

Included in your **Colorado Library Media Profile** are several tables of benchmarks for school library media centers (LMCs) in the state. All of these benchmarks are ratios that should make it easier to compare your LMC's figures with those for other LMCs, either individually or grouped by school level or enrollment range. These ratios address both LMC resources (<u>examples</u>: staffing, the collection, funding) and services (<u>examples</u>: cooperation between LM staff and classroom teachers, circulation).

# **STAFFING RATIOS**

Benchmarks for LMC staffing are provided by two ratios: endorsed library media specialists per 100 students and total LMC staff per 100 students.

# Endorsed Library Media Specialists per 100 Students

*Endorsed library media specialists per 100 students* is calculated as follows: the number of library media specialists endorsed by the Colorado Department of Education expressed in full-time equivalents (FTEs)<sup>\*</sup> divided by the number of students enrolled in the school, divided by 100:

#### (LMS FTEs ÷ Students Enrolled) ÷ 100 = LMS per 100 Students

This ratio is a measure of the extent to which an LMC's operations are supervised by a library media professional whose training has been endorsed by the state.

<sup>\*</sup> For purposes of calculating FTEs, full-time is defined as 40 hours per typical week. Individual districts and schools may vary in how they define full-time status.

# Total LMC Staff per 100 Students

*Total LMC staff per 100 students* is calculated as the total number of LMC staff in FTEs <u>divided by</u> the number of students enrolled in the school, divided by 100:

## (LMC Staff FTEs ÷ Students Enrolled) ÷ 100 = LMC Staff per 100 Students

This ratio is a measure of the extent to which an LMC is adequately staffed, taking into consideration the number of students served by the LMC.

# WEEKLY SERVICE RATIOS

Benchmarks for weekly LMC services are provided by five ratios: LMC visits per student, circulation transactions per student, net loan rate, ILL/100 circulation ratio, and the number of information skills instruction contacts per 100 students.

## LMC Visits per Student

*LMC visits per student* is calculated as the number of visits to the LMC by individual students, whether alone or in class, <u>divided by</u> the number of students enrolled in the school:

#### Visits per Student Enrolled ÷ Students Enrolled = LMC Visits per Student

This ratio is a measure of the frequency with which students use the LMC in general. In lieu of figures on uses of electronic information resources, this ratio is an important supplement to the circulation ratio.

\*(Example: If a class of 30 visits the LMC, count 30 visits, not one.)

#### **Circulation Transactions per Student**

*Circulation transactions per student* is calculated as the number of times library media materials are charged out to users <u>divided by</u> the number of students enrolled in the school:

#### **Charge-outs ÷ Students Enrolled = Circulation Transactions per Student**

This ratio is the traditional library use measure, but also includes non-book formats such as issues of print magazines, video materials, and computer software packages, when such items are circulated.

# Net Loan Rate

The *net loan rate* is calculated as the number of times items from the LMC collection are loaned to other LMCs or libraries <u>divided by</u> the number of materials from outside sources borrowed or rented by the LMC:

#### Items Loaned ÷ Items Borrowed/Rented = Net Loan Rate

This ratio is a measure of the extent to which the LMC participates evenhandedly in resource sharing among libraries and exploits other resources available commercially. Figures of 1.00 or more on this ratio indicate that the LMC either lends as much as it borrows or rents or that it lends more than it borrows or rents.

#### Interlibrary Loans per 100 Circulation Ratio

The *ILL/100 circulation ratio* is calculated as the number of items borrowed or rented by the LMC <u>divided by</u> circulation of materials from the LMC collection, divided by 100:

#### (Items Borrowed/Rented ÷ Items Circulated) ÷ 100 = ILL per 100 Circulation Ratio

This ratio is another measure of the extent to which the LMC participates in resource sharing among libraries and exploits other resources available commercially.

<u>Caution</u>: While generally it is good for an LMC to have a high figure for this ratio, an excessively high one--especially if coupled with low collection and circulation ratios--may indicate the need to review the LMC's collection development policy.

# PERCENTAGE OF LMS/TEACHERS HOURS SPENT ON INSTRUCTION

School library media specialists--and, in schools without them, certified teachers assigned to LMCs--spend substantial proportions of their time directly in the instruction process. Four ratios call attention to different aspects of the instructional role played by professional library media staff.

#### **Identifying Materials**

The *percentage of LMS/teacher hours spent identifying materials* is calculated as the number of hours endorsed library media specialists and/or certified teachers staffing the LMC spent identifying materials for instructional units planned by classroom teachers <u>divided by</u> the total number of hours worked by such LMC staff:

## LMC Hours Identifying Materials ÷ LMC Staff Hours Worked = Percentage Hours Identifying Materials

This ratio indicates the proportion of professional LMC staff time spent participating as resource people in instruction.

# Planning with Teachers

The *percentage of LMS/teacher hours spent planning with teachers* is calculated as follows: the number of hours endorsed library media specialists and/or certified teachers staffing the LMC spent planning instructional units cooperatively with classroom teachers <u>divided by</u> the total number of hours worked by such LMC staff:

## LMC Planning Hours ÷ LMC Staff Hours Worked = Percentage Hours Planning

This ratio indicates the proportion of professional LMC staff time spent collaborating with classroom teachers in the design of instructional units.

# **Teaching Cooperatively**

The *percentage of LMS/teacher hours spent teaching cooperatively* is calculated as follows: the number of hours endorsed library media specialists and/or certified teachers staffing the LMC spent teaching instructional units cooperatively with classroom teachers <u>divided by</u> the total number of hours worked by such LMC staff:

#### LMC Hours Teaching Cooperatively ÷ LMC Staff Hours Worked = Percentage Hours Teaching Cooperatively

This ratio indicates the proportion of professional LMC staff time spent collaborating with classroom teachers in the delivery of instruction.

# Evaluating Student Work

The *percentage of LMS/teacher hours spent evaluating student work* is calculated as follows: the number of hours endorsed library media specialists and/or certified teachers staffing the LMC spent evaluating student work<sup>\*</sup> <u>divided by</u> the total number of hours worked by such LMC staff:

#### LMC Hours Evaluating Work ÷ Total LMC Hours Worked = Percentage Hours Evaluating Student Work

This ratio indicates the proportion of professional LMC staff time spent assessing the progress of students in learning.

\*(Examples: grading class assignments, participating in assessments)

# **Total Hours of Instructional Activities**

The *total percentage of LMS/teacher hours spent in instructional activities* is calculated as the sum of the four above-mentioned types of hours <u>divided by</u> the total number of hours worked by such LMC staff:

### Hours Identifying + Planning + Teaching + Evaluating ÷ LMC Staff Hours Worked = Total Instructional Hours

This ratio indicates the proportion of professional LMC staff time spent in instructional activities.

# **COLLECTION RATIOS**

Benchmarks for LMC collection development are provided by five ratios: volumes per student, print subscriptions per 100 students, electronic subscriptions per 100 students, video materials per 100 students, and computer software per 100 students.

# Volumes per Student

*Volumes per student* is calculated as the number of print volumes in the LMC collection <u>divided by</u> the number of students enrolled in the school:

#### **Print Volumes ÷ Students Enrolled = Volumes per Students**

This ratio indicates the size of the LMC book collection in relation to the size of the student body it is designed to serve.

It is important to consider this ratio in relation to collection ratios for other formats (<u>examples</u>: electronic subscriptions, videos, software) as well as the circulation ratio. If volumes per student is relatively high, the percentage of non-circulating materials in the collection is relatively low. If circulation per student is relatively low, it may be time to consider weeding the collection and/or revising the LMC's collection development policy.

#### Print Subscriptions per 100 Students

Print subscriptions per 100 students is calculated as the number of periodicals to which the LMC subscribes in print <u>divided by</u> the number of students enrolled in the school, divided by 100:

#### (Print Periodicals ÷ Students Enrolled) ÷ 100 = Print Subscriptions per 100 Students

This ratio indicates the scope of the LMC's print periodical holdings in relation to the size of the student body.

Over the next few years, it will be particularly important to monitor changes in this ratio relative to those for electronic subscriptions. Changes in the ratio should also be related to the change in per student spending for print and electronic subscriptions as well as the capital investment in equipment required to access electronic formats.

#### Video Materials per 100 Students

*Video materials per 100 students* is calculated as the total number of video materials<sup>\*</sup> in the LMC collection <u>divided by</u> the number of students enrolled in the school, divided by 100:

#### (Video Materials ÷ Students Enrolled) ÷ 100 = Video Materials per 100 Students

This ratio indicates the size of the video collection in relation to the size of the student body. Notably, unlike electronic subscriptions and computer software, video materials tend to be used by whole classes or groups of students rather than by individuals.

\*(examples: video cassettes, video disks)

# Computer Software Packages per 100 Students

*Computer software packages per 100 students* is calculated as the total number of licensed computer software packages<sup>\*</sup> included in the LMC collection <u>divided by</u> the number of students enrolled in the school, divided by 100:

#### (Licensed Software Packages ÷ Students Enrolled) ÷ 100 = Software Packages per Student

<sup>\*</sup> Exclude common office automation software used in managing the LMC, but not considered part of the collection (<u>examples</u>: WordPerfect, MS Word, Lotus 1-2-3, MS Excel, DBase, MS Access).

## FUNDING RATIOS

Benchmarks for LMC funding are provided by four ratios: print materials expenditures per student, non-print materials expenditures per student, supplies and other operating expenditures per student, and total materials expenditures per student.

## Print Materials Expenditures per Student

*Print materials expenditures per student* is calculated as total spending for print formats<sup>\*</sup> divided by the number of students enrolled in the school:

#### **Print Expenditures ÷ Students Enrolled = Print Expenditures per Student**

This ratio indicates the level of spending on print materials relative to the size of the student body. From year to year, maintenance of an LMC's buying power depends on increases in such funding to account for increases in enrollment and/or increases in average costs for books and periodicals.

\*(<u>examples</u>: books, print subscriptions)

#### Non-Print Materials Expenditures per Student

*Non-print materials expenditures per student* is calculated as total spending for non-print formats<sup>\*</sup> divided by the number of students enrolled in the school:

**Non-print Expenditures ÷ Students Enrolled = Non-print Expenditures per Student** This ratio indicates the level of spending on non-print materials relative to the size of the student body. As with print expenditures, maintenance of an LMC's non-print

buying power relies on increases in such funding to support increases in enrollment and/or increased charges from vendors of electronic resources.

\*(examples: electronic subscriptions, videos, computer software packages)

Potentially, the shift from "just in case" print collections to "just in time" electronic access to information could stabilize--even reduce--the costs of LMC operation. Alas, among the many changes being wrought in the "information age" are those of how information as a commodity is priced. Whether or not savings occur as a result of the shift from print to electronic resources may depend largely on how electronic information is "packaged" (examples: CD-ROM, laser disk, mini-disk, online access) and priced (examples: quarterly or annual subscriptions, fee-for-use).

#### Supplies & Other Operating Expenditures per Student

Supplies and other operating expenditures per student is calculated as the total amount expended on behalf of the LMC for supplies and other costs<sup>\*</sup> required to maintain and access the collection <u>divided by</u> the number of students enrolled in the school:

#### LMC Supplies & Operating Expenditures ÷ Students Enrolled = Supplies & Operating Costs per Student

This ratio indicates the extent of the marginal costs to the LMC of providing access to its collection and electronically networked information.

\*(Examples: Cataloging supplies, computer printer cartridges, paper)

# Total Materials Expenditures per Student

*Total materials expenditures per student* is calculated as the sum of print and non-print materials costs and supplies and other operating costs <u>divided by</u> the number of students enrolled in the school:

#### Print + Non-print + LMC Supplies + Operating Costs ÷ Students Enrolled = Total Materials Expenditures per Student

This ratio indicates the overall cost to the LMC of providing access to its collection and electronically networked information.