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ACTING SENIOR VICE CHANCELLOR MILLER
ACADEMIC SENATE CHAIR TALBOT

Subject: Report of the Task Force on Electronic Publications

In January 2004, Acting Senior Vice Chancellor for Academic Affairs David Miller and Academic Senate Chair Jan Talbot empanelled a joint senate-administration taskforce to study electronic publications issues in the academic review process.

I. Taskforce Charge:

The task force was asked to consider the following issues:

- How much electronic publishing will be accepted for academic reviews?
- By what standards will Web sites be judged?
- Who will judge them?
- Is there an academic standard for electronic publishing?
- Is the construction rather than the use of a Web site "research"?
- How should one examine the peer-review process of electronic publications in order to establish their comparability to refereed journals?

II. Process

The task force met on two occasions, and all members of the task force participated in the deliberations. The task force reviewed various documents pertinent to this topic, including correspondence from previous UCSD CAP committees (1997, 1999, 2000, and 2002), as well as reports to the 2003 UCAP from UCSB and UCB. Other materials reviewed include:

- a newsletter from the American Historical Association (February, 2004) concerning tenure practices in history
- a 1999 paper by T.Y. Neely on "The Impact of Electronic Publications on Promotion and Tenure Decisions" <http://www.arl.org/diversity/leading/issue10/tneely.html>
- a 2001 paper by K. Anderson et al. on "Publishing Online-Only Peer-Reviewed Biomedical Literature: Three Years of Citation, Author Perception, and Usage Experience" <http://dois.mimas.ac.uk/DoIS/data/Articles/juljuljany:2001:v:6:i:3:p:6690.html>
- a 1998 book by Adrian Johns, *The Nature of the Book: Print and Knowledge in the Making* (University of Chicago Press)
- a 1997 report from Rutgers University from its Committee on Electronic Publication and Tenure <http://web.syr.edu/~psgraham/pgsite/pglibwork/pgtexts/ept.html>
- a 2003 report from the Association of Research Libraries concerning escalating costs of journals <http://www.createchange.org/resources/CreateChange03.doc>

- a 2000 report from the American Association of Universities on “Principles for Emerging Systems of Scholarly Publishing” <http://www.arl.org/scomm/tempe.html>
- an article from the Chronicle of Higher Education (2004) concerning establishment of a Web Citation Index
- Communications from various faculty members

III. Background:

There is a sharp increase in both the number and cost of traditional “print” journals. The increased cost for print publications may lead to a decrease in the number of scholarly books published by academic presses; this decrease in publishing venues may have a particularly adverse effect on the humanities. There has been an even more striking increase in various non-paper-pulp based publications (aka “electronic publications”). All universities are grappling with how to assess the quality of such new venues for disseminating scholarly work. Given the relatively lower cost of electronic as distinct from print journals, relatively marginal electronic journals may survive that would otherwise not flourish in a print academic environment. Moreover, the editorial protocols, standards, and structures that prevail in the print environment are as yet embryonic in the considerably younger electronic environment. Thus, the range of quality in electronic format journals tends to be broader than that in print journals. To a certain extent the difficulty in evaluating new electronic venues mirrors similar issues when movable-type printing emerged centuries ago (How can one verify authorship? How can one verify that the text is authentic? How can one establish the repute of the publisher? How can one ensure the persistence of the text over time?).

IV. Deliberations:

The taskforce recognized that electronic publishing is used very differently across academic disciplines. Given the costs of publishing, it is likely that paper publishing will decrease in the future. In a short period of time, certain electronic journals have already been recognized as equivalent to print journals in engineering and the natural sciences. Numerous journals in these scholarly areas, as well as in medicine, already publish both electronic and paper pulp versions. Such new patterns of publication have also emerged in the social sciences. The humanities have, to date, less experience with electronic journals. The probable decline in number of printed academic books implies that the humanities will rely increasingly on electronic media, not just for articles but also for “books.” The arts have always had diverse ways of demonstrating their creative output (e.g. performance), and the arts are actively experimenting with newer electronic media. In sum, the patterns of use and stature of electronic publishing already vary widely according to academic discipline. The implication is that each department needs to clearly articulate how its field regards various publication media.

In most fields there are readily recognized venues of high stature, and thus far, these are usually print-based or combined print/electronic venues. Faculty members need to make a case for why a relatively untried or unestablished electronic venue is selected. There are clear instances where electronic publishing offers outstanding advantages (e.g. Web links, 3-dimensional graphing, etc) over traditional publishing. On the other hand, some electronic publishing amounts to “vanity publishing,” where there is limited (if any) peer review, other than the faculty member’s personal faith in his/her work. The issues involved in establishing the stature of an electronic journal are common to any print-based journal as well. New

print-based journals continue to be developed and within a few years, scholars can draw conclusions about the academic value of such new journals based on indicators including their editorial boards, the quality of their peer review, and most importantly the quality of the work they publish. Similar metrics will help define the value of new electronic publishing outlets as well.

The malleability of the source document in electronic publishing creates some problems for establishing the definitive archivable citation. Can it be archived safely over time? Will the media become obsolete? How can one handle changes to the work over time? How does one verify what was written in one version of a piece of scholarship? Is the medium too “mutable” to be archived? These questions will likely be addressed in the near future, when conventions begin to be adopted concerning how to identify, archive and refer to later iterations and modifications of work.

The taskforce was less sure how to evaluate the academic value of electronic collections. To a certain extent they could be viewed as analogous to textbooks or book chapters--important contributions but not exactly definitive instances of original scholarship. In many universities where the emphasis is placed on teaching rather than original research, such collections might be highly valued, particularly if it could be established that they were being used widely. However, in universities that place a major emphasis on original research, such electronic collections may not be as highly valued. Interestingly, emerging federal regulations will increasingly require recipients of large grants from NSF and NIH to make their research data (“collections”) available in on line open access archives even before the investigator gets the opportunity to analyze and publish the findings. Thus, an important, useful and carefully crafted “collection” of data may constitute important scholarly activity in and of itself, but verifying the value of such data is still difficult. Computer programs as well as electronic collections and archives can also be seen as akin to product development, inventions, patents, etc. The University already considers such activity when it evaluates academic files, so their “electronic nature” does not really preclude their consideration in evaluating files.

The evaluation of a given “publication” properly considers both pre-publication and post-publication metrics.

The perceived quality within a discipline of a particular publishing venue can be one index for evaluating work published therein. How rigorous is the peer review? How esteemed is the journal? What is its circulation? What is its overall “impact factor”? These are the sorts of considerations that inform the evaluation of pre-publication quality of scholarly work. With increasing specialization in all fields of scholarship, journals are taking on increasingly specialized emphases. As a result, one needs to compare within a scholarly area the quality of a particular journal with that of other, similarly oriented sub-specialty journals. Valuable work can be published in a very specialized small circulation journal. Similarly, just being published in Science is not a guarantee of the quality of an article. The department, disciplinary dean, and the faculty members themselves need to explain how they regard a particular publishing venue. Electronic journals are merely a variant of “new journals” and after a few years the academic field can assess their “pre-publication value”.

Just as there are metrics for evaluating pre-publication quality, so too there are post-publication metrics of quality. How has the work been greeted by the field? How has it been cited or reviewed? What is the impression of knowledgeable readers who have

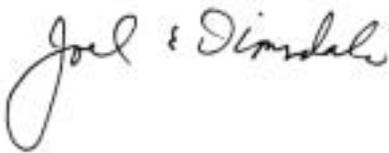
scrutinized the work? There is fundamentally no difference between print and electronic media in terms of such post-publication evaluation. Indeed, one of the most widely used references in the Social Sciences (the Hollingshead 2-factor index of social position) was never published, other than in ditto fashion, and yet it is highly regarded and cited. So far, the status of electronic publications has been ambiguous in terms of citation analysis. However, it is interesting to note that the ISI has recently begun to collect citation data on electronic publications.

V. Conclusions:

The task force does not see electronic publications as intrinsically second-class publishing outlets. There are widely differing perspectives regarding use of such outlets across disciplines, and the divisional deans as well as the campus CAP are already aware of such differences.

The issue is one of determining the value of the work, no matter what its venue. The onus is on the department to document the quality of scholarship, particularly when it is published in a venue that is relatively untried. Departmental ad hocs and Chairs can render the University a great service by careful review of a file rather than by merely counting citations, etc. Careful evaluation of a journal's pre-publication review (e.g. editorial board, peer review practices, etc) can help place work in context. There can be instances not only where electronic publications are "equal to" print publications, but also "superior" to them. Again, the department, in its evaluation of a file, is in the best position to provide such information.

In the final analysis the responsibility to determine the value of scholarship is shared across multiple levels of review, culminating with CAP. Merely counting entries in a CV or examining the publishing venues is unlikely to result in a nuanced and thorough evaluation of scholarly work. While reviewers have always considered such factors, they have always placed an entirely appropriate emphasis on the evaluation of the work itself—how it is reviewed and used by others, as measured in a number of different ways. This careful evaluative work will need to continue whether the venue is based in paper pulp or electronic media.



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