

## 3.11 AUTOMATION

### Rationale:

Why do I have to automate? Automation is a software package used to assist building level librarians with the management of their catalog, circulation, material and patron activity, as well as produce a variety of reports and statistics. Automation is not just a tool to modernize the job of the librarian; it is also a tool that provides greater access to the library's collection for students and staff. Physical access to the library collection is a prerequisite to intellectual access.

Automation also provides more time for the school/campus librarian to collaborate and teach information literacy. Students must have an opportunity to learn how to find a book on the shelf using a catalog. This is one of the first benchmarks on the information literacy continuum. The universal standard in the 21<sup>st</sup> century for library catalogs is the OPAC (online public access catalog). This means that students who have not had an opportunity to use an automated catalog regularly to locate resources will be at a disadvantage. Card catalogs are obsolete.

### A Brief Overview of Automation applications:

The software for library automation has changed from its early applications. New York City school libraries have a variety of these applications, from the stand-alone to the web-based. Schools can purchase library automation software from vendors in FAMIS using NYSTL software money. Here is a brief history of automation software at a glance:

- Stand Alone: First generation software for circulation and catalog requires only a stand alone computer. Patrons cannot search the catalog on other computers unless catalog software is installed on each of the other computers. Patrons are added by the librarian. The librarian has full access to the application. The software is installed from a floppy disk or CD-ROM.
- Local Area Network: Second generation software for circulation and catalog requires a LAN (local area network) with a server and several computers connected to the server. Patrons can search the catalog from computers connected to the server within the library or school building. Patrons are added by the librarian. The librarian has full access and a designated computer for circulation. The librarian or school staff administers the server. The software is installed from a floppy disk or CD-ROM.
- Web-Based: Third generation software is completely web-based. The circulation and catalog software are installed on central servers at MetroTech. The school librarian does not need locally-installed software for this application. The full catalog is accessed via the Internet. All applications are web-based. Patrons are added weekly via File Transfer

Protocol (FTP) from servers at MetroTech. Patrons can search the catalog at school or at home, or anywhere there is Internet access. The circulation and catalog software are installed on the central server. Many schools share the server and catalog. The servers are maintained and administered by Central staff from the Division of Instructional and Information Technology (DIIT) and the Office of Library Services (OFCSLS). The librarian can make changes for the school's collection only. The district administrator can make global changes for all schools on the server.

#### Time Allocated to Accomplish:

How long will it take to automate a library? This will depend on the current state of your library and on the amount of money which can be allocated to the task. Even if you have no computers and none of your books are processed, you have no card catalog, and you have no budget for automation, your library can be fully automated within three years.

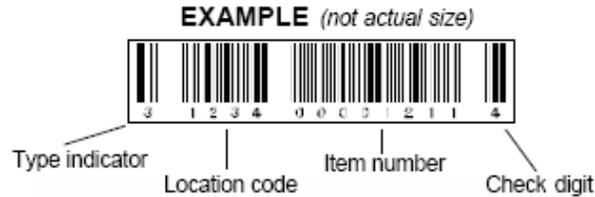
Automating the cataloging and circulation of a library collection should be a high priority for every library which is not already cataloged. In the automation process, each material record is assigned a unique electronic record with a unique corresponding barcode. All barcodes must be physically applied to the material. While this may be somewhat time-consuming in the beginning, it will ultimately be a timesaver. Automated library management systems shorten clerical functions like ordering, managing overdues and circulation, creating bibliographies, conducting inventory, and record-keeping.

#### Barcodes:

New York City school libraries have a standard for barcodes. When you order materials for your library, include the barcode specifications as part of the processing for your order. You will have to complete a specification form for each vendor.

Before you order barcodes, you need to know your library location code. The library location code is a four-letter code assigned to each New York City school library by the Office of Library Services. To get your school library location code, call the Office of Library Services at (212) 374-0328.

The barcode is a 14 digit, Code 39 (or Code 3 of 9), MOD 43, with a check digit. All schools are recommended to use this barcode symbology. The barcode should look like this:



The type indicator is usually a 3. The location code is a four-letter code you receive from the Office of Library Services. The item number is an eight digit range for materials. You can assign an item number range for your vendors. You can assign a two-digit number for the vendor and a six-digit range for items. An example would be 01 for a book vendor, with 000,001 for the first item number. It would look like 01000001. Another vendor would be 02, with 000,001 for the item number. It would look like 02000001. You can assign your school the highest number range of 09000001. The check digit is generated by the computer. Keep a list of all the item number ranges you assign to vendors.

Call Number Patterns:

There is also a standard for call number patterns. School libraries should mirror the public library as much as possible. We are providing our students with an opportunity to become lifelong learners. Lifelong learners use public or academic libraries. These call numbers are similar to those used by New York City public library systems. When no call number patterns are given to vendors, the Office of Library Services recommends the following as a default:

**Aud** = for cassettes or other audio materials

**AV** = for both audio and visual materials, especially the older formats, like slides, transparencies, filmstrips. If any of these materials are current enough to be retained in your library collection, use this call number prefix.

**Bio** = for individual biographies. Some may want to use 920s for collective biographies. NYC school libraries do not use 92 for individual biographies.

**CD** = for CD-ROM formats

**DVD** = for Digital Video Disc

**Easy or E** = for Easy Books or Early Readers. In elementary this is important. Middle and high schools may want to integrate these books into the regular collection using the appropriate call numbers to avoid insulting our struggling readers.

**ebook** = for electronic books

**ESL** = for English as a Second Language resources

**Fic** = for fiction books

**Kit** = for multiple formats in a box or bag

**Map** = for map collections

**MP3** = for electronic media in digital format

**Prof** = for professional collections

**Ref** = for reference resources

**SC** = for story collections

**Pic** = for picture books which are not always easy and may be in middle or high school collections

**PBK** = for paperbacks

**Sp, Fr, Ru** = for foreign language books

**Vid** = for videos

Checklist:

How do I get from here to there? Before you begin, have a plan. This plan will be adjusted according to the situation in your library. If you have no card catalog and one antique computer, you will plan differently from the library with automation software in a box, a new computer, and a mixture of processed and unprocessed books. There are many routes to automation. These steps are listed in order of priority and assume that you are starting from zero. Please omit or modify them accordingly.

**1. Begin ordering all materials shelf-ready with data-disks and barcodes.**

Do not order unprocessed materials. Most vendors will keep your specifications on file. If you have not already chosen an automation system, don't agonize over which one to select for data-disk and barcode purposes. Any of the approved systems will be fine. Just choose one, use it for all specification sheets and be consistent. If you choose another system later, your barcodes will still be usable in most cases. As the years go by, your newest books will have barcodes and the older books will be weeded. Eventually most of your collection will have been converted.

## **2. Assess and weed collection**

Assess the current status of your collection to determine what materials should be weeded (or discarded from the collection) before you begin the automation process. Any items that are out-of-date, never checked out, or in poor condition should be weeded. Do not spend time or money adding outdated or little used items to an automated catalog. [See 3.5.1 Weeding Guidelines and 3.5.2 Weeding Process.]

## **3. Conduct inventory (to extent possible):**

Why do I need an inventory? A catalog which doesn't match the books on the shelf is frustrating to use and a poor teaching tool. Doing an inventory from a paper shelelist is an enormous job, but you must have an accurate list of items in your collection before you can automate.

## **4. Choose automation system:**

Your choice of automation system can be influenced by a number of factors. Your school budget is a factor. You need to consider the particular needs of your student population: Is it heavily bilingual? Who will be running the circulation desk – yourself, parent volunteer, or students? You may want to consult with the Office of Library Services for guidance.

Develop of checklist of things that are important to your particular situation. You may wish to include some or all of the following:

- Ease of use (intuitive use)
- Report maker (flexible and customizable)
- Basic circulation and cataloging functions
- Ability to e-mail patrons
- Visual look (grade appropriate?)
- Bilingual abilities
- Ability to write book reviews
- Visual search
- Advanced searching with Boolean limiters
- User friendly for students at your level
- Can assistant use it for circulation?
- Used by other libraries in your cohort?
- Produced by a contracted DOE vendor (can use software money to purchase)
- Cost, including annual support fee (see if NYSTL software funds are available for the purchase)

Find out which systems are available through contracted vendors on FAMIS. Make an inquiry to the librarians on the list serve. Go visit other automated school libraries near your school. Use NOVEL to find reviews in journals.

Once you have narrowed your choice to one or two programs, you may request a demo diskette from the vendor. This will give you the opportunity to play around with a system on your own.

Links to Web pages for different systems:

Follett. Includes Follett and Destiny as well as Sagebrush Technologies:

<http://www.fsc.follett.com/>

Surpass: <http://www.surpasssoftware.com/>

Alexandria: <http://www.goalexandria.com/>

Mandarin: <http://www.mlasolutions.com/>

Make sure the hardware you have and the software you buy are compatible. Even if you only have a stand alone computer, begin automating. You can generate bibliographies for staff and students and can circulate books and generate related statistics. This will put you further down the path to being fully automated.

Once the selection process is over, purchase the software using NYSTL software money or grant/gift money.

## **5. Send your records for retrospective conversion.**

In order to convert your collection into MARC (MAchine Readable Cataloging), records, information on every item in your collection must be gathered and matched with an electronic record. The Office of Library Services strongly recommends that you send your list of items in your library collection to a retro-conversion vendor. Please remember that the converted records and all future vendor disks for new materials should be in US MARC 852 or MARC 21 format, with 852 tag holdings which include your library local information. Make sure your vendors know what this information is. The 852 tag should include: the four-letter location code (mentioned earlier in this section), the call number and barcode number, as well as other fields you may want to include.

The vendor will convert copies of your shelf list cards, Excel list, photo copy of title page or the CIP (Cataloging in Publication) page into electronic data on disks. The information you send should include Author, Title, City of Publication, Publisher, Copyright date, ISBN, Library of Congress Number, and Call Number you use in your library, as well as how many copies your library owns of the item. Remember this is a very good opportunity for you to clean up your call numbers.

By sending your records to a vendor for retro-conversion, you ensure that the best electronic records are matched to your library collection holdings. It also ensures that your MARC records include all the information your automation system needs to function fully.

Some school librarians may want to convert their records on their own. This is not recommended or the preferred method. To do this, the librarian needs to be fully acquainted with cataloging rules and procedures. Of course, this is easier to do with a Web-based product, but may take more time and assistance for the librarian. It is easier to send your library holdings information to a vendor and continue to serve the school community than match each item with a record from the central server or vendor database.

#### **6. Set up the computer, install the software and data disks:**

How do I set up my computer system and use it? In an ideal world, an automated catalog/circulation system is installed on a “server” so that you can use a computer on your desk to circulate books and the students can use other workstations to search the catalog. Better yet is a system where the software lives on a school server and every computer in the building is able to access the catalog. The best system is Web-based so that students can access the catalog from home. All automation systems are moving to Web-based, so in the future, any librarian purchasing new automation software will simply buy into software that is already installed on a central server, without having to install software in the school.

The retrospective conversion vendor will send you a data disk with complete MARC records for the items in your collection. When the MARC data disk is available and the software installed, you are ready to import your records. Follow the procedure outlined by your automation software. The final import of your converted records takes place in an hour or two, depending on the size of your collection.

You may also need to import pupil information records. To get ATS data for automation, contact Paul Basso at 718-935-5361 or e-mail at [pbasso@schools.nyc.gov](mailto:pbasso@schools.nyc.gov).

When both databases are imported, the automated catalog is ready to circulate, create records and statistics.

**See the automation flow chart on the last page of this Handbook section.**

#### **7. Maintain the system:**

The system must be maintained by:

- Paying for yearly updates to the software to maintain essential continued support,

- Continuing to purchase and process materials with barcodes and MARC records for importing into the automated system,
- Maintaining the integrity of the catalog records,
- Maintaining the computer equipment,
- Backing up the data on a daily/weekly basis,
- Performing yearly maintenance like setting the automation calendar to the school calendar each fall, and
- Using the system to monitor and prepare reports of library circulation and usage