Can or should journals survive? The increased cost of journal publication and the rising number of journals has resulted in inflating the cost of circulating good articles. The cost factor is also present in the potential conflict between the entrepreneurial and the scholarly functions of journals. Apart from costs, the time from submission to publication of journal articles has now reached up to three years in some cases, which exceeds the time required to publish a book, and eliminates one of the original advantages of journals. In an effort to overcome some of the financial problems, some journals have begun assessing page costs to authors. There may be alternatives to the present method of printing and circulating journals, including computer-based typesetting, and circulating only abstracts of articles with the full text available on microfiche.

Another area of concern is the potential involvement of the Federal Government in journal publication, and the implications of this for professional and scientific journals. A further concern is raised by the minimal attention paid by professional educators to the vitality and utility of journals. (WBC)
ISSUES AND PROBLEMS IN JOURNAL PUBLICATION

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Over the past several years at AERA meetings, participants have concerned themselves with a wide range of topics. Each year sessions range from picky little methodological problems to gigantic macrocosmic issues. Our perusal of recent programs reveals that the topic of this symposium—journals and the development of the discipline—has not been well represented. It was our belief that this neglect was anomalous and inappropriate that led to this symposium.

The relationship of the modern journal to the scholar is one of often unrecognized and unacknowledged intimacy. Journals are important to all of us, a force in shaping the content and direction of our profession. Journals are important to many of us as a vehicle for communicating the ideas and information we have produced. Certainly, all in this room realize that journals are important to academicians in securing pleasant things like promotion, tenure, raises, and status among colleagues. It is as journal contributors that we approach this symposium with a series of questions and issues about the status and future of education journals.

We open with a basic question: "Can journals survive?" Over the past few years the cost of producing a journal has risen enormously. The problem of increased journal cost presents a particularly difficult situation when combined with the increased number of journals serving the field. The total cost of producing a literature for education is thus a function of both the increased cost of journal publishing and the increased number of journals. This situation is not unique to education; it exists in all disciplines. Day (1976) notes that in one physical science the cost of producing journals has tripled in the past ten years, the subscription price has similarly tripled, and he projects an additional tripling of the price in the coming ten years.
In an academic buyers' market with jobs, promotion, and tenure more difficult to secure, the performance-based evaluation of faculty is becoming increasingly stringent. Publication—and this largely means journal publication—is an increasingly important criterion for academic reward and survival. The increased number of journals is in part a consequence of the need for more publication room for academicians. The increased number of journals offers a desirable state for the author since it offers more potential slots for his article, but the individual benefit to the author is offset by the liability of an increase in the cost of producing a literature. It is not unlikely that the number of manuscripts submitted for publication will continue to grow. The establishment, and therefore the cost, of the larger number of journals will complicate the question of the journals' economic survival. In fact, Bamford (1976) suggests that the rising costs of paper-based information dissemination may require the establishment of an electronic alternative to the traditional mode of dissemination.

If more and more journals are established, and there is an increase of pressure to publish upon scholars, we exacerbate the problems of the quality and impact of journals. The situation is one wherein an increased number of journals must be sifted through in order to find what would probably be a relatively constant number of useful articles. Thus, we inflate the cost of disseminating each good article. The established quality journals may face a decline and be joined by other journals which produce "static"—"noise"—rather than advance the state of knowledge.

Discussion of this question leads us inexorably to a companion question. If the economic feasibility of journal production is questionable, and if the raison d'être of journals, the advancement of academic fields also becomes
questionable, we must ask should they survive? Listen to the responses of a
journal editor to this question:

... the scientific journal and its wide dissemination
to peer group scientists is an essential component of
'doing' science and the journal must not die ... the
past couple of centuries could not have occurred with-
out 'print on paper.' And as to the journal, I believe
that it is the ideal vehicle for communicating research
results to all of those who need or can use them (Day, 1976, pp. 288-289).

The possibility of the retirement of a good and fruitful servant is difficult
to contemplate. Our first humane response, as in the words above, is to
deny the need for change as an affirmation of the value of what has existed
before. Yet, this does not come to grips with several important considerations.
One is the conflict between the entrepreneurial and scholarly functions of a
journal. Scholarly journals are entrepreneurial, although their profit making
proclivities vary. As financial pressures grow, there is an element of
conflict, increasingly evident, in creating and perpetuating the literature
and turning a dollar. Those who run the journals face the dilemma in a way
that satisfies both the publisher and the contributor-consumer. One way in
which this dilemma has been approached is by page costs to authors. An
increasing number of journals have instituted page costs and the page costs
have been rising steadily. There is something anomalous about the situation
in which productivity is an invitation to impoverishment among those in
occupations and settings demanding published creativity and not known for the
generation of lavish incomes. If the ability to pay becomes a criterion for
publishing, then we can only hope that there is a one-to-one relationship
between those who author important contributions and their personal or
institutional affluence. If there is not such correspondence, then the usefulness of journals will further deteriorate,
Also of importance is the matter of time line in journal publishing. There are academic and scholarly journals that regularly require up to three years between the acceptance of an article and its appearance in print. When it requires more time to have information appear in print in a journal than to publish a book, then one of the critical justifications of a journal—immediacy—has disappeared.

Consideration of this problem has led to many suggestions for changes. It is probably not fruitful to debate the issue of whether proposed changes would change journals or lead to the demise of the journal as we know it. Terrant (1976) discusses altered production of journals through computer based type setting in which the composition and printing of journal material interfaces directly with the author for verification and alteration by computer. He also discusses correction of information input and editing by means of video display terminals among a variety of technological improvements designed to make journal production more feasible, more rapid, and less costly. Bamford (1976) discusses the possibility of preparing new information in computer sensible form and storing it in central facilities, retrieved by terminals wherever and whenever they are useful. Hart (1976) describes an alternative to journals substituting microfilm for the services now provided by journals. The Journal of Chemical and Engineering News (1976) reports an experiment in which the journal subscriber receives an extended two- to three-page abstract of an article. The full article is placed in archival collections to which the scholar may refer. These archival collections are then reduced in size, though readable without microfilm equipment. Terrant (1976) discusses the use of computer conferences on which centrally stored data and information would be accessible by scholars who could interact with one another as well as with the data simultaneously. Similarly, he
discusses the extension and technological improvement of telephone conferences as an alternative to some of the functions provided by journals. He summarizes his provocative article by mentioning these possibilities: the full text of primary journals in computer readable form; cable television (utilized for) selection of special information packages; satellite communication permitting for example, scanning of materials that is typeset in one location and beamed via satellite to produce full page film for plate making at another location; various media for highly packed information involving bubble, holographic, or electron beam technology; portable input terminals utilizing telephone couplers to permit on-the-spot reporting via digitized signals; and finally, voice-operated typewriters.

If we take the existence of journals as given then we will probably answer the question of what must be done to make journals worthy of survival in one way. If we frame the question in terms of the needs for communication among scientists, scholars, and practitioners, and the technical alternatives that are before us, then the question of the survival of journals will be part of a much larger set of considerations.

One of the intriguing questions that arises is the entrance of the federal government—or perhaps state or local government—as producers or controllers of professional and academic journals or their successors. The trend is discernible today. Several governmental agencies or institutes produce their own journals, Office of Education, NIMH, and NIH among them. Branscomb (1976) gives us an interesting possible preview of the rationale for this as he states:

If the nation can justify massive investments of public funds in research, in expectation of economic and social benefit, one must think through the mechanisms by which these benefits come about. The outputs of research are documented knowledge, plus personal, technical experience.
The manner in which this knowledge and experience may be aggregated, shared, evaluated, and finally converted into useable decisions, artifacts, and services is critical to the utility of the investment (emphasis ours). From this perspective scientific information policy must not be viewed as an additional element of technical activity to be undertaken after research and development programs have been justified and put in place . . . Indeed, one could even conjure up hypothetical situations in which a government technical program might consist only of information activities without any significant degree of original research; it is hard to imagine a justification for research without the corresponding information facilities (pp. 8-9).

Is it possible that the massive governmental support of research which is a post-World War II phenomenon will give rise to a massive governmental support and control of the processes of scientific and professional communication also? If this is possible, or even occurs partially, the place, existence, and nature of professional and scientific journals as we know them today may be much in question.

These questions are not raised for the consideration of journal editors and staffs only. We began this presentation with the idea that the state and nature of journals was of paramount interest to the workers within professional and academic fields. It is not unusual, however, for professional educators, even those who write for publication, to pay little attention to the vitality and utility of journals. Although all journals have editorial staffs made up of prominent people in their field or subfield, and refereed journals use an even wider sampling of experts for article evaluation, this falls far short of the practitioner participation that is in keeping with the importance of the journals. Even scholarly journals which are published by and represent professional associations are managed in the same manner as journals sponsored by university departments and private publishing interests. We understand and sympathize with
the argument that increased participation could result in decreased quality and increased publication problems. Nevertheless, it seems to us that journals sponsored by important professional organizations have a unique opportunity and responsibility to elevate the awareness of members of the profession to the problems before us in the dissemination of disciplinary knowledge and to enlist their support in the solution of these problems.

One final question is suggested by the preceding discussion and the novelty of this symposium. Why is this topic of journal survival and change and the place of the scholar, consumer, and contributor in this issue so infrequently addressed at meetings such as this and among academicians in general? Is it that journal publishing is viewed as such a closed activity that general academic input is considered unwelcome and futile? Is it that no mechanisms for a dialogue are seen as existing? Is there a naive disinterest among educational scholars? Are the publishers and editors uninterested? Do they feel they have the knowledge and acumen to guide the destiny of journals through these changing conditions without the discordant clamor of the practitioners? Clearly we are not only dealing with questions about technology, publishing, and the development of a body of knowledge; we are also involved with an intriguing question about human behavior.
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