

Computer Center

An Electronic Bulletin Board for Biologists

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Department Editor

Fisher Scientific and NABT are establishing an electronic bulletin board for biologists. As a result, I decided to devote this column to a general discussion of electronic bulletin boards and present my views on the potential for this particular one. I know that many readers are already familiar with electronic bulletin boards and information services. This column is intended more for those who normally might not consider using such a service. I hope to inspire some of those people to consider this bulletin board because of its unique applications for NABT and all biologists.

What is an Electronic Bulletin Board?

The term "electronic bulletin board" describes these systems well. They are a means of communication using computers and phone lines. Just like the bulletin board at the supermarket, one can leave almost any type of message or announcement and eventually get an answer. In reality, there is the potential for more than electronic communication. Normally, a bulletin board offers a variety of different services. Most commonly, it offers the ability to leave and receive messages (have discussions) and serves as a source for software, technical information, and data sets which can be "downloaded" from the bulletin board to your computer or "uploaded" from your computer to the bulletin board.

I have to admit that my experience with using a bulletin board for messages is limited. I access a local Macintosh users group bulletin board about once a week in order to see what is new. I frequently read the messages, but most are of little or no interest to me. Bulletin boards can be fast sources of technical information through their message capabilities. Normally, one

would leave a message describing a problem. For example, if you are having trouble getting a certain piece of software to run properly, you might leave that as a message. Someone else would read that message (on large bulletin boards this might occur instantaneously) and give you a suggestion on how to solve the problem.

I do not mean to imply that such a bulletin board function is only for computing problems. It is more frequently used for more general communications. For example, you could leave a message regarding a new text. You might be interested in asking if anyone who has seen a certain text that you are considering has anything to say about it (favorable or unfavorable). You might be looking for a source of laboratory supplies. You could leave a message asking if anyone knows of a place where you can obtain a certain item. Finally, bulletin boards frequently have regular "discussions" in which participants might pass back and forth a variety of observations.

The second common bulletin board function is the exchange of software. Most public bulletin boards have a library of software that is either public domain or "shareware" (software for which you are on the honor system to pay the developer). You can access the bulletin board and get a list of software available for your computer. You then can "download" the software. The downloading process is a means of copying the program from the bulletin board library to your diskette. If you have a piece of software that you think others might be interested in, you can "upload" it to the bulletin board. However, that software cannot be copyrighted! (Publishers get upset if someone uploads commercial software onto a bulletin board.)

A third bulletin board function is to serve as a repository for data sets. You

might find that a bulletin board has a data set which has the names of all of the members of a certain organization. Or there might be a data set which has a list of current texts along with publishers names, addresses and retail price. Normally, these types of data sets are found on the larger information services. However, most bulletin boards have specialized data sets. At the least, most bulletin boards have a data set which lists the names and addresses of all users.

How Do I Communicate With the Bulletin Board?

Communication with the bulletin board requires your computer, some form of communication software and a modem. The typical procedure is that you must subscribe to the bulletin board. This normally involves either an annual fee or an hourly fee. You are given the phone number and a membership code of some kind along with specific information on how to communicate with the bulletin board. Using the information, you set up your communications software. You call the bulletin board and enter your membership code. At that point you would receive a menu of options. Most communication is done through menus. The initial menu might include reading/leaving messages, reading news items of interest, using the software transfer library, accessing a data set library or quitting. You choose what you want to do and are routed to the appropriate place.

After your first menu choice, you will get a second menu asking you what you want to do in the particular area that you selected. You might want to leave a message, read all of the messages that have been posted since your last call, respond to a message or read a specific news item. In the data set library, you might get a list of all available data sets or download a particular data set. In the library transfer section, you first would choose the library in which you want

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to work (the library corresponding to your computer). Then you might choose a sub-library if there are enough programs in the library to warrant such a structure and next download a particular program to run it. Using a bulletin board is actually a very simple process. Most of it involves typing a single letter or number in response to menu items.

The Fisher Scientific/NABT Electronic Bulletin Board

Fisher Scientific is establishing a bulletin board for biologists in conjunction with NABT. The subscription fee for NABT members will be \$25.00 for the first year, and a \$5.00 renewal fee every year after that. For non-NABT members the first year will be \$60.00, and the subsequent renewal fee will be \$20.00 per year. (Look how much you save by being a member of NABT!) Fisher has indicated a willingness to support all major computers (Apple, Commodore, Tandy and IBM). If enough people subscribe, a toll-free number will be established. As of right now (I am writing this column in late October), the bulletin board is in the planning stages. This means that we can shape the future of this service in a variety of ways. The following are some of my thoughts on what might be possible.

First, the editors of *ABT* are interested in this service as a means of providing better communication with the membership—particularly authors and potential authors. Messages could be left for the editors asking their opinion as to the suitability of certain projects being developed. Someone might be developing a new laboratory

exercise and leave a message asking if the editors would be interested in a paper describing the technique. Or, an author might have already submitted a paper and wonder about its status. One of the thankless tasks that the editors do is to coordinate manuscript reviews. The editors do everything possible to get manuscripts reviewed quickly, but, sometimes reviewers are not as quick as the editors would like, which delays papers in the review process. The editors can use such an electronic bulletin board to give authors more timely information on the progress of the manuscript.

The editors briefly discussed the idea of electronic manuscript submission. My personal opinion is that such a procedure is not desirable. Because of the idiosyncracies of different computers, bulletin boards transmit most materials as simple, unformatted text. Most manuscripts have figures or tables of data associated with them which cannot be transferred easily in such a form. In addition, electronic transfer of manuscripts might produce security problems; an author would have to submit a manuscript by uploading it to a library to which the editors have private access in order to provide security. In my view, such a system does not seem justified. However, news items of interest to biologists could certainly be posted on such a bulletin board.

The bulletin board could function in software distribution, as I discussed above. Anyone with a program they want to distribute can put it on the bulletin board as long as either they hold the copyright, or the program is not copyrighted. In addition, it has been suggested that people who are developing copyrighted software could

use the bulletin board as a marketing device. A developer might want to upload a working, abridged, demonstration copy of the software, which could be downloaded and tested. If someone then wants to purchase the software, a message could be left asking for ordering information. Or, the developer may accept orders directly from the bulletin board and mail out the full program with a bill.

Fisher Scientific will, no doubt, be setting up some form of product data set that would provide users with a list of products along with ordering information. I am not sure if they will be accepting orders via the bulletin board, but I know of other companies that do (as long as they have some form of payment information). Fisher has expressed a desire to use the bulletin board for announcements of new products and special offers.

It might be out of our range, but it is still worth considering establishing "panel discussions." Larger information services do this on a regular basis. A topic, date and time are announced and anyone interested can call the bulletin board to participate. The problem with such a function is that it requires sophisticated hardware and phone service, which is probably beyond our means at this time.

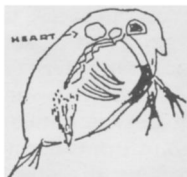
These are the specific uses that I can think of that might help us as members of NABT. If there are any others that I have not considered, let me know. Although I am not involved in developing this bulletin board, I will pass any suggestions on to the people who are developing it. Once the bulletin board is established, I may write another column discussing its features and specific techniques for accessing it.

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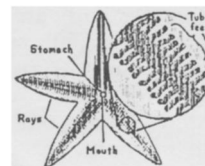
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