rejection rates in defining the most prestigious journals is fading.

So what measures can a tenure committee use to determine what is an acceptable journal and what is a mediocre one? It has been suggested that researchers' citation rates may be one answer. That is, rather than considering the journal in which the research is published, academia and the researchers within it might establish the value of research. Even this standard is open to its own challenges, however. Researchers may prefer to cite articles that are more easily accessed; this generates more citations of open-access (OA) online journals, not because the information residing there is more valuable but because it is more easily and quickly accessible.<sup>32</sup> Some recent studies, such as those by Steve Hitchcock, suggest that publishing in OA journals may actually enhance the likelihood of a particular researcher's being cited by other researchers.33 Further, an article may be cited as a bad example of research, or as a counterpoint. Given that citation rates may be one of the few remaining measures available after the shift to OA online publishing, ease of access may play a far greater role than traditional standards. As Chu and Krichel note, 'In a nutshell, an infrastructure that encourages downloading at digital libraries would eventually lead to higher usage of their resources.'34

Whatever direction this evaluation process takes, it is unlikely that a high rejection rate, which has been suggested as the only sure method to ascertain what is the 'cream of the crop,'35 will survive the migration of research to online publications. While print journals are restricted by space, which limits the length of articles as well as the size of individual issues, online journals are published in a boundless environment. The online journal is not driven by the economics of article lengths or numbers.

All of the above concerns, from economics to policy, were factors addressed by the team responsible for launching the *Online Journal of Rural Research and Policy (OJRRP)*. To some extent, the early months and years of *OJRRP*'s operations reflect the lack of an 'owner's manual' for online publishing. Thus, what follows may be taken as just such a manual for those contemplating a journal start-up.

THE CASE OF THE ONLINE JOURNAL OF RURAL RESEARCH AND POLICY

Stage 1: Sponsor, Board, Editorial Staff

A. Issue: Finding the 'Right' Sponsor

In a world of shrinking university budgets, finding a sponsor to assist in the launch of a new online journal is more than important, it is an imperative. It comes with its own set of issues, however. As noted by Raym Crow in 2005, in a report created for the Scholarly Publishing and Academic Resources Coalition (SPARC),

- 1. Sponsorships might imperil editorial independence as sponsors may seek to influence the journal's editorial content.
- 2. Whatever the reality, authors and/or readers may *perceive* that sponsorships impair the journal's editorial independence.
- 3. Sponsorships require considerable effort on the part of a publisher to define, negotiate, implement, and manage.
- 4. Sponsorships may not generate sufficient revenue to fully support a journal.<sup>36</sup>

## OJRRP Experience

In the case of the *OJRRP*, the impetus for creating a new publication came from a source outside the university. The North Central Regional Planning Commission (NCRPC), a non-profit funded for the purpose of 'enhancing regional economic opportunity and community development' within eleven counties in Kansas, initially provided \$5000 for the creation of a journal that would address rural issues from traditional scientific research and community policy dimensions. This amount was increased to \$30,000 in 2006.

John Cyr, former director of NCRPC, sought not only a closer relationship with Kansas State University but also an avenue through which academics and local communities could connect. His hope was that the journal would be that connection and that the research presented in it would be 'accessible' not only to academic researchers but also to the rural communities that constitute the vast majority of those served by the organization.<sup>37</sup> Cyr's concern revolved around the tendency of academics to speak in a language accessible only to other academics in their field—that is, legal research is written by lawyers for lawyers, geology research by geologists for geologists, and historical research by historians for historians.

Cyr also hoped the new journal would address, among other issues, the challenges of sustainability faced by communities in the Great Plains, as well as their history, economics, geography, social structures, education, and many other research areas. This vaguely drawn mission almost immediately created challenges. For example, it was intended that non-academics, such as practitioners and professionals in related fields, would supply the 'non-academic'-language articles. This idea ran into an unexpected barrier: private-sector professionals expect to be paid for their advice and research, an expense that was not included in the budget of the journal; and while some non-academics did agree to publish in *OJRRP*, the numbers were far fewer than had been hoped.

In addition, a shift in the directorship of NCRPC in 2008 spurred the *OJRRP* editor to seek a shift in the relationship between the journal and its sponsor. That year, the publication of the journal was shifted to Kansas State University (K-State), and the role of NCRPC was changed to that of formal sponsor. This shift was part of the long-term plan envisioned by Cyr.

The amount of funding provided to the journal was sufficient, but only because of the editor's willingness to work for no pay or release time. Such an amenable arrangement is rare and should, as will be discussed later, offer the editor some recognition of scholarly research on the part of the university, at the very least.

## Lessons Learned

- New journals are best funded by organizations—private or academic—that see a strong and clear connection to the publication's mission.
- The relationship between the sponsor and the publication should be clearly stated in the publication, so as to avoid confusion among potential authors as to the subject area or areas appropriate for the journal.
- Start-up funds will be higher than the amount of support required once the journal establishes itself.
- The participation of a willing editor is essential, but so is adequate compensation, either in release time or in credit within the faculty member's scholarly research (not service) portfolio.

#### B. Issue: Creation of an Editorial Board

As is the case with all new journals, the creation of an editorial board and the selection of a journal editor were of great importance. Identifying a committed group of academics and policy experts willing to devote time to reviewing submissions is key for any journal, online or print. For a journal devoted to a single research area, identifying the likely best choices for an editorial board is mostly a matter of looking at records of publication. Another step might be to seek out those authors who are most cited, given that they are likely to be seen as experts by the targeted research community. As noted earlier, however, a high citation rate is a two-way street. Using the publication standard is all well and good for a specific discipline, where the top researchers are, for the most part, well defined; in the case of a cross-disciplinary journal, the selection is far more complicated.

## OJRRP Experience

The mission of *OJRRP* was not defined by economic or policy issues, nor by geographical, sociological, or any of the dozens of other academic areas a Great Plains journal might address. For this cross-disciplinary journal, the editorial board needed to be expert in the overarching theme (the Great Plains), then identified as expert within the numerous academic and policy areas and, more specifically, rural studies within these disciplines. It is, in a sense, circular thinking. Being cross-disciplinary requires finding common ground among diverse groups, and then allowing that common ground to define the specific academic disciplines of potential editorial-board participants.

OJRRP had a head start, of sorts, because a unit at K-State, the Kansas Center for Rural Initiatives (KCRI), already had a diverse and well-respected board. When presented with the concept of OJRRP, that board embraced the new publication's mission; many board members committing immediately. In some senses this was both a benefit and an impediment to the development of the journal. The benefit was the immediate sense of identity, given that many members of the KCRI board were nationally recognized leaders in rural community development research. These leaders would provide the cachet needed to attract more board members of similar standing. The impediment was the new journal board's close identification with and standing in specific research areas. These affiliations raised concerns among some potential authors

in academic areas not 'represented' on the board: Was its research agenda really focused on sociology? Was its policy agenda really focused on economic development? The journal's mission statement (below) attempted to make the diversity clear, but the journal's editorial board might easily have misled researchers.

The Journal publishes peer-reviewed academic and community-based research, commentary and policy articles that address issues related to the Great Plains. We also publish invited articles from leading researchers. Research in a broad range of areas—art to zoology, engineering to modern languages, community development to geography—is appropriate. The only criteria we require is that the information offered is related to the Great Plains. This region—undergoing major change and its accompanying social, economic and infrastructure stress—needs new ideas that flow from research and discussion. *OJRRP* offers a unique subject-driven platform for this research, while generating conversations through its book reviews and blogs.<sup>38</sup>

The editor's first task was to solidify the editorial board, bringing on several new members recommended by the existing KCRI board. In addition, the editor targeted potential board members in areas of academic research and policy not yet represented. Yet the failure to fully diversify the editorial board early remains a challenge for *OJRRP*.

#### Lesson Learned

To attract a more diverse group of research submissions, a cross-disciplinary journal must first attract leaders from all of the diverse fields of study the publication intends to represent. For a journal wishing to cross disciplines, building a board that reflects the inherent diversity of such a publication is the first and most important step. The *OJRRP* editor should have taken the time to structure the editorial board carefully prior to the publication's launch. The board should have matched the diversity expressed in the journal's mission statement.

## C. Issue: Budgets

The budget necessary to establish an online journal is determined largely by the method of its delivery to readers. A large print journal, with the costs associated with editing, design and layout, printing, and

mailing, will require an equally large budget. Online journals armed with the latest editorial management software can rely on a smaller staff to handle editing and layout of articles for posting online.

The online cross-disciplinary journal's editorial board is likely to be larger than that of the typically more homogeneous, general-topic print journal. To put it simply, a cross-disciplinary journal represents more academic areas and, therefore, requires a more diverse board. A small online journal receiving twenty to thirty submissions a year, might need an editor, a graduate student, and a copy editor, as well as funding for publicity and outreach. Whether the editor is funded by 'summer salary' or release time is largely a function of the university's commitment to the journal. At the very least, as mentioned earlier, the editor should receive recognition for the scholarly research associated with serving as a journal editor. The variety of free software available to assist in the editorial process, mentioned above, will be discussed in more detail below.

## OJRRP Experience

Funding for the journal was provided, as noted earlier, by a non-profit in the form of annual grants of between \$5000 and \$30,000. These grants provided the funds necessary to cover the costs of an editor, a graduate assistant, and some publicity and training. The need for a copy editor was not immediately addressed. Over time, as the journal shifted to the university and implemented new journal-management software, the funding fell to roughly \$16,000, enough to pay a graduate student at K-State to work twenty hours per week. The issue of compensation, either for the editor or for the copy editor, remains unaddressed.

#### Lesson Learned

Online journals require far less in funding than print journals. However, compensation for editorial staff should be included in the planning. While it is not uncommon for a project to succeed because of the commitment of a few who are willing to essentially volunteer their time to the effort, the efficacy of such a model is tenuous over the long term. Some form of compensation, such as release time, must be built into the model to assure that staff can be recruited in the future.

#### E. Issue: Choice of Editor

The mission of an editor in a journal start-up involves more than waiting for submissions to roll in. In addition, the specific qualities of that editor for a cross-disciplinary journal should be as subject-neutral as possible. That is, choosing an editor who has published in one research area, such as community development, will unavoidably 'label' the new journal. The choice of editor should be focused more on candidates' desire to see the journal succeed than on their familiarity with any one of the many subjects covered by the publication. Matching the editor with the publication and then giving that editor a clear mission are critical. The lack of clear goals related to the journal's potential can lead to delay and confusion. The editorial board can play an active role in this process, as can the sponsor.

## OJRRP Experience

After a rocky start during which a managing editor was hired without being given a clear mission, a second editor with a defined idea of *OJRRP* was given control of the journal. This is a cautionary tale. Such endeavours as launching an online journal are never so smooth, never so easy. The task is to focus on long-term outcomes, not on immediate success. Any group not prepared to withstand missteps is likely to fall apart at the first bump in the road.

The second editor chosen was an associate professor in the mass communications department at K-State who was willing to work for very little compensation, including forgoing a buyout of his teaching load. This editor brought critical assets to the project: a thorough understanding of the Web editorial software, academic independence, and a policy perspective. It is not suggested that mass communication faculty are exclusively suitable for such positions, but they may be uniquely qualified, given the overarching goals of such projects. With a background in mass communications, such Web-familiar editors are comfortable with issues of content management, online publication, and journal publicity. As an added bonus, this editor had strong ties to the university's library, serving as chair of the institution's faculty advisory board. This proved to be a very valuable connection.

#### Lesson Learned

Faculty in mass communications may be uniquely suited for online journal editing. At the very least, an editor of an online cross-disciplinary journal should be Web competent, online ready, and familiar with the elements of publicity. A stubborn desire to see the project succeed is a genuine necessity for any endeavour.

## F. Issue: Using Invited Articles

To be a publication, of course, a journal needs something to publish. For a cross-disciplinary journal, the topics appropriate to the publication must be made clear early. How does a new journal attract submissions for peer review?

## OJRRP Experience

Offering publication for targeted authors held in some esteem in their discipline can be a bridge for authors seeking peer-review opportunities. Potential contributors must feel that the journal is a good 'fit.'

The editor, working with the board, also moved quickly to invite several board members to submit research articles. These articles provided evidence of the journal's intended cross-disciplinary nature. In addition, some targeted authors were invited to publish; these authors were then invited to join the board.

## Lesson Learned

Invited articles are a valuable tool for any new journal seeking to lower the psychological barrier for potential new contributors. Researchers are wary of submitting articles for review without some sense that the journal is tenure worthy and a good match.

## G. Issue: Publishing Schedule

Print academic journals have traditionally used the volume/issue format to manage content, primarily because of the need to send articles by mail. Bundling several articles into one issue reduces the postal charges; this can mean delaying the appearance of research articles until a sufficient number are ready to be printed, bound, and shipped. Online journals are delivered electronically. What options do online journals have for the timing and format of their 'issues'?

## OJRRP Experience

OJRRP publishes research when it has been reviewed, edited, and properly formatted for the Web. Exceptions were the creation in 2008 of a rural art issue and in early 2009 of a special issue dealing with rural sociology. Some journals, such as *Journalism and Mass Communication Quarterly*, seem to average between four and six articles per issue; OJRRP thus far has published roughly six articles each year and is unlikely to publish more than fifteen articles per year going forward, if only because of its unique multi-disciplinary nature.<sup>39</sup>

#### Lesson Learned

It is important to note that the artificial concept of 'issues' is not only an artefact of print publishing but also suggests that a certain number of articles must be published each year. Deciding how many articles is enough is a board discussion that might be convened prior to an online journal's launch. But such a policy can just as easily be adopted later, as has been the case with some online journals. The *Web Journal of Mass Communication Research (WJMCR)*, for example, started as an online journal with print-style issues; ten years later, that format was abandoned:

Because we publish online, we have come to realize that it is not necessary to adhere to the conventional quarterly scheme required of printed academic journals that depend on the U.S. Postal Service for their circulation.<sup>40</sup>

Online journals need not follow the print-journal model of publishing in 'bundled' groups around seasonal dates (spring, summer, winter, fall). Online journals are not mirrors of print publishing. Seasonal, bundled timetables may make sense for some online non-academic publications, such as magazines. Readers want to read the entire publication, whether it is *Consumer Reports* or *Time*; accessing such publications all at one time makes more sense.

Academic researchers, on the other hand, rarely expect to find two applicable research articles in one issue, much less an entire issue filled with such works. In addition, online journals should be driven by the caveat that nothing is improved by waiting. Rather than delaying publication to attain some number of articles to be packaged into an 'issue,' the online publication can post articles as they clear peer review.

Having settled on a mission, an editor, and initial procedures, *OJRRP* still faced several issues unique to online publications, not the least of which would be access. Once a team (or individual) to run the journal had been established, as well as the editorial board to assist with peer review and policy, the next phase focused on creating the protocol of operations, including how articles were received, reviewed, and posted on the site as well as how they were stored and updated.

#### H. Issue: Access

Some online journals require some form of registration or membership. Such registration might be used to stay in contact with the journal's readership; it might also provide some user data. Some journals charge author fees to help cover editorial staffing, as well as software and storage costs. What are the best choices for an online journal?

## OJRRP Experience

John Cyr, the primary force behind the creation of *OJRRP*, envisioned an open-access journal that communities in rural areas could access without a subscription fee. For this reason, the issue of access was never formally discussed; it was assumed that, given its mission to address rural issues, the journal would be free.

The editorial board—again, largely a subset of the KCRI board—had reservations. Members were concerned that without paid subscriptions, the journal would have no long-term revenue source sufficient to fund operations. Some on the board also expressed concern that few would subscribe to an online cross-disciplinary journal.

After much discussion, the decision was made not only to move forward with an OA, non-subscription journal but to make access to articles registration free. This last step was taken in reaction to research, previously cited, indicating that academics were becoming increasingly unwilling to use journals that required even the modest requirement of registration.<sup>41</sup>

#### Lesson Learned

The access issue should be handled prior to the journal's launch. Given the expectation of OA among younger researchers, as discussed earlier, a strong case must be made if the new journal intends to charge a subscription fee.

## Stage 2: Software, Link Rot, Code, Promotion

#### A. Issue: Software

Certainly online journals have eliminated two of the most expensive costs associated with publishing: printing and delivery. Staffing, however, is a significant part of any journal's expenses. What options exist to assist new journals in reducing their staffing costs?

Responding to the growing demand for online journals and, to some extent, fuelling the growth of this form of publishing, software packages have been designed to make publishing operations easier and more manageable. More than two dozen are listed with short descriptions at SPARC, a division of the Association of Research Libraries. Of these, a few are free (open-source) packages, including Open Journal Systems (OJS), published by the Public Knowledge Project (PKP). Since 1998, PKP has been a leader in supporting online academic journal publishing. Software created by PKP provides a free, open-source solution to online journal management.<sup>42</sup> Like many of these open-source software packages, OJS offers substantial support to editors in file management and workflow coordination. As noted by John Willinsky,

- OJS is installed and controlled on a local server.
- Editors configure the journal's requirements, sections, review process, and so on as appropriate.
- The software handles online submission and management of all
- An optional subscription module with delayed open access is available.
- Comprehensive indexing of content is provided.
- Readers can be notified of newly published content by e-mail.
- Editors have access to complete context-sensitive online help files. 43

These relatively new software solutions have literally changed the publishing landscape. In terms of both online and offline management, the costs to create an online journal have been significantly reduced. The software provides tracking of submissions, reviewers, and publishing, all within an online environment. Authors and publishers are able to send, resend, and ultimately provide revised manuscripts within a secure Web area. This communication flow results in easy downloads, uploads, and extremely valuable tracking of the entire process. No team considering launching a new online journal should overlook the massive operational savings—in terms of staffing and time—that these systems can offer. Potential publishers can review several of these management tools in a 2008 analysis by a Johns Hopkins library research team: DPubS, GNU EPrints, Hyperjournal, OJS, Connexions/Rhaptos, DiVA, and Topaz.<sup>44</sup>

## OJRRP Experience

More than just finding a software solution at K-State, the journal also found a strong and innovative advocate in the university library. University Libraries Dean Lori Goetsch was already considering creating an online press; the timing of the journal's desired move to the university coincided with the library's creation of New Prairie Press, a strictly online publisher. The dean committed to the new journal a server to host the journal and an administrator to manage OJS.

The move of *OJRRP* to K-State gave the editorial staff an opportunity to use OJS. But adapting to the OJS protocols took longer than expected, given that the editorial team was in the middle of two special issues. The shift to OJS was therefore gradual. The creation of PDF files was a trial-and-error effort, as decisions about imaging and external links were tested and retested. Ultimately, as the kinks were worked out, the software has performed as advertised. Some challenges in becoming accustomed to the technical issues of the new software delayed the full transition.

#### Lesson Learned

New journals need strong advocates willing to put resources behind the project. Editorial managers looking to use OJS should set aside more time than might initially be assumed necessary to become fully comfortable with the multiple features of the software, especially its submission-management system. Managers should also consider using spam-blocking software, such as Captcha, to avoid false submission notices. 45

## B. Issue: Traditional Space versus Online Space

In addition to software choices, the new journal must literally have *space*—room on a server somewhere. And, given that new online journal editors must anticipate the possibility of including images and video—if only because these are two elements that traditional print

either can rarely include (as in four-colour images) or cannot easily provide (as in video)—the bandwidth that supports file transfer is key. The uploading and downloading of large files associated with a journal's operations can slow down the network that hosts the publication. As Jeffrey Fritz notes, 'some university network administrators see it [video files] as a potential network "killer." '\*46 Bandwidth is a critical issue, as research papers can exceed in size the traditional Web page by orders of magnitude, and may often, with the inclusion of images and charts, overwhelm the medium-sized university network. In cases of already overburdened university networks, online journal start-ups may find themselves looking elsewhere for hosting. 47

Other off-site options, such as HighWire Press, in operation since 1995, can offer new journals the breathing space to grow without taxing a host university's resources. HighWire Press, a for-profit operation at Stanford University, has grown into the largest repository of online journals, with more than 1403 available as of 21 October 2010; to date, 1,999,671 of the 6,356,565 articles offered by HighWire are available at no charge<sup>48</sup> HighWire journals can choose to allow fee-based access by article or by subscription, or open access. In addition, HighWire and other such for-profit publisher services can provide technical support to journal staff. Some university networks, on the other hand, can provide journals with technical and editorial support at little or no charge, and can be set as open access only, charging no fees for access to research articles and, potentially, research data.

In addition, the ability of an online journal's editorial staff to work remotely is critical. Physical space is a cost that, while necessary for print journals, is largely unnecessary for online journals. Management of electronic files online can eliminate the need for a physical office.

## OJRRP Experience

When *OJRRP* was first published, its space and bandwidth challenge was solved by the NCRPC server, which provided a strong technical support system and generous bandwidth. This gave the journal an opportunity to grow without slow-access events or blackouts. After the transition, the university's space and bandwidth were more than sufficient to provide the opportunity for long-term growth. Journal staff are able to manage the journal from their campus offices and homes.

#### Lesson Learned

Long-term planning for space and bandwidth must take place early in the publication planning process. The editorial team should ensure that the host, in this case the university library's server-administration team, is aware of the needs of the publication over the long term. In addition, this host should be made aware of the possible inclusion of video, blogs, and other enhancements envisioned by the editorial staff. The rule of 'no surprises' is critical in this phase of the new journal's development.

#### C. Issue: Link Rot

It is an old story, but probably true, that within seconds of the first Web site's being launched, someone somewhere bookmarked that site's URL. Bookmarking was such a popular activity in the 1990s that some journal articles addressed everything from how users might organize bookmarks<sup>49</sup> to what to do when a browser encountered 'link rot.'50 Link rot, or dead bookmarks, usually occurs when a Web page's name or location is changed. The browser is directed to the infamous Error 404 page, or something similar, but rarely to the new location of the information.<sup>51</sup> Losing a link to a page came to be seen as an insulting act on the part of a Web manager. It was a 'maddening habit of Web page authors to unthinkingly change the URL (address) of their pages, rendering a bookmark worthless.'52 However, error pages and maddened Web surfers are not the only, and certainly not the most critical, issues facing academic journals with respect to broken links. As more and more research relies upon online sources of information, the citations contained therein become more and more essential elements of that research. It is a simple issue of showing the source of a particular bit of information. Prior to online journals, citations were subject to authors' transcription errors, but rarely did a particular print work cited by an author simply cease to exist. Online, link rot eliminates access to citations, and does so, as a team of Nebraska researchers demonstrated in 2006, at a predictable rate. They found that links used in syllabi had a 'half-life' of fifty-five months: that is, half the links used in the syllabi were broken by the fourth or fifth year, and half of the remaining links were broken within fifty-five more months.<sup>53</sup> Others have suggested that link 'half-lives' fall between two and six years.<sup>54</sup> Researchers have found, at least within communication journals, that the half-life of links is longer for publications with .org (non-profit) or .gov (government)

domain names.<sup>55</sup> The same researchers also found that, overall, 37 per cent of links had rotted over a four-year period.

The question of dealing with broken links in an online journal article is not susceptible to a simple answer.<sup>56</sup> Some online journal editors resist changing any element of a published work, even if that change is intended to correct a broken link.<sup>57</sup> This reflects the 'first edition' philosophy of the print publishing world: corrections can be made in the second edition, the argument goes, but not presented as part of the original publication. And the workload of managing a journal's external links becomes increasingly large as the journal grows.

At the same time, efforts are well underway to assist researchers in finding a particular 'lost' Web site or Web page. The Online Computer Library Center (OCLC)'s Persistent Uniform Resource Locator (PURL) project uses a 'resolver' that associates the sought Web site with one already known, essentially 'correcting' the bad address. As of 3 June 2003, almost three-quarters of a million PURLs had been created, with more than 5 billion resolutions. As noted by Thom Hickey, chief scientist at OCLC,

Identifying and managing information resources have always been central to librarianship. As these resources have moved to the Web, the problem of names tied to potentially changing locations now affects everyone. OCLC's experience with libraries and electronic resources helped us create the PURL infrastructure to serve libraries and other communities in addressing these complications. Because of our continuing commitment to this service, we feel it is time to update and extend it to support a larger user base and provide more resilient access to online information.<sup>59</sup>

Several applications have been developed to address the failures of external links in articles. One of the most highly regarded is the Digital Object Identifier (DOI), created in 1998. For a fee based on the publisher's size, DOIs provide 'an efficient, scalable linking system through which a researcher can click on a reference citation in a journal and access the cited article.' An alphanumeric identifier is attached to digital content, such as a book, book chapter, or journal article, and then paired to its URL. The greatest value to editors (and researchers) may be that the DOI is updated within a central directory. This results in fewer broken links caused by content's being moved, although it does not address the

question of the linked content's being eliminated or otherwise rendered inaccessible. Online journal editors should ensure that their publication is registered with DOI through one of the many associated organizations, such as CrossRef, that manage DOI records:

CrossRef, the official DOI registration agency for scholarly and professional publications, harnesses collaboration among publishers to provide the scholarly community with easier access to online research content. CrossRef was established in 2000 as an independent, non-profit membership association, with a mandate to make cross-publisher linking throughout online scholarly literature efficient and reliable using the DOI system.<sup>61</sup>

The result is not that links within their own articles will remain link-rot proof but, rather, that other articles published elsewhere will have some assurance that their links will remain valid. The DOI system, like any link-rot prevention scheme, relies upon the degree of adoption of the cure: the more publications use DOIs, the lower the occurrence of link rot in general.

## OJRRP Experience

In the case of *OJRRP*, the editorial decision early on was to check links on an annual basis and provide an opportunity for authors to correct broken links. Broken links left unresolved would be 'unlinked,' with an editorial note that the cited source had been moved. In April 2009, the journal's server administration was successful in obtaining a DOI system that would assist in reducing broken links for citations in other journals.

#### Lesson Learned

In addressing the issue of broken links, editorial boards of online journals must weigh the sanctity of the author's research as written against the needs of researchers to access references. If the editorial team decides to attempt to correct link rot, it might use its own staff to search for a suitable substitute, such as finding a new location for a journal article, or the staff might choose to contact the author and request a correction. Special coding in the journal Web site can automatically notify the editorial staff that a link is broken within an article. Such a link can be labelled as broken and the link coding removed, so

that the link is left uncorrected. Of course, if an online journal's board chooses to provide a 'corrected' article as a second edition, the 'first' edition containing the error can be preserved and kept accessible. The resulting multiple 'new editions,' however, would raise a significant issue with respect to long-term storage.

DOI registration takes time, so editors are urged to start the process as soon as possible. For more information on DOIs, editors are encouraged to visit the International DOI Foundation at http://www.doi.org/.

#### D. Issue: HTML or PDF?

While still an issue in flux, the actual electronic nature of the article—that is, HTML or Portable Document Format (PDF)—is a matter of great importance. Part of the discussion concerns the long-term stability of HTML, and specifically the fact that varied browser standards result in a digital document's presenting differently. As I noted in 2006, various browsers are generally consistent with respect to the manner in which they present HTML; however, some inconsistencies have crept into the HTML code, with the result that some text images—such as apostrophes, em dashes, and 'smart quotes'—render correctly in some browsers but not in others. Were these inconsistencies to widen, the ability to read actual online research text could be hampered, or, at the least, made more difficult and unreliable.<sup>62</sup>

On the other side of the discussion, the use of PDF, proprietary software owned by Adobe Inc., worries some archivists because of the proprietary nature of the software and because the documents created are not 'self-contained'—that is, PDF documents may rely on system fonts to properly render in a reader's viewer, which is a problem if the computer being used to view the PDF does have that font installed. The same issue can occur with respect to other content not embedded in the document:

As time passes, and especially as technology changes, these external connections can be broken, and the dependencies cause information to be lost. Additionally, because of the lack of standardization among the many PDF development tools on the market, there is inconsistency in the implementation of the file format. This lack of standardization could be chaotic for the information managers of the future,

especially as it would be difficult (if not impossible) for them to 'get under the hood' of the PDF files unless a format specification were put in place that specifically addressed long-term preservation needs.<sup>63</sup>

In addition, as mentioned above, a private company owns PDF and its Acrobat Reader software. Some academics working in the area of archiving standards would prefer a more open ownership that would allow the creation of open standards:

We also argue that formats that are in the hands of a formal, open standardisation process should be preferred over formats that are not. There are fewer surprises in such formats, and the development of the formats takes place in the open. We realise that this is not always practical (for example, PDF is a widely used and effective format, with numerous open source implementations, that is the property of a single vendor rather than the product of a standards body. However, Microsoft's recent proposal to standardise its own competing format, XML Paper Specification, cannot be viewed as entirely without commercial cynicism (Ars Technical)).<sup>64</sup>

The creation of PDF/A is one answer to the issue of link rot. PDF/A, a file format offered at no charge by Adobe, requires that fonts be embedded in the document and that annotated content be accessible by readers. Since 1943, the Association for Information and Image Management (AIIM), a non-profit organization in Maryland, has provided standards for archiving documents using PDF.

## OJRRP Experience

The editorial board of *OJRRP* decided early in the process of creating the journal that the text would be in HTML, with a PDF provided for download and storage for readers. This decision was largely based on the simple nature of HTML. Text can be easily managed using commercial Web editors; in addition, the need for the additional management services, such as submission tracking, were judged to be minimal, given the start-up nature and the intended narrow focus of the journal. With the shift to OJS in 2008–9, a PDF/A-only approach was instituted, and all articles were switched to the more stable format by May 2009.

#### Lesson Learned

The editorial team should meet with its university or server host to address archiving standards. While HTML may appear to be a simple approach to article storage, in the long term it may present some issues with respect to standards. At the same time, PDF files are not without issues related to standards. As of May 2009, PDF/A seems to be the preferred approach. While a broader discussion of the archiving standards is outside the scope of this article, editors interested in exploring PDF and PDF/A standards should visit the AIIM Web site (http://www.aiim.org/).

## E. Issue: Attracting Submissions

In some ways, a journal—print or online—that is not used is the same as no journal at all. One might muse on whether the sound of a journal (tree) falling in a forest creates any actual research (sound). The editor of any new journal must address how to make sure someone does, in fact, 'hear' this publication. This can be a challenge within a tight budget.

## OJRRP Experience

For OJRRP, employing a graduate student was the best and most affordable solution. Half of the journal's budget in 2008 was spend on securing the services of a graduate student, in this case one from the Department of Political Science. In subsequent years, all of the journal's reduced funding went to the graduate student. The graduate student, among other activities, contacted potential readers and authors via e-mail. Of course, how e-mail is used is as key an element as what is said in the e-mail messages. The ability to promote an activity by using massive e-mail lists targeting academics was quashed years ago by universities' anti-spam software. The strategy used in the case of OJRRP was to send individual e-mails to department chairs at every major university in the country. This was time consuming, but it generated more traffic on the journal's Web site, and more responses from potential authors, by successfully avoiding institutional spam filters. Eventually, this practice was expanded to target individual professors—again, one at a time. In addition, research into which researchers were producing the highest numbers of articles addressing rural issues provided the editor with leads for offering invitations to publish in OJRRP. Note that traffic on the journal site increased after these e-mail activities—proof, of a sort, that the e-mails were being taken seriously by some academics.

#### Lesson Learned

Editors should immediately seek to have their publication included in the many online journal databases, such as PubMed, JournalSeek, PubList, and others focused on particular areas of research. Of course, for a cross-disciplinary journal, several of the specialized databases would be appropriate. For example, the server administrator of *OJRRP* managed, 'after many months of knocking on their door,' to get the journal listed in the Directory of Open Access Journals (DOAJ):

Within a short time, this means that [*OJRRP*] will be picked up by libraries via their link resolvers, and begin to appear in all sorts of places. This also means that search engines such as Google Scholar will be more likely to pick it up. Speaking of the latter, I was pleased to see articles from the journal show up as cited objects [in Google Scholar].<sup>65</sup>

E-mail is still an option for the budget-strapped small online journal. In fact, even moderately sized journals should consider e-mail as an option to prompt submissions. If the budget allows, direct mail might also be considered. At the same time, however, all online journals should use digital directories, such as DOAJ.

## Stage 3: Tracking Usage and Long-Term Sustainability

## A. Issue: Are We Being Read?

Tracking usage goes far beyond making an argument for a journal's value. As suggested earlier, an online journal need not show thousands of users to justify its existence; tracking usage has more to do with how visitors are getting to the site and what they are doing when they get there. Almost any domain server has software that allows a hosted Web site to track usage. With this information, the editorial staff can track how readers are finding the journal, what search engines are being used, what search terms are being used with those search engines, and how much time visitors spend in various areas of the site.

But this does not answer the question of how a new journal, with very limited funds, can get readers to the site to begin with.

## OJRRP Experience

In the case of *OJRRP*, the technical support at NCRPC could provide data on the number of unique visits to the site each month, the pages most often visited, and the amount of time spent on the site.

The *OJRRP* editorial staff requested 'link swaps' with other research journals and organizations (i.e., links were established from *OJRRP* to a group's site, in exchange for reciprocal links from that site back to *OJRRP*). This is a traditional and very effective method of ensuring that a Web site can be found by users of search engines such as Google. And in the case of *OJRRP*, as of 1 May 2009, a Google user looking for 'Great Plains rural research' would find *OJRRP* ranked first. This is quite an accomplishment for a journal with such a limited publicity budget.

#### Lesson Learned

To boost awareness and search-engine tracking, journal staff can seek 'link swaps' with appropriate sites closely related by subject. This simply means providing a link to a group's Web site and, in turn, receiving a link from that Web site to the journal site.

## B. Planning for the Long-Term Health of an Online Journal

It is a seductive siren: the relatively low costs of publishing an online journals can make it appear so affordable that a group looking to create a new publication can be forgiven if they miss this step. Yet it is easily the most important. Does the journal have the necessary funding in place to actually ensure its long-term viability?

As Walters and Wilder note,

The economic implications of open-access pricing are important because they influence (a) the long-term, large-scale feasibility of open-access publishing, (b) the perception of open access as a fair or unfair mechanism for allocating costs, and (c) the amount of funding that colleges and universities can devote to other, competing scholarly initiatives.<sup>66</sup>

Yet perhaps even more alarming than the quick demise of a new journal is the possible failure of a seemingly established journal some years into its operation, given the increased risk of information loss. This might happen for a number of reasons: the funding agency ceases or reduces its support; faculty members who have donated their time resign or retire; the incentives within the university are not sufficient to attract and sustain editorial support. What happens to the research? Is it absorbed into a different journal? Is it simply marooned and forgotten by all but the authors?

## OJRRP Experience

OJJRP did sustain cuts in funding support from NCRPC, in 2009 and again in 2010. In the absence of action from another source to make up the funding shortfall, the journal has relied on the goodwill of the staff involved. Complicating this situation is the fact that the university has yet to resolve the actual value that should be placed on the work performed on the journal. Being the editor, for example, is considered part of a faculty member's 'service' work, notably the least important factor in most university evaluations. Other 'born online' journals are also wrestling with this issue.

The situation has generated more than a little introspection. Without the consistent support of with a funding agency or the full-throated support of the editor's university, any online journal will face ultimate failure. And with this comes several questions. Should *OJRRP* cease operation, what will happen to its archives? On reflection, should any academic journal be launched without complete assurance that its long-term viability will be protected?

The next few years will be critical for *OJRRP*. As it looks for a solid platform and a mechanism for succession for the editorial staff, it must depend on the goodwill of the publishing-platform staff provided by the university library, as well as the willingness of its editorial staff and board to remain committed.

#### Lessons Learned

The ability to launch an OA online academic journal economically must be balanced with the ability to ensure long-term viability in terms of both staffing rewards and financial support.

#### CONCLUSIONS

Many challenges face any new journal, print or online. In the world of the Web, however, such start—up challenges have more to do with technique than with fiscal support, and the technique is often augmented by powerful software that is provided at little or no cost. The

fundamental economics of publishing have changed. No longer does it cost hundreds of thousands of dollars to launch a journal, nor does it require appealing to a large number of subscribers by using a broadly defined subject. OJRRP is focused on one relatively small area of research that crosses almost every area of academia, from engineering to family studies. It need not ever narrow its focus to appeal to a specific area of rural research—for example, economic development or sociology—to justify its existence, nor does it need to broaden its subject area to include all global rural research topics; it can succeed by providing a carefully defined theme, the Great Plains, while opening its discussion to a wide variety of disciplines. This is the age of the crossdisciplinary journal, a time when the justifications can overwhelm past arguments of cost and over-stretched resources. Quite literally, all that any new journal now needs is the passion of a few. It also need not have the deep pockets so necessary to launch a print journal. But it does require some pockets.

As with any journal, standards must be established, missions defined, and clear policies set. But online journal editorial boards can use the advantages of their Web existence, leverage their research expertise, and adopt patterns of publication that are in sync with the online world, not the world of print.

In the case of *OJRRP*, and likely in the case of many new journal start-ups, the dedication of the editorial board and editor has been the key element. Software can be found, minimal funding can be secured, but without the selfless dedication of an editorial board and the willingness of an editor to work for minimal compensation (or none at all), a new journal faces almost insurmountable challenges. New journals—perhaps especially online journals—are labours of love, not of fortune and glory. With the stubborn dedication of its people and a large slice of careful planning (and luck), a new journal like *OJRRP* can grow and thrive.

The issue of a journal's long-term success calls into question a fundamental and soul-searching question: Should a new journal be created, research published in it, and readers attracted, if there exists even the smallest chance that the funding that launched the journal may fade away? Should creating new research opportunities be part of a university's mission (as it was when many print-only university presses were created decades ago)?

These are not easy questions, and they will not generate easy answers. A desire to see faculty members' work published and the allure of being part of a cutting-edge online publishing endeavour certainly rests in the heart of many universities. But let us not rush forward, however alluring the siren's song may be, without carefully considering the long-term impact of the act of publishing itself. Even the most obscure print volume can be found, eventually. Can the same be said for an online journal left without financial support or the dedication of its starry-eyed staff?

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