Estimating Library Space Needs

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Space planning requires a prior analysis of service needs and knowledge of how many users, materials, and staff the library will need to hold.

Quick and dirty estimates of space requirements:

1. Number of reader seats (including computer workstations) times 30   _____
2. Number of books and AV items divided by 10   _____
3. Number of magazine subscriptions divided by 1.5   _____
4. Back issues: number of subscriptions times number of years held, divided by 3   _____
5. Number of staff workstations times 150 *   _____
6. Storage space **   _____
7. Total of lines 1 through 6   _____
8. Allowance for elbowroom and miscellaneous equipment: 20% of line 6   _____
9. Total library space in square feet: lines 6 plus 7   _____

* "Workstations" include service desks and offices. A two-person desk is two workstations.

** Note that this formula assumes you can come up with a storeroom size. Storage needs of school libraries vary widely due in part to the amount of classroom equipment they need to store.

The quick and dirty method above is too sloppy for a serious document presented to school administrators. Unless you have no time at all, prefer the approach below.

More detailed estimates of space requirements require listing everything you need and calculating the total space required:

Remember that at all times the numbers you supply must be based on long-term future needs, not what you have now.

If spaces seem large, remember that the space includes not only the furniture item, but also all the necessary space around it.

Four-person tables must be rectangular, with two chairs on each of the two long sides. *Square or round tables for four students are totally unacceptable.*

Reader space:

Table for four (3 by 5 foot top) .... 100 square feet
Table for two (3 by 3 foot top) .... 60 square feet
Study carrel .... 30 square feet
Easy chair .... 40 square feet
Primary size table for four small children .... 80 square feet
Computer workstation with generous space for papers .... 40 square feet
Computer workstation with tight space (such as an OPAC) .... 30 square feet

Collection space:

Double-faced shelving unit * .... 25 square feet
New book display unit .... 100 square feet
Filing cabinet .... 12 square feet
Atlas stand .... 30 square feet
Dictionary stand .... 25 square feet
Card catalog (per 3-foot, single sided unit) .... 30 square feet

* To figure the number of items in a shelving unit, determine the average number of items on a shelf for that segment of the collection and multiply by the number of shelves in a double-faced unit (typically 14 for adult books, 10 for j books, 8 for reference books, and 6 for E books). When counting the number of items per shelf, count how many items it takes to occupy about 26 inches, in order to leave room to shelve items. If any items will be stored behind the service desk for security, be sure to provide extra square footage at the desk.

Service desks:

Service desk for one staff member .... 150 square feet
Service desk for two staff members .... 250 to 300 square feet

If any items will be stored on shelving behind the service desk for security, be sure to provide extra square footage accordingly.

Circulation space:

"Circulation" space in architectural terms means elbow room space for moving around, queuing up at the service desk, etc. After you've added up all the public service spaces above, add 10 percent for circulation.

Staff space:

Staff workroom (per staff member) .... 100 to 175 square feet

Storage space:

How much storage space you will need depends on what has to be stored. If you have a lot of AV equipment on carts, for example, you need to allow extra space for it. 200 square feet is probably a minimum figure for a workable storeroom. Remember that most libraries build too little storage space and that some school libraries are abruptly asked to store equipment for which they never planned space.