Authorware Professional. Version 2.0 Macromedia Inc. 600 Townsend Street, San Francisco, CA 94103; 415/442-0200; 800/288-4797; fax, 415/442-0190. $4,995.00, list price; $995.00, educational price; upgrades from earlier versions begin at $395.00. System requirements: Macintosh or IBM-compatible with Windows.

Health sciences education is experiencing a major reevaluation, and, as a result, alternatives to traditional teaching methods are being explored. Computer-assisted instruction (CAI) is in high demand to enhance curriculum and to provide an alternative to lectures. Despite the diversity of educational software available in today's market, many instructors need tools that are structured in their own teaching styles. Authoring software allows this flexibility. One of the most advanced authoring systems available is Authorware Professional. It is a powerful and versatile multimedia design tool for producing interactive CAI applications quickly and easily.

A program is created by using a few icons from a palette and placing them on a flowline; no programming background is needed. Included in the palette are icons for displaying, animating, interacting, calculating, mapping, flagging, importing movies, playing sounds, and controlling external devices. Each of these tools is very powerful individually; however, Authorware is still more robust in combining a variety of media with user interactions and branching by means of approximately 200 system variables and functions and an unlimited number of custom variables and functions. Variables and functions can consist of anything from the time of day to graphics. Interactions are available in ten types, including push buttons, "hot spots," movable and clickable objects, text responses, and key-strokes. When an application reaches an interaction icon along the flow line, it waits for a user interaction and then branches to the flow line, subroutines, or other files linked by the author. This lends the author the capability to build a complex program quickly and without scripting. The authoring and delivery environment is integrated, and, therefore, it is very easy to jump between the two.

Response tracking is an attractive feature for authors who are interested in collecting data. Authorware provides the author with the capability of tracking user interactions. Various aspects of the user's performance are stored; e.g., response time or correct or incorrect responses. These data in turn can be calculated for use by the author or used as variables for more interactions.

In addition, Authorware allows for multiplatform delivery. Applications can be developed on the Macintosh platform and, with some limitations, for delivery on a Windows platform. Authorware has specific equipment requirements for authoring and delivering the CAI. For the Macintosh, 10-megabyte hard disk storage is required. The minimum delivery hardware set-up will dictate the development hardware needs. For the Windows platform, a 25-megahertz or faster personal computer with an 80386 microprocessor or better is required for authoring. End users must have a 16-megahertz personal computer with an 80386 microprocessor, a minimum of four megabytes RAM (8 megabytes are recommended), a hard disk with 10 megabytes storage, mouse, Microsoft Multimedia Extensions (included in Windows 3.1), sound card (if using sound option), VGA monitor with sixteen or more colors, and Windows 3.0 or 3.1.

Anyone can learn to use Authorware in a matter of hours. However, to make full use of the variables and functions, a considerable investment in time is necessary. Included in the package is a thorough tutorial that provides an excellent walk-through of the software capabilities. It also introduces basic instructional design theory, encouraging the author to follow a systematic approach of analysis and evaluation throughout the development process. Other documentation is very clear and well indexed for easy reference. There is a separate guide for cross-platform development providing suggestions for easier porting to the Windows platform.

Authorware Professional is an excellent tool, recommended to librarians or instructors interested in developing coursework, from simple presentations to high-level interactive computer-assisted instruction.

Lara Luetkehans
Greenblatt Library
Medical College of Georgia
Augusta

AskRx. Version 1.1. Camdat Corporation. 1111 Bayhill Drive, San Bruno, CA 94066; 800/771-7448. $295.00, single user (excludes Patient Clipboard and prescription writer); $595.00, single user/CD-ROM; $975.00, network (two to five users); $1945.00, network (six to ten users); $2450.00, updates. System requirements: IBM-compatible with Microsoft Windows, CD-ROM player if using CD-ROM version, color monitor recommended.

AskRx is a drug information software program that uses the United States Pharmacopeial Dispensing Information (USP DI), volume 1, as its data source. It provides information on more than 6,000 brand name, generic, and over-the-counter drugs available in the United States and Canada. Drug information also can be accessed by
manufacturer, indication, drug class, and side effects. AskRx is all that it is advertised to be. When you enter a drug name, you can retrieve information on its indications, contraindications, drug interactions, dosages, side effects, pharmacology, and precautions, as well as references to the biomedical literature. It is an easy-to-use, easy-to-learn program that effectively incorporates the point-and-click Windows environment into its search interface. AskRx comes with a tutorial, or demonstration, which highlights all of the program's features and provides an excellent overview of the product.

AskRx was designed by physicians for physicians. In addition to the USP DI drug monograph information, the program also contains a built-in prescription writer, a patient mini-medical record (demographics, drugs, conditions, allergies, preferred pharmacy), and the ability to create personalized medical instruction handouts for patients. AskRx could be equally useful in a pharmacy environment, where it can be used to manage repeat patients. The program is designed to work on a stand-alone system as well as a network. (Camdat is willing to discuss network pricing for more than ten users). The data can be loaded onto a hard drive or accessed via CD-ROM. The plain vanilla version of AskRx, without the Patient Clipboard and prescription-writing modules, could be extremely useful in a health sciences library, where these modules would not be needed. Information could thus be utilized by health sciences staff and students.

When you open the program, you are immediately placed in the search window. At this point, you can search for a specific drug or disease condition using complete or partial terms. You then can select one or several of the function buttons from the tool bar at the top of the screen to access more specific information. These function buttons include indications, contraindications, drug interactions, side effects, treatment, drugs to avoid, brand and generic names, dosing, pharmacology, diagnostic interference, patient monitoring, patient consultation, and precautions including pregnancy, breastfeeding, feeding, pediatrics, and geriatrics. When you select one of these functions, a window pops up outlining all of the possibilities. For example, if you searched for the side effects of aspirin, the pop-up window would list all of the known side effects. For more information, you select the side effect in which you are interested, click on the "Explain" button, and you are taken to the text in the USP DI for aspirin in which that side effect is explained. You can customize the tool bar to present only the functions you use most often. In summary, the search component of AskRx lets you search a specific medication or condition, further define your topic using the function buttons, and display the appropriate text from the drug monograph. One of the program's strengths is its ability to cross-reference information from relevant monographs other than the one initially requested or selected. This is transparent to the user and extremely helpful.

If you choose to browse AskRx instead of searching for specific information, you can wander through the drug monographs in the browser, which is organized by specific medication and groups of medications. Since the browser is organized as an electronic textbook, it can be searched in a similar fashion. Both the main and monograph tables of contents for USP DI can be displayed and searched.

The Patient Clipboard function of AskRx is actually a database of individual patient records created by the physician or pharmacist.

More than one database can be maintained. The database window is divided in two. One half contains demographic information such as name, address, gender, and birth date. The second half contains information on the patient's conditions or medications. The Patient Clipboard also can be used to print prescriptions for the patient. AskRx can tell if the newly prescribed medication will interact with current medications, so that the appropriate preventive and therapeutic measures can be taken.

AskRx comes with a detailed and friendly manual. There are many step-by-step instructions and plenty of examples. The program contains context-sensitive online help that mimics Windows Help screens. The menus are well displayed and easy to use. The function buttons are intuitive. The installation procedure takes a matter of minutes. AskRx comes with unlimited toll-free technical support, and Camdat's customer support was responsive and pleasant at all times. Upon purchasing AskRx, the user receives the most current version of the program plus all of the updates distributed within one year of purchase. Updates are available every six months. Additional updates are optional and are purchased separately. This is a distinct disadvantage because physicians and pharmacists need the most up-to-date drug information available.

This product has many advantages over its print counterpart. The search interface is easy to use and allows the user to access various parts of the USP DI seamlessly. Combinations of drugs can be searched and cross-referenced in seconds. In addition, the ability to track a patient's current medications could reduce physician error in prescription and drug interactions. AskRx is a highly useful program that could benefit anyone prescribing or dispensing medici-
Software reviews

<table>
<thead>
<tr>
<th>Software</th>
<th>Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>AskRx</td>
<td>It is well designed and easy to learn. It is a worthwhile program to consider purchasing for a physician’s office or a pharmacy. Its usefulness in health sciences libraries is limited and the cost may be prohibitive. Perhaps the greatest drawback for libraries is that AskRx is the full text of only the first volume of the USP DI.</td>
</tr>
</tbody>
</table>

Nadia J. Martin  
Taubman Medical Library  
University of Michigan  
Ann Arbor