

Bull, G., Willis, J., & Bell, L. (2000). Rethinking the nature of academic discourse. *Contemporary Issues in Technology and Teacher Education*, [Online serial], 1(2) 222-225.

Rethinking the Nature of Academic Discourse

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The transition to an emerging technology offers an interesting juncture. Often, the transition begins by transferring an existing format to a new medium. The first movies were essentially filmed plays. Over time, filmmakers began taking advantage of the new medium, culminating in the cinematography and special effects that characterize contemporary offerings.

Similarly, some online academic journals are primarily electronic versions of their printed counterparts, while others have moved farther from their roots. With the CITE Journal, we hope to build upon the tradition of scholarly academic publishing, while encouraging ongoing dialog and taking advantage of the new media's capabilities.

The CITE Journal is distinguished from others, both print and electronic, by a focus on technology in specific subjects and core content areas, such as science education, mathematics education, language arts, and social studies education. The board of directors of teacher educator societies for each content area has appointed editors in the respective content areas each association represents. This organizational format is designed to ensure that the focus remains first and foremost on content, encouraging discussion of ways to incorporate technology into each academic discipline.

Ongoing Dialog

The new technologies supporting an online journal offer the opportunity to develop an ongoing dialog. Many online journals feature interactive chat rooms, mailing lists, and web forums that create a space for informal conversations. As a matter of editorial policy, we hope to establish a high scholarly standard for dialogs and commentaries about articles, as well as in the articles themselves. For this reason, readers of the CITE Journal have the opportunity to respond to an article by submitting a commentary that will be published as an article in its own right. These commentaries will undergo the same process of peer review as the original articles. However, taking advantage of an electronic medium, commentaries and responses will be posted immediately after acceptance.

New technologies also offer opportunities for different kinds of academic dialogs. Print-based journals have fostered a style that has encouraged long articles separated by extended periods measured in months or years before a response (if any) occurs. Publication delays of up to a year or more encourage authors to develop lengthy manuscripts encompassing every possible aspect of the topic they might wish to address.

In contrast, online readers have become accustomed to scanning text, preferring shorter documents that make use of hyperlinks to provide access to secondary information. The “Commentary” option of the CITE Journal makes it possible for authors to publish shorter commentaries that respond to a specific aspect of an article or to make a specific point. This could potentially lead to a more interactive style of discourse that still meets high scholarly standards. Shorter commentaries of three to five pages may be better suited to an online than more lengthy responses, generating the interactive dialog that is the objective of the journal.

While publication timelines may be shorter and printing costs may be less constraining for an online journal, the attention span of the readership is finite. Research in computer-mediated communication suggests that when discussants are faced with a large number of choices, the discussion becomes so fragmented that it is difficult to construct a meaningful dialog. To facilitate a thoughtful dialog on each topic presented, CITE Journal will publish only one or two articles per content area in each issue. This approach will ensure that a topic of importance in each content area will be highlighted in each issue of the journal. With encouragement and facilitation from content area editors, a dialog of associated commentaries will be published in each topic strand.

This will ideally generate a discussion strand similar to this example from the inaugural issue:

§ If We Didn’t Have the Schools We Have Today, Would We Create the Schools We Have Today? – Thomas G. Carroll

§ Commentary: Some Comments on “If We Didn’t Have the Schools We Have Today, Would We Create the Schools We Have Today?” – Gerald Bracey

§ Commentary: Technology, Learning, and Schools: Comments on Articles by Tom Carroll and Gerald Bracey – John Bransford, Xiadong Lin, and Dan Schwartz.

§ Commentary: The Paradigm behind the Curtain: Comments on Papers by Carroll; Bracey; and Bransford, Lin, & Schwartz – Jerry Willis

While much of the dialog and commentary associated with a topic strand will be published in the quarter in which the base article first appears, the editorial staff will continue to review and publish commentaries for as long as original contributions are accepted. This approach generates a model in which there are a relatively small number of topics four to six in each content area over the course of a year and a larger number of commentaries that extend the dialog initiated through publications of the base article.

Guidelines for a productive dialog suggest that new commentaries should make an original contribution, rather than rehashing or restating previous positions, and should be constructive, intended to advance the conversation. As a further innovation, we hope to assemble panels of authors and affiliated commentators at the conferences of sponsoring professional associations. These invited panels will provide an opportunity for direct interactive dialog that will build upon the foundation of scholarly publication and may, in turn, generate further articles and

commentary in future issues.

Taking Advantage of New Media

The CITE Journal also provides an opportunity to take advantage of new media. For example, an article on “Preparing Tomorrow’s Science Teachers to Use Technology” in the inaugural issue contains a discussion of the Doppler effect. It includes a video illustrating the change in pitch that occurs as a moving vehicle approaches. In the printed version of this article, only a still image of this illustration may be displayed.



On the other hand, the printed version has advantageous features not present in its electronic counterpart. Most computer monitors are not capable of displaying a full page of text, and the resolution is considerably lower than that of the printed page. Because of these and other characteristics, studies have found that reading comprehension is often higher when text is displayed on a printed page. The printed version is also accompanied by page numbers, which seem less appropriate for the web version.

This concept of multiple instances of a base document, each containing characteristics and features that may not be present in other versions, flows directly from opportunities offered by a new medium. In addition to printed and online versions, other formats might be generated by a base document. For example, in preparation for a conference (the National Technology Leadership Retreat), the articles found in the inaugural issue were transferred to a format suitable for handheld computers (Palm OS). These devices currently have a display area of 160 x 160 pixels. The articles were, therefore, condensed and reformatted to take advantage of this medium.

As a result, there are potentially several instantiations of each article, each with somewhat different characteristics. (In the field of computer science, the term “performance” is sometimes used to refer to different expressions of an underlying base document.) Since the CITE Journal is intended to be an academic publication, this leads to the question of how to appropriately reference the different instances or expressions of an underlying document. This has been resolved for the present by adopting the APA format for printed documents for the printed

version and the parallel style for electronic documents for its online counterpart. Thus the appropriate citation for the online version of the science article in the inaugural issue would be

Flick, L., & Bell, R. (2000). Preparing tomorrow's science teachers to use technology: Guidelines for science educators. *Contemporary Issues in Technology and Teacher Education* [On-line serial], 1(1). Available: Hostname: www.citejournal.org Directory: [vol1/iss1/currentissues/science/article1.html](http://www.citejournal.org/vol1/iss1/currentissues/science/article1.html)

while the corresponding citation for the printed counterpart consists of the following:

Flick, L., & Bell, R. (2000). Preparing tomorrow's science teachers to use technology: Guidelines for science educators. *Contemporary Issues in Technology and Teacher Education*, 1(1), 45-67.

The citation for the printed version reflects the fact that it has page numbers, while the online citation reflects the fact that this version is available through the web. Page numbers provide a mechanism for locating a specific quotation or section of the text in the printed version, while imposing printed pagination upon resizable browser windows in the online version unduly constrains this medium. Printed pages also lend themselves to hand annotation, while the web version facilitates animation, virtual reality, video, and audio. When each is used its best advantage, the two media are complementary. In the future, technologies such as XML (Extended Markup Language) will make it possible to automatically generate multiple instances from one underlying metadocument.

Conclusion

New technologies allow the CITE Journal to encourage ongoing scholarly dialog that can take place in formats and media different from – and possibly better than – the traditional print publications of the past.

Technology offers the opportunity, but realization of this potential will depend upon the readers and contributors to the journal. If you have an academically grounded insight or perspective inspired by an article in the CITE Journal, we encourage you to submit a commentary, becoming not only a reader but a participant in an interactive discourse.

Contemporary Issues in Technology and Teacher Education is an online journal. All text, tables, and figures in the print version of this article are exact representations of the original. However, the original article may also include video and audio files, which can be accessed on the World Wide Web at <http://www.citejournal.org>