Access and Use of Library Resources in Library Power

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The Library Power initiative employed flexible access to the library media center and improved library media center space to increase the use of the library's resources in instruction. These changes through Library Power are associated with increased use of the library resources by teachers and improved interactions with library materials for students.

Use of school library resources can take many forms and can occur in a variety of places. Resources are used by students to provide individually chosen reading, to answer questions on assignments, to pursue individual interests, to support assigned papers, as well as by teachers to prepare and support lessons. In addition, use of library resources occurs in classrooms and workrooms as well as in the school's library. The surveys and case studies of the Library Power evaluation sought to capture some of this complexity by asking librarians to make counts of library use, by asking teachers to describe their students' use of the library, and by case study researchers observing students and staff in libraries and classrooms. This article reports how access to libraries in Library Power schools was provided, the changes in facilities and equipment that were made, the amounts and kinds of use that occurred, how practices and facilities were related to use, and how teacher involvement in Library Power activities related to use of the library by students.

Allowing Use of the Library at Times Best Suited to Instructional Purposes

Information Power-Building Partnerships for Learning (American Association of School Librarians & Association for Educational Communications and Technology [AASL & AECT], 1998) clearly states how students should gain access to school library collections,

In a student-centered school library media program, learning needs to take precedence over class schedules, school hours, student categorizations, and other logistical concerns. To meet learning needs, the program's resources and services must be available so that information problems can be resolved when they arise. (p. 89)

A key premise of Library Power is that library facilities and resources can support instruction best if they are available at the time most suited to a
lesson or when spontaneous interests arise. Therefore, one of the requirements for a school to participate in Library Power was to make a commitment to use the flexible schedule. This meant that individual, group, or class access to the library would not be limited to rigidly scheduled times of the day or week, but would be possible when needed, for a range of instructional activities. Flexible scheduling also implies that the library would support multiple activities in the library at the same time, such as allowing small groups, classes, and individual students to work in the library concurrently.

A basic evaluation question for Library Power schools is whether students and teachers are getting sufficient access to the facilities and the materials to support instructional efforts. Library Power schools were asked to move to a flexible schedule if they were on a traditional schedule of, for example, once-a-week LMC visits. Such a change in the program can cause a major disruption in a school’s working philosophy, and the transition is not always easy; in fact, the flexible schedule might be controversial and could become a major political problem for the administrator and the library media specialist. Therefore, a further important question is whether the practice of flexible scheduling continues when the requirement from the initiative is no longer present.

In a series of annual surveys, librarians in Library Power schools were asked how access to the library was scheduled according to the following categories (see Table 1):

- all classes are regularly scheduled into the LMC;
- some classes are regularly scheduled, other classes flexibly;
- the LMC is completely flexibly scheduled (classes, small groups, and individuals are scheduled for varying time periods appropriate to need).

In this matched set of libraries responding in both 1995 and 1997, 92% of the libraries reported having full or partial flexible access to the library in 1995; 94% reported such access in 1997. However, this matched set included reports on schools that were nearing the end of their Library Power program in 1995 together with schools that were in their first year in 1995. A clearer pattern is seen if a matched set of Round 3 libraries, which began their Library Program in school year 1994-1995, is compared as in Table 2. Here we

<table>
<thead>
<tr>
<th>Schedule</th>
<th>1995</th>
<th>1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>All regularly scheduled</td>
<td>8.1%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Some regular, some flexible</td>
<td>22.9%</td>
<td>24.2%</td>
</tr>
<tr>
<td>All flexibly scheduled</td>
<td>69.1%</td>
<td>69.4%</td>
</tr>
<tr>
<td>Number responding</td>
<td>223</td>
<td>219</td>
</tr>
</tbody>
</table>
find that 86% of the Round 3 libraries reported having full or partial flexible access to the library in 1995 and 98% reported such access in 1997. In fact, 92% of the libraries were reported as fully flexibly scheduled in 1997.

An additional question to consider is whether the practice of providing flexible access to the library persists after the end of the grant period. Overall ($n=441$) in 1997, librarians in 95% of Library Power schools reported at least partially flexible access for their school libraries. Sites funded in Round 1 ended their Library Power funding in 1995. In 1997, two years beyond the grant period, those libraries were wholly or partially flexibly scheduled in 84% of the schools. All other Library Power libraries (Rounds 2 and 3) were scheduled flexibly, in whole or partially, in at least 97% of their schools (see Figure 1).

Although the survey question gave three options, case studies indicate that because school staff held a variety of beliefs about flexible scheduling,
flexible scheduling was implemented in a variety of patterns and with varying effects on use of the library. Some teachers, for example, believed that kindergarten and first-grade students could not be secure in going to the library unaccompanied by a teacher; others believed that their students’ developmental needs were served best by regular, predictable schedules—in those schools regularly scheduled times were maintained for those classes. In other schools, teachers were reluctant to send students spontaneously because the librarian might be too busy to supervise or help them or because they did not believe in the students’ ability to work independently. Some schools scheduled classes on a flexible basis, but maintained a regularly scheduled checkout time for the whole school. This was seen as a “step toward total flexibility.”

Librarians, teachers, and principals have made adaptations to help flexible scheduling work for their school. In one school, for example, half-classes visit the library for half a period, allowing for better attention for students in the library and giving the teacher a smaller group to work with in the classroom. Then the half-classes switch places and the other half visits the library. In many libraries, librarians keep a schedule on which teachers can sign up for blocks of time; in one library, teachers can sign up for a study table in the library for a group from their class to use. In some schools, going to the library as an individual was a reward for good behavior or for finishing lessons in the classroom; in other schools, students were dropped off at the library because their behavior disrupted the class. As methods for tracking which individual students gained access to the library were rarely evident, it must be assumed that some students gained access more easily than others, but the patterns of such use are not known.

The report of one case study researcher illustrates how librarians at one school struggled with the concept of a full flexible schedule and produced a thoughtful compromise that met the purposes of on-demand access:

Neither the librarians nor teachers felt the continuation of weekly checkout periods represented a significant compromise in flexible scheduling. Retaining a brief weekly checkout period was seen as a service provided to students above and beyond the library’s increased involvement in instruction vis-à-vis flexible scheduling. Most students would have used the library at least once a week in any event, the librarians reasoned, so weekly checkout periods helped streamline library traffic associated with noninstructional student needs. Furthermore, weekly checkout periods did not compromise the philosophy of flexible scheduling as it applied to individual students because students were still permitted to come to the library any time they wanted. But the main reason librarians did not see problems with the weekly checkout is that they did not feel it detracted from what they themselves could do, or actually did do, with students. As [a librarian] noted, the main idea behind flexible scheduling was to make the interaction between students and librarians more purposeful, and School 1’s hybridized scheduling approach did not hamper them in that objective.
An analysis of the relationship between scheduling of access and staffing of the library found a significant positive relationship between scheduling pattern and the number of support staff in the library. Overall, Library Power libraries had an average of fewer than one third full-time equivalent (.31) support staff. However, libraries that had regularly scheduled access had an average of .076 FTE in support staff compared with an average of .341 FTE support staff in libraries with fully flexible access. The presence of support staff has been noted as necessary for a library to be responsive to multiple and spontaneous demands for services.

Perhaps the most painful aspect of moving from a regular to a flexible schedule is that many teachers lost a planning period. Under the regular schedule, the class would often be left at the library while the teacher would be free to plan lessons or perform other individual tasks. For many of these teachers, experience with the flexible schedule was required for them to have some sense of the benefits it could bring to their teaching. In a number of case studies, the principal was credited with the movement to a flexible schedule by strongly supporting the practice and by creatively finding alternative times for both the teachers and the librarians to plan instruction. By 1997, case study researchers were reporting that many initially reluctant teachers had come to value flexible access to the library. However, responses to the Teacher Survey in 1997 indicated that a proportion of the teachers did not believe that flexible scheduling should or would continue, probably because some teachers had difficulty making use of the library in their instruction.

Providing Appropriate Library Facilities
The degree to which a school library media center can fulfill the intentions of flexible scheduling is strongly related to the center’s facility, its capacity, and features. Library Power funds supported the renovation of the library facility to signal a fresh start in the library media program and to accommodate the different kinds of uses that relate to flexible scheduling. The evaluation inquired into the kinds of spaces available in the library and whether the type of space had undergone renovation with Library Power grant funds. (Although grant funds could be used for materials in the renovations, school districts were asked to provide the labor.)

Figure 2 shows the change in schools’ library media center spaces at the end of the three-year Library Power program. Table 3 lists the total numbers of library media centers having different types of spaces in 1997 with an indication of the number of libraries adding or renovating those spaces during their Library Power project.

Nearly half of the Library Power schools added more space for comfortable reading. A third of the libraries added space where students could work on computers and where teachers and librarians could read aloud to groups of students. One fourth of schools added space where individual students could read, view, or listen to library materials. They provided areas where
Table 3
Types of Spaces Available in the Library Media Centers (1997)

<table>
<thead>
<tr>
<th>Type of space</th>
<th>Number Having</th>
<th>Percent Having</th>
<th>Added in LP</th>
<th>Percent Added</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Library Power Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual read/view/listen</td>
<td>361</td>
<td>80.9%</td>
<td>123</td>
<td>27.6%</td>
</tr>
<tr>
<td>Comfortable quiet reading areas</td>
<td>308</td>
<td>69.1%</td>
<td>204</td>
<td>45.7%</td>
</tr>
<tr>
<td>Small group (&lt;5) reading/viewing areas</td>
<td>357</td>
<td>80.0%</td>
<td>115</td>
<td>25.8%</td>
</tr>
<tr>
<td>Large group (5+) reading/viewing areas</td>
<td>400</td>
<td>89.7%</td>
<td>101</td>
<td>22.6%</td>
</tr>
<tr>
<td>Storytime area</td>
<td>322</td>
<td>72.2%</td>
<td>134</td>
<td>30.0%</td>
</tr>
<tr>
<td>Areas for learning centers</td>
<td>198</td>
<td>44.4%</td>
<td>64</td>
<td>14.3%</td>
</tr>
<tr>
<td>Production areas for classroom teachers</td>
<td>128</td>
<td>28.7%</td>
<td>33</td>
<td>7.4%</td>
</tr>
<tr>
<td>Production areas for students</td>
<td>88</td>
<td>19.7%</td>
<td>27</td>
<td>6.0%</td>
</tr>
<tr>
<td>Conference rooms</td>
<td>120</td>
<td>26.9%</td>
<td>31</td>
<td>7.0%</td>
</tr>
<tr>
<td>Computer access area or laboratory</td>
<td>364</td>
<td>81.6%</td>
<td>145</td>
<td>32.5%</td>
</tr>
<tr>
<td>Workroom for LMC staff</td>
<td>267</td>
<td>59.9%</td>
<td>30</td>
<td>6.7%</td>
</tr>
<tr>
<td>Storage (equipment, etc.)</td>
<td>330</td>
<td>74.0%</td>
<td>63</td>
<td>14.1%</td>
</tr>
<tr>
<td>Space enough for multiple activities</td>
<td>358</td>
<td>80.3%</td>
<td>100</td>
<td>22.4%</td>
</tr>
<tr>
<td>Total responding</td>
<td>446</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
students could work in small groups, large groups, or spaces to allow different simultaneous activities. Overall, more than three fourths of Library Power libraries now can support large and small groups, reading aloud, computer use, and multiple simultaneous activities. In addition, in all categories, the variety of spaces available increased from 1995 to 1997. In particular, the percentage having a computer access area or laboratory increased from 68.8% in 1995 to 81.6% in 1997.

In addition to supporting the alterations made to the library spaces, Library Power funds were used to furnish the libraries with more attractive and comfortable furniture, such as lower bookshelves to open up or define spaces, warm carpeting, rocking chairs, reading nooks, and other features to make the library media center more inviting to students.

For many schools, there was a clear interaction between the facilities renovations and the degree to which they were implementing flexible scheduling. Table 4 indicates the significant relationships (p < .05) between kinds of spaces added or owned in 1997 and the kind of access provided. There is a clear pattern of libraries providing more flexible access being more likely to have added such spaces and to have such spaces in 1997. For example, no libraries that were regularly scheduled added space for individual reading/viewing or listening. Almost 80% of libraries having such spaces were fully flexibly scheduled. Most striking is the capability to support multiple activities in the library simultaneously. Almost 80% of the libraries with such capacity were fully flexibly scheduled; fewer than 60% of those not having such capability were fully flexibly scheduled.

In addition, there was a strong pattern of seating capacity in the library and form of scheduling. Libraries that allowed only regularly scheduled access reported an average of 43 seats, libraries with a mix of access scheduling reported an average of 50 seats, and libraries providing fully flexible access reported an average of 61 seats.

These data cannot support a causal conclusion in either direction—either that facilities determine scheduling or that scheduling affects facilities. It is clear, however, that aspects of facilities and scheduling co-occur in ways unlikely to be due to chance.

Use of the Library Media Center
Because the purpose of improvement of facilities and schedule is the use of the library for the support of instruction, the evaluation used several measures of the uses made of library visits by individuals, small groups, and classes; circulation of materials; and teachers' reports of student use. The most common measure of library use is the number of visits by users. Librarians were asked to record use on each day of a typical week of the number of large groups, small groups, and classes that visited the library. The numbers of students contained in each of these groups was added to the number of individual student visits to obtain the number of visits in a typical
week. Table 5 reports the mean response for that measure over three years and calculates the number of visits per week per student in the school. For comparison purposes, the figures reported from the National Center for Education Statistics 1993-1994 School and Staffing Survey (SASS) are given for schools nationally in the US (Chaney, 1998).

On average, a student in a Library Power school would visit the library over 1.5 times a week. This represents an increase over the expected once a week found under rigid scheduling of library use by classes. This count includes visits by individuals, classes, and other groups; on average, about one fourth of the weekly visitors were reported to be individual students. Overall, on these visits, libraries circulated an average of one book per student per week.

<table>
<thead>
<tr>
<th>Table 4</th>
<th>Facilities Related to Scheduling of Access (Librarian Survey, 1997)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All regularly scheduled</strong></td>
<td><strong>Some regularly, Some flexible</strong></td>
</tr>
<tr>
<td>5.2%</td>
<td>20.2%</td>
</tr>
<tr>
<td><strong>Individual read/view/listen</strong></td>
<td></td>
</tr>
<tr>
<td>% adding during LP</td>
<td>0.0%</td>
</tr>
<tr>
<td>% not adding</td>
<td>7.2%</td>
</tr>
<tr>
<td><strong>Individual read/view/listen</strong></td>
<td></td>
</tr>
<tr>
<td>% owning at end of LP</td>
<td>2.8%</td>
</tr>
<tr>
<td>% not owning</td>
<td>15.5%</td>
</tr>
<tr>
<td><strong>Comfortable quiet reading areas</strong></td>
<td></td>
</tr>
<tr>
<td>% adding during LP</td>
<td>2.0%</td>
</tr>
<tr>
<td>% not adding</td>
<td>7.9%</td>
</tr>
<tr>
<td><strong>Comfortable quiet reading areas</strong></td>
<td></td>
</tr>
<tr>
<td>% owning at end of LP</td>
<td>3.3%</td>
</tr>
<tr>
<td>% not owning</td>
<td>9.6%</td>
</tr>
<tr>
<td><strong>Storytime area</strong></td>
<td></td>
</tr>
<tr>
<td>% owning at end of LP</td>
<td>5.0%</td>
</tr>
<tr>
<td>% not owning</td>
<td>5.7%</td>
</tr>
<tr>
<td><strong>Production areas for classroom teachers</strong></td>
<td></td>
</tr>
<tr>
<td>% owning at end of LP</td>
<td>3.2%</td>
</tr>
<tr>
<td>% not owning</td>
<td>6.0%</td>
</tr>
<tr>
<td><strong>Production areas for students</strong></td>
<td></td>
</tr>
<tr>
<td>% owning at end of LP</td>
<td>3.4%</td>
</tr>
<tr>
<td>% not owning</td>
<td>5.7%</td>
</tr>
<tr>
<td><strong>Space enough for multiple activities</strong></td>
<td></td>
</tr>
<tr>
<td>% owning at end of LP</td>
<td>3.1%</td>
</tr>
<tr>
<td>% not owning</td>
<td>13.6%</td>
</tr>
</tbody>
</table>
In a week, the average Library Power school library would be visited by three large groups (averaging 35 students), 18 classes (averaging 24 students), and 21 small groups (averaging 6 members). These averages are larger than those obtained in 1995 when two large groups, 13 classes, and 13 small groups were reported (see Table 6). In addition, in 1997, 30% of the librarians would have helped to teach an average of three classes outside the library.

Flexible access to the library appears to affect the patterns of use of the library. Although no difference was found between the number of large groups in a week for regularly scheduled access and fully flexible access (averages of 3.61 for regular vs. 3.33 for flexible), there was a strong difference between those libraries with a mixed schedule (an average of 1.5 large-group visits per week) and those with fully flexible access, which had twice as many large-group visits in a week (3.3). The number of small-group visits was even more strongly affected by scheduling. The number of small-group visits to libraries with a regular schedule was fewer than 10 in a week.
(9.56) whereas the number of small-group visits to fully flexibly scheduled libraries was more than twice as many (21.39).

With the move to flexible access and more direct support of the curriculum, the question of the capacity of the library to support instruction is raised. The average Library Power school had approximately 30 classroom teachers. Visits by each class of an average of once a week would come close to exhausting the resources of the library and staff, particularly when it is considered that each of the visits under a flexible schedule is for a unique purpose. Under the regular schedule, the same lesson could be repeated for a number of classes. In addition, there are visits by small groups and individuals. Therefore, although there is an increase in use from 1995 to 1997, it is unknown at this point whether a limit of capacity is being reached.

Although each of the kinds of visits show substantial increases from 1995 to 1997, 25% of the schools still have low levels of activity: no large groups in a week, 10 class visits, and 9 small-group visits (see Table 7).

As an additional measure to the counts kept by librarians, in a sample survey across the initiative, teachers were asked for their observations on student use of the library. Overall, 65% of the teachers reported an increase in library use since Library Power began. Further, 60% noted an increase in use of the library on the students’ own initiative, and 72% described student attitude toward using the library as more positive (see Table 8).

The change in attitude toward using the library was described by a principal in a case study school:

The old library was not tied to the curriculum in any way. You went to the library to check out a book. Period! Now classes of students, half classes of students, one student, two students, depending on what is going on in the class-
room ... determines who needs to go.... They go in there with their problem ... that they were trying to find information about. They go right to it. Librarians, parents, volunteers, or assistants, at times, are in there to help.

In the two years, you almost needed to be here to see ... the change. But now students have a completely different view of the library.... They enjoy going to the library ... enjoy solving problems that they ... can solve in the library.... I have seen some of that. “We are going to the library to see what we can find out. We do not agree upon this ... so we are going to the library.” We still have students who want to check out books, but now they check out books related to some things happening in the classroom, almost every time ... not just some isolated book.

A further source of insight into the acceptance of flexible scheduling was obtained by asking librarians, principals, and a sample of teachers whether they felt key Library Power practices would and should continue beyond the formal funding period. In particular, they were asked about flexible scheduling and about on-demand use of the library (see Table 9).

Overall, all three groups of respondents believe that the practice of as-needed access to the library will continue and should continue. Teachers are somewhat less supportive of the practice, with more believing that flexible scheduling will continue (93%) than believe it should continue (85%). Schools that completed their Library Power grant periods two years ago have somewhat lower expectations for continuation of these practices; however, the lowest percentage of agreement by Round 1 librarians, teachers, or principals is 82%, showing strong support for Library Power practices and the expectation that they would continue. Again, the lowest percentage is for
| Table 9  
<table>
<thead>
<tr>
<th>Continuation of Flexible Access and On-Demand Use (1997)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Librarians</td>
</tr>
<tr>
<td>% Yes</td>
</tr>
<tr>
<td>---------------------------------------------------------</td>
</tr>
<tr>
<td>Flexible scheduling of classes in the library (vs. regular weekly visits)</td>
</tr>
<tr>
<td>Will continue</td>
</tr>
<tr>
<td>Total responding</td>
</tr>
<tr>
<td>Should continue</td>
</tr>
<tr>
<td>Total responding</td>
</tr>
<tr>
<td>On-demand use of the library by individual students or groups (vs. at pre-set times)</td>
</tr>
<tr>
<td>Will continue</td>
</tr>
<tr>
<td>Total responding</td>
</tr>
<tr>
<td>Should continue</td>
</tr>
<tr>
<td>Total responding</td>
</tr>
</tbody>
</table>

Round 1 teachers agreeing that flexible scheduling should continue. The overall high expectation for continuity is supported by persistence of the practice in a large number of Library Power schools.

The attitudes and behaviors of the teachers appear to be strongly related to their degree of involvement with Library Power practices. Teachers were asked to rate their level of “participation in Library Power activities, such as flexible use of the library and joint planning of instruction with the librarian.” Teachers who rated their participation as more active also said more often that their students visited the library “as a class,” “in small groups,” and “as individuals.” They also reported that their students used the library more than before, used the library more often on their own initiative, and had a more positive attitude toward using the library. The teachers who were more involved with Library Power are more convinced that the practices of “flexible scheduling of classes in the library (vs. regular weekly visits)” and of “on-demand use of the library by individual students or groups (vs. at pre-set times)” should continue. Teachers who reported increased use of the collection to support their instruction are also significantly more positive that these practices should continue. Teachers who rated their level of participation with Library Power as more active are also significantly more positive that both flexible scheduling of classes in the library and on-demand use by individual students should continue.

Conclusions on Access to and Use of Library Resources
It appears that the Library Power initiative has spurred major change in the way school libraries are used to support instruction. Although the facilities
improvements are an immediate and visible sign of change in the school, the move to flexible scheduling was a more profound change in the operation of the school. It is clear from the survey and case study data that this change in the timing of access to the library is well under way, but there is also ample evidence that this change is often not smooth; is interpreted in various ways by different librarians, teachers, and principals; and brings significant concerns about the evenness of access in the school and in the classroom. However, although the adjustment to a flexible schedule is often difficult, there is also reason to believe that schools that persist will find ways of working through the complexities and can conclude that instruction is better served.

As the practices of Library Power continue to be employed in these schools, a number of issues will need to receive attention:

- how to move to good and equitable support for all of the classrooms in the building;
- how to provide full flexibility that supports regular visits as well as spontaneous uses;
- how to allow general checkout visits as well as more targeted uses;
- how to design appropriate visiting practices for the different grade levels;
- how to determine the amount of use that is desirable from each class;
- how to allocate the limited staff resources of the library to provide the fullest support of the curriculum.

References

Author Note
Douglas Zweizig is a professor in the School of Library and Information Studies, University of Wisconsin-Madison. Previously, he served as a senior research associate with King Research, Inc. and was on the faculty of the University of Washington and the University of Toledo. He earned his MA at Harvard, his MLS at Rutgers, and his PhD in Information Transfer at Syracuse University. He has developed tools for library evaluation such as Output Measures for Public Libraries (ALA, 1982) and The TELL IT! Manual: The Complete Program for Evaluating Library Performance (ALA, 1996), and has conducted national studies of adult literacy services in libraries and public library involvement with the Internet. Currently, he is completing a four-year evaluation of the foundation-funded National Library Power school library initiative. He investigates, writes and consults on evaluation and planning of library services.