SCENTS, SENSE, CENTS:
PLAYING THE NUMBERS GAME
WITH AUTOMATED CIRCULATION
SYSTEMS

Not so long ago I learned of a lab manager who had stopped keeping usage statistics because no one at that institution had ever asked to see them. From that day forward I have repeatedly fantasized about what might be done with the time that my staff and I would save by not counting people, places, and things on a regular basis. Imagine! If only we could devote all of our working hours to the nourishing of our faculty relations, the interests of our students, the acquisition and care of our machines, the procurement and implementation of our choice of programs, the development of our instructional designs, the pursuit of our professional endeavors. What a wonderful world it would be!

Few of us, however, are able or even willing to forego a certain amount of data collection. We may follow the “scents” of numbers because we want to know about and make “sense” of trends in our operations. We may have found that round numbers and guesstimates do not suffice when we need to justify our continual quest for dollars and “cents.” Or, on a more specious level, perhaps we inherited or appropriated someone else’s meticulous and/or historical records, but “now that we have a computer” or “now that we have the latest software,” we may find ourselves keeping ever more data and producing all manner of charts and graphs simply because we can. If those facts and figures of yours have at times seemed to take on a life of their own, perhaps you can benefit from the knowledge and experiences of others who have wrestled with the same situation.

...from Shelley Breen,
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Choosing an automated circulation system for a language lab-type resource facility can be a time-consuming and distinctly personalized endeavor. There is more to it than just grabbing a software package off the shelf and saying to yourself, “Well, that’s accomplished!” Many factors must be considered before making any decisions that, once made, may be yours to live with for the next decade. The most important thing

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to remember is that every learning lab is uniquely made up of different needs, uses, equipment, teaching philosophies, priorities, and budgets. What works for one lab won’t always meet the needs of another.

When working out the details for your automated circulation system, address the following issues. Even if some of these don’t seem pertinent, they should be considered for possible future expansion.

1. What is your budget for the initial implementation project and for the anticipated yearly cost of operation? Consider software upgrades, hardware maintenance, staff support, etc.

2. What specific information do you want or need to collect? Is it important for you to keep a record of student data? circulation of equipment, tapes, reference books, videos, software? classroom reservations?

3. What reports are important for you to extract from the database (e.g., per student, per course, per language)? And with what frequency (e.g., daily, weekly, monthly, per semester, yearly) do you need such reports?

4. Will the system be connected to a campus network and/or a local area network? If so, you will need to consider the costs of a network card for your computer(s) and/or server and, where applicable, a site license for the software.

5. How “user friendly” does the program need to be? Will the users be student employees, lab management staff, faculty, computer geniuses?

6. Will you be using computer equipment or a platform that you presently own? Does it have enough memory to support the software you choose, plus the additional databases of people, places, and things? If you intend to purchase new equipment, make sure that the software you are considering will run on that configuration.

Once you have answered these questions, you will have a set of guidelines to follow when researching available software and computer platforms. Don’t put money into something that is obviously too sophisticated for your needs; but then again, don’t waste money on a system that cannot adequately meet those needs.

At this point, especially if you have had some successful and satisfying experiences with development software such as HyperCard or ToolBook, you may be tempted to design your very own perfectly customized automated circulation system. Be forewarned that unless you have an inconceivable amount of time and technical expertise, attempting to design your own program can result in headaches, all-nighters in the office, temper tantrums, and unpredictable mood swings (by you, the computer, or both). Here I speak from personal experience. My tendency to be a do-it-yourself perfectionist, plus an overinflated confidence about my command of HyperCard, led me to try to design my own simple little computerized sign-in program. The resulting stack looked great and seemed to work fine—until I did an expanded test run with it the night before the lab opened for the semester. The glitches I found made me understand why people get paid to do this sort of thing full time and with the proper (and proper amount of) training. However, if you are indeed proficient in HyperCard/HyperTalk or ToolBook, by all means try to design a program that meets your lab’s needs. These software packages are wonderfully versatile and full-featured. When done skillfully, the resulting stacks or books, with their little buttons, are very user friendly.
As an alternative to reinventing the wheel, I have looked into "Digital Doorman," a program designed for the Language Resource Center at Dartmouth College. Digital Doorman runs on a Macintosh with a bar code reader and its accompanying software, HyperCard, and a word processing program such as MacWrite II. Students sign in by passing their barcoded student ID card through the barcode reader. Their data card appears on the screen, and the date and check-in time are automatically recorded onto their computer file. When the students leave, they must pass their ID card through the barcode reader again to record the check-out time. The features of Digital Doorman include: a password option for both staff and student assistants; manual entry to make changes in students' files; weekly, term and cumulative report generating; the ability to load student data from a text file from the Registrar's office; and a Book Checking Extension that keeps track of book circulation. The program also includes a reference manual that can be printed. Digital Doorman is available as shareware from Dartmouth College; the fee is $50 for those who decide to use it. For more information, contact: Inge Brown, Assistant Director of the Dartmouth College Language Resource Center, inge.brown@dartmouth.edu or (603) 646-2624.

Another option would be to develop your own database manager. I have investigated FileMaker Pro by Claris for the Macintosh, but this and other application programs such as dBASE IV, 4th Dimension, and FoxBASE are available for all platforms. They allow you to create a custom package with only the information pertinent to your recordkeeping needs. You can design student file cards and report formats fairly easily and, through the use of graphs and charts, combine this information to make meaningful presentations to your department, to other lab managers, or to potential funding sources. Although learning to use this type of program will require more time and effort than learning to use a pre-designed program such as Digital Doorman, it does offer more flexibility and the ability to customize. On the other hand, depending on the one you select, an application program can be either easier or more difficult to learn than a development package like HyperCard or ToolBook.

These are only the possibilities that I have sorted out as being the most feasible alternatives for me and my lab. Again, it all boils down to what you need and what technical expertise will or will not be available to set up, operate, and troubleshoot the whole system—hardware and software—to keep it running smoothly and with minimal interference. Outline your needs, think carefully, and choose wisely. If you go about setting up an automated circulation system in a logical fashion, you should end up with a means of keeping track of everything that happens in your lab efficiently and headache-free.

...from Karen Stoumbaugh, The University of Kansas, Lawrence karenlee@kuhub.cc.ukans.edu; or (913) 864-4759

Before we adopted the Winnebago program, a commercially available library automation package, we used a paper check-out system. The most common problems with the old way were: the exorbitant waste of paper, the difficulty of deciphering illegible handwriting when it came time to generate overdue notices, and the students' claims that they had not only returned the material(s), but had done so on time. Using the Winnebago system has helped us solve each of these problems.

Previously, patrons were required to fill out a new slip of paper virtually every time they walked in the door; now a staff
member enters the necessary personal information on a patron's on-line "card" once at the time of their first visit. All of the materials are now barcoded, so we can more easily and quickly determine if a particular item has been returned. Also, thanks to a recent software upgrade, each patron has a "circulation log" which indicates the date and the time of day when an item was checked out and returned. Illegibility problems are resolved, and most people who incur fines for overdue materials don't argue when they are shown or provided with a copy of their own circulation log.

We have also come to rely on several other benefits of using the Winnebago system. One is the efficiency with which we can print overdue and fines lists. We can limit these lists by the number of days overdue or by a minimum fine amount, so we don't waste postage or continuous postcards on people who owe less than the minimum fine. A second advantage is that the program allows for different patron types. We use this feature to check materials out on a semester basis to instructors, while we restrict the majority of our users to a weekly check-out period. And one very important feature which must be mentioned is the Winnebago Software Company's dedication to customer service. Following one full year of their support plan at no additional charge, we have taken advantage of their affordable toll-free calling plan as needed. Our calls have always been answered, within two hours as guaranteed, and the personnel have always been knowledgeable, attentive, and courteous.

As with any computer program used by human beings, the Winnebago system is not without its pitfalls. Occasionally two numbers are accidentally transposed, and we end up with duplicate records. The barcode readers will sometimes scan only a portion of the code and thus check out something completely unintended. And an item or series of items may be missed during inventory; if that barcode number is then unintentionally deleted and later assigned to another item, this results in identical barcodes on unrelated items.

When we think back to our days of pencil and paper, these unsuspected difficulties seem insignificant. The majority of our previous problems have been eliminated, our records are far more accurate, and the Winnebago system has proven to us that it will adapt and upgrade as centers like ours grow and change.

[Note: The Winnebago system presently consists of circulation routines, on-line catalog material searching capabilities, and textbook control. Modules for audiovisual material and room bookings are now in development.—KN]

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I can add a few more parts to this body of knowledge. If you are interested in off-the-shelf library-type automation software, you might also consider Data Trek, Inc.'s "AV Handler" program (800) 876-5484 or The Follett Software Company's "Circulation Plus" program (800) 323-3397.

If the thought of "growing your own" appeals to you, contact Read Gilgen at the University of Wisconsin, Madison gilgen@vms.macc.wisc.edu; or (608) 262-1408. Read and his staff began creating "CircSys" about ten years ago using the DOS-based Knowledge Man database program; he estimates that they are now using version 10.46c. CircSys is networked, manages an equipment pool for faculty and classroom loans, and maintains a materials
reservation system at the lab and for long-term loans. Future plans are to provide an on-line catalog and a video reservation system. Read and the UW have no plans to distribute their tailor-made CircSys because of the difficulties they would likely encounter in trying to provide support. But he can forewarn you of the mistakes they have learned from over the years in trying to meet the varying demands of a multipurpose facility, a growing collection, and a large faculty and student body. CircSys has survived staff turnover, adapted to changing institutional requirements as well as hardware needs, and successfully freed the staff to concentrate not only on the necessary (though often neglected) housekeeping tasks, but also on the potentially more satisfying efforts to improve client relations.

Clearly, an automated circulation system for a language lab needs to be thoughtfully and individually tailored. Hopefully the options that are outlined above provide enough information to get you started.

Contributions/suggestions for the "Lab Management" column may be sent directly to Kathleen Ford. Mailing address: UCLA Language Lab, 190 Powell Library, Los Angeles, CA 90024-1517; phone: (310) 206-8955; fax: (310) 206-1455; email: eil8kej@mvs.oac.ucla.edu, or EIL8KEF@UCLAMVS.BITNET.