School Library Evaluation and User Satisfaction in Japan

Michiko Matsumoto
School Librarian at Higashikurume dai 3 Elementary School
University of Tsukuba Graduate School of Library, Information and Media Studies, Tsukuba, Japan
michikomatsumoto731@gmail.com

Abstract:

In recent years in Japan, school libraries are beginning to be required to conduct evaluations as part of their schools’ management plan. The currently utilized School Library Evaluation Form (2008) is antiquated, and does not match the present conditions of the school libraries, nor does it address user satisfaction. In this study, I created a new School Library Evaluation Form, and investigated the validity of the form in correlation to the level of satisfaction of the school library users.

First, I created two forms, School Library Evaluation Form and School Library User Satisfaction Survey, and then conducted a questionnaire survey in elementary schools. In each school, the School Library Evaluation Form was collected from one school library teacher, and the School Library User Satisfaction Surveys were collected from two teachers. Then, I analyzed the correlation between the level of achievement and the level of satisfaction. As a result of correlation analysis, major questionnaire categories in the School Library Evaluation Form that were related to the services directly provided by the library to the users, including 1. Facilities and Equipment, 2. Library service, and 3. Guidance and Support showed correlation with the data from the School Library User’s Satisfaction Survey. Thus, the validity was satisfied. In contrast, no correlation was seen in the major questionnaire categories related to indirect services provided by the library to the users, including 4. Management and Operation, 5. Organization, and 6. Collaboration and Cooperation. In addition, since the new School Library Evaluation Form included one hundred items which was a burden to the respondents, I also experimented with developing an abridged version of the form including fifty items and using the same method as described above.

Keywords: Elementary School Libraries, School Library Evaluation, User Satisfaction, Japan
School Library Evaluation and User Satisfaction in Japan

1 Introduction
Should Japanese school libraries provide services to increase user satisfaction? By regulation, evaluation has been implemented since the year 2000 and many public systems in Japan have been conducting evaluations, such as administrative evaluation, academic evaluation, and library evaluation. School libraries are beginning to be asked to conduct administrative evaluation as one of the supporting systems in achieving the educational goals for the entire school by providing necessary information.

The school library evaluation form currently in use in Japanese elementary school libraries is now out of date, is no longer applicable after the change of information environments, does not match modern developments in library system, nor does it address user satisfaction. Therefore, I created a new School Library Evaluation Form and a User Satisfaction Survey to investigate the connection between library service and user satisfaction.

I distributed the two new forms, School Library Evaluation Form and School Library User Satisfaction Survey, to twenty-one elementary schools in two different districts in Tokyo. In each school, the School Library Evaluation Forms were collected from one school library teacher who was the provider of the library services, and the School Library User Satisfaction Surveys were collected from two teachers who were the users of school library (in each school, three people participated in the research). The level of achievement of school library services was measured from School Library Evaluation Form, while the level of satisfaction by the library users was measured based on School Library User Satisfaction Survey. I then analyzed the correlation between the level of achievement and the level of satisfaction. Since the new School Library Evaluation Form included one hundred items which had become a burden to the respondents, I also experimented with developing an abridged version of the form with fifty items. I analyzed the correlation between the two forms and tested the validity of the School Library Evaluation Form.

2 School Library Evaluation

2.1 School Libraries in Japan
In Japan, there are 20,676 Elementary Schools, 9,696 Junior High Schools, and 3,591 High Schools, and most of the schools have school libraries (Ministry of Education, Culture, Sports, Science and Technology, 2013). The School Library Law, created in 1953, requires that schools provide a school library (Article 3). The purpose of a school library is to contribute to the development of school curriculums and to enhance students’ sound development in their education (Article 2). Furthermore, a school must appoint a library teacher who works on specialized tasks in a school library (Article 5).

Thus, 99.8% of elementary schools with more than twelve homerooms have library teachers, while 23.9% of elementary schools with fewer than eleven homerooms have library teachers. Library teachers also work as homeroom teachers, and they have little time to work in libraries. Although 47.9% of the elementary schools have a school librarian, only 8.1% of them work full-time. The rest of them work part-time (Ministry of Education, Culture, Sports, Science and Technology, 2013).
2.2 Library Evaluation
Since the Library Act was revised in 2008, with an added clause defining library evaluation duties, many libraries have been conducting evaluations. Library evaluation is defined as: “The judgment of values on the standards of a library from a management point of view, for the purpose of improving the services. The judgment is made in comparison to its organizational goals or the standards set by public systems, objectively evaluating levels of achievement of those goals” (Tosyokan yogo jiten, 2004, p. 418). In this study, I define evaluation in this way. It is crucial to understand evaluation in line with the process of management cycle (P: Plan, D: Do, C: Check, A: Act) (Miyoshi, 2008, p. 13).

2.3 School Library Evaluation
Schools are obliged to conduct inspections and evaluations on school management when establishing elementary schools and junior high schools (Ministry of Education, Culture, Sports, Science and Technology law, 2002). Consequently, schools have been asked to present management policies, including educational goals and principle goals, and to fulfill their responsibility to provide further explanation of their stated policies and goals. In order to support the realization of educational goals for the entire school more comprehensively, school libraries are required by government to conduct evaluation on their own management. (Kita, 2009, pp. 159-160).

3 School Library Evaluation and User Satisfaction
In this study, the objective was to create a new school library evaluation form that would be applicable under current situations and to evaluate the validity of the form. I believe it is crucial for a school library to make improvements on its resources and services and make best efforts toward the higher level of satisfaction of the users. I investigated the validity of the form, based on the correlation between the level of achievement of school library services and the level of satisfaction of the library users. If the items in this new school library evaluation form were valid, there would be correlation between the level of achievement of school library service and the level of satisfaction of the library users.

4 Method

4.1 Method of Questionnaires
I created two new forms: School Library Evaluation Form and School Library User Satisfaction Survey. In order to show the validity of the School Library Evaluation Form, I conducted surveys, and analyzed the correlation between the level of achievement of school library evaluation items and the average of user satisfaction level calculated from School Library User Satisfaction Survey.

4.2 Selection of Research Subjects
Twenty-one elementary schools in two different districts in Tokyo were selected as the targets of this study. In each school, School Library Evaluation Form was collected from one school library teacher who was the provider of the library services, and School Library User Satisfaction Survey was collected from two teachers who were the users of school library (in each school, three people participated in the research).
4.3 Period
The two forms (School Library Evaluation Form and School Library User Satisfaction Survey) were sent by mail to each elementary school collecting the data. The data collection was conducted between December 2, 2013 and January 24, 2014.

5 Creating Evaluation Items and the Method of Analysis

5.1 Items on School Library Evaluation Form
In creating a new evaluation form, I referred to the following four existing school library evaluation forms:

- **Checkup for School Library-School Library Simple Evaluation Form** (Sano, 1993, pp. 30-47) by Tomohiko Sano
- **School Library Activities Checklist 2002 version** (Hayashi, 2002, pp. 71-81) by The Society of Study on School Library Problems
- **Checklist for Preparing Reading Environment for Children: Reading Environment at School** (Nihon Tosyokan Kyoukai, 2005, pp.12-15) by Japan Library Association

Then, I created the following six categories and prepared the items for each category, resulting in 100 items in total. Possible answers to these Items were either “applicable” or “not applicable”. The level of achievement in categories at each school was calculated by the percentage of detailed items that were applicable to them. The newly created School Library Evaluation Form is a six A4 page document:

I Management and Operation (14 detailed items: 3 items on basic principles, 8 items on management, 3 items on operation)
II Facilities and Equipment (24 detailed Items: 11 items on collecting materials, 3 items on evaluating materials, 10 items on current situations of facilities and equipment)
III Organization (12 detailed items: 6 items on library teachers, 4 items on school librarians, 2 items on cooperation of a library teachers and librarians)
IV Library Services (22 detailed items: 7 items in-library use, 4 items on promotion of reading, 5 items on reference, 4 items on publicity work, 2 items on utilization of computers)
V Guidance and Support (13 detailed items: 2 items on creating plans, 6 items on support for classroom teaching, 2 items on reading guidance, 2 items on library use education, 1 item on supervising the student school library committee)
VI Collaboration and Cooperation (15 detailed items: 2 items on connection to the local community, 1 item on connection to the other schools, 3 items on connection to volunteers, 1 item on connection to student households, 5 items on connection to the public libraries, 3 items on connection to local municipal Boards of Education)

5.2 Items on School Library User Satisfaction Survey
I created a satisfaction survey based on my study (Matsumoto, 2012, pp. 55-84) and a Library User Satisfaction Survey created by Yamato City Library (Yamato, 2007, pp. 74-77), comprised of 5 categories with 32 items. The respondents were asked to choose one of 6 answers to each item: “Satisfied (5 points)”, “Somewhat Satisfied (4 points)”, “Natural (3 points)”, “Somewhat Unsatisfied (2 points)”, “Unsatisfied (1 point)”, and “not sure”. Level of
satisfaction in each category was calculated based on the average points of detailed items within it. I assumed that higher levels of satisfaction led to frequent use of the library, and thus included the frequency of library use as one of the indicators of their satisfaction level in this study. This newly created School Library User Satisfaction is a three A4 page document.

1. Frequency of school library use (8 detailed items on such topics: frequency of library use based on different purposes including “researches reading, researches for lesson materials, and readings by teachers”)

2. Satisfaction level of school library facilities and materials (7 detailed items on such topics as numbers and qualities of books and other materials, number of chairs, and location of the school library)

3. Satisfaction level of school library services (8 detailed items on such topics as hours of operation, checkout systems, reservation and requests, accessibility of the library, and attitude of librarians)

4. Overall satisfaction level towards school library (1 detailed item: users’ overall satisfaction level toward the school library)

5. Satisfaction level towards the outcome of utilizing a school library (8 detailed items on such topics: acquiring research skills, acquiring frequent reading habit, acquiring materials applicable to lessons, and getting advice from school librarians).

Using the analysis methodology mentioned above, I calculated the data collected from twenty-one schools and utilized Pearson’s Correlation Coefficient in analyzing the correlation between the level of achievement and the level of satisfaction. The level of Statistically Significant Certification was 0.05.

6 Results and Analysis

6.1 Response Rate
I received answers from twenty-one library teachers and forty-one teachers (98.4% response rate).

6.2 Results of Level of Achievement in School libraries
I calculated the average points of achievement in school libraries in each category for each school before calculating the average of each category from all the data from twenty-one schools. The averages were as follows:

I. Management and Operation 63.3% (with maximum 100.0%, minimum 14.3%),
II. Facilities and Equipment 53.2% (with maximum 83.3%, minimum 29.2%),
III. Organization 52.0% (with maximum 91.7%, minimum 25.0%),
IV. Library Services 59.6% (with maximum 90.9%, minimum 18.2%),
V. Guidance and Support 63.7% (with maximum 100.0%, minimum 38.5%), and
VI. Collaboration and Cooperation 58.5% (with maximum 83.3%, minimum 33.3%).

6.3 Results of Level of User Satisfaction
I calculated user satisfaction in each category for each school, before calculating the average points of each category from all data from twenty-one schools. The averages were as follows:

1. Frequency of school library use 2.0 (with maximum 2.5, minimum 1.5),
2. Satisfaction level of school library facilities and materials 3.2 (with maximum 4.9, minimum 2.0),
3 Satisfaction level of school library services 3.9 (with maximum 4.9, minimum 2.7),
4 Overall satisfaction level towards school library 3.7 (with maximum 5.0, minimum 1.5), and
5 Satisfaction level towards the outcome of utilizing the school library 3.4 (with maximum 4.6, minimum 1.9).

6.4 Correlation analysis between level of achievement and level of user satisfaction (See Chart 1)
The result of the analysis of the correlation between the level of achievement and the level of user satisfaction is shown in Chart 1 below. There were statistically significant differences between the level of achievement and the level of user satisfaction. This was seen in the following 8 items:

II Facilities and Equipment
2 Satisfaction level on school library’s facilities and materials ($r=0.781$, $p<0.01$),
3 Satisfaction level on school library services ($r=0.531$, $p<0.05$),
4 Overall satisfaction level towards school library ($r=0.700$, $p<0.01$),
5 Satisfaction level towards the outcome of utilizing a school library ($r=0.805$, $p<0.01$),

IV Library Services
2 Satisfaction level of school library facilities and materials ($r=0.516$, $p<0.05$),
4 Overall satisfaction level towards school library ($r=0.584$, $p<0.05$),
5 Satisfaction level towards the outcome of utilizing a school library ($r=0.582$, $p<0.05$),

V Guidance and Support
5 Satisfaction level towards the outcome of utilizing a school library ($r=0.510$, $p<0.05$).

Chart 1.
Correlation analysis between levels of achievement in school libraries and levels of user satisfaction (100 Items)

<table>
<thead>
<tr>
<th></th>
<th>1. Frequency of Library use</th>
<th>2. Satisfaction level towards school library’s facilities and materials</th>
<th>3. Satisfaction level towards school library services</th>
<th>4. Overall satisfaction level towards school library</th>
<th>5. Satisfaction level towards the outcomes of utilizing a school library</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Management and Operation</td>
<td>−.209</td>
<td>.012</td>
<td>.054</td>
<td>.150</td>
<td>.200</td>
</tr>
<tr>
<td>II. Facilities and Equipment</td>
<td>−.072</td>
<td><strong>.781</strong></td>
<td>.531*</td>
<td>.700**</td>
<td><strong>.805</strong></td>
</tr>
<tr>
<td>III. Organization</td>
<td>−.242</td>
<td>.300</td>
<td>.140</td>
<td>.289</td>
<td>.036</td>
</tr>
<tr>
<td>IV. Library Services</td>
<td>−.067</td>
<td><strong>.516</strong></td>
<td>.402</td>
<td>.584*</td>
<td>.582*</td>
</tr>
<tr>
<td>V. Guidance and Support</td>
<td>−.250</td>
<td>.307</td>
<td>.253</td>
<td>.327</td>
<td>.510*</td>
</tr>
<tr>
<td>VI. Collaboration and Cooperation</td>
<td>−.210</td>
<td>.283</td>
<td>.206</td>
<td>.213</td>
<td>.027</td>
</tr>
</tbody>
</table>

**$p < 0.01$, *$p < 0.05$
7 Creating the abridged version (50 items) of the School Library Evaluation Form

I experimented with the creation of an abridged 50-item version of the School Library Evaluation Form which consists of 100 items.

7.1 Target of Research
In order to create the abridged version of School Library Evaluation Form, I added 71 schools as the target of research: 29 schools from one district in Tokyo and 42 schools from one district in Chiba prefecture. Then, I added the 21 schools in Tokyo (mentioned earlier) for a total of 92 schools. For this study, in each school, the respondent was limited to one school library teacher, the provider of library services.

7.2 Response Rate
For this study, 50 people out of 92 responded (54.3% response rate).

7.3 Selection of 50 Detailed Items
Based on the data collected during my earlier study, I selected 50 detailed items with the lowest level of achievement out of 100 items in the School Library Evaluation Form:

I Management and Operation (5 detailed items: 1 items on basic principles, 2 items on management, 2 items on operation)
II Facilities and Equipment (12 detailed items: 5 items on collecting materials, 3 items on evaluating materials, 4 items on current situations of facilities and equipment)
III Organization (6 detailed items: 1 item on library teachers, 3 items on school librarians, 2 items on cooperation of library teachers and librarians)
IV Library Services (11 detailed items: 3 items in-library use, 3 items on promotion of reading, 1 item on reference, 2 items on publicity work, 2 items on utilization of computers)
V Guidance and Support (7 detailed items: 1 item on creating plans, 5 items on support for classroom teaching, 1 item on library use education)
VI Collaboration and Cooperation (9 detailed items: 1 item on connection to the local community, 1 item on connection to other schools, 1 item on connection to volunteers, 1 item on connection to student households, 4 items on connection to public libraries, 1 item on connection to local municipal boards of education)

7.4 Method
In testing the validity of the abridged form, I applied the same procedures as the previous study with the full-length form with 100 items: I calculated the data collected from 21 schools and utilized Pearson’s Correlation Coefficient in analyzing the correlation between the level of achievement and the level of satisfaction. The level of Statistically Significant Certification is 0.05. The maximum percentage of achievement was 71.4%, while the minimum was 2.1%.

7.5 Correlation analysis between level of achievement and level of user satisfaction (See Chart 2)
Based on the analysis, significant correlation between the level of achievement and level of user satisfaction were seen in the following nine items:
Facilities and Equipment
1 Satisfaction level on school library’s facilities and materials \( (r=0.604, p<0.01) \),
4 Overall satisfaction level towards school library \( (r=0.566, p<0.05) \),
5 Satisfaction level towards the outcome of utilizing a school library \( (r=0.630, p<0.01) \),

Organization
2 Satisfaction level on school library’s facilities and materials \( (r=0.539, p<0.05) \),

Library Services
2 Satisfaction level on school library facilities and materials \( (r=0.465, p<0.05) \),
4 Overall satisfaction level towards school library \( (r=0.474, p<0.05) \),

Guidance and Support
2 Satisfaction level on school library’s facilities and materials \( (r=0.477, p<0.05) \),
4 Overall satisfaction level towards school library \( (r=0.442, p<0.05) \),
5 Satisfaction level towards the outcome of utilizing a school library \( (r=0.596, p<0.01) \)

Chart 2.
Correlation analysis between levels of achievement in school libraries and levels of user satisfaction (50 Items)

<table>
<thead>
<tr>
<th>I. Management and Operation</th>
<th>1. Frequency of Library use</th>
<th>2. Satisfaction level towards school library’s facilities and materials</th>
<th>3. Satisfaction level towards school library services</th>
<th>4. Overall satisfaction level towards school library</th>
<th>5. Satisfaction level towards the outcomes of utilizing a school library</th>
</tr>
</thead>
<tbody>
<tr>
<td>II. Facilities and Equipment</td>
<td>-0.089</td>
<td>0.202</td>
<td>0.179</td>
<td>0.216</td>
<td>0.363</td>
</tr>
<tr>
<td>III. Organization</td>
<td>-0.073</td>
<td><strong>0.604</strong></td>
<td><strong>0.539</strong></td>
<td><strong>0.566</strong></td>
<td><strong>0.630</strong></td>
</tr>
<tr>
<td>IV. Library Services</td>
<td>-0.230</td>
<td><strong>0.539</strong></td>
<td>0.241</td>
<td>0.448</td>
<td>0.253</td>
</tr>
<tr>
<td>V. Guidance and Support</td>
<td>-0.141</td>
<td><strong>0.465</strong></td>
<td>0.314</td>
<td><strong>0.474</strong></td>
<td><strong>0.459</strong></td>
</tr>
<tr>
<td>VI. Collaboration and Cooperation</td>
<td>-0.247</td>
<td><strong>0.477</strong></td>
<td>0.343</td>
<td><strong>0.442</strong></td>
<td><strong>0.596</strong></td>
</tr>
</tbody>
</table>

**p < 0.01, *p < 0.05

8 Consideration and Issues

The correlation between the level of achievement and the level of satisfaction on 100 items was observed under the three categories: Facilities and Equipment, Library Services, and Guidance and Support; therefore, the validity of the newly created evaluation form can be verified. Categories which showed correlation: Facilities and Equipment, Library Services, and Guidance and Support were the services directly provided to the school library users, and it can be that this was one of the reasons the detailed items under each of the categories are
connected to user satisfaction. In contrast, no correlation was seen in the following categories: Management and Operation, Organization, and Collaboration and Cooperation. These categories are related to indirect services provided to the users, and thus did not show to the correlation. Based on these results, it is valid to conclude that achieving higher levels in the areas of categories that showed the correlation will lead to the higher level of user satisfaction. Any categories without correlation will not affect the improvement of user satisfaction level.

Correlation between the level of achievement and the level of satisfaction in 50 items was observed for four categories: Facilities and Equipment, Organization, Library Services, and Guidance and Support. Therefore, the validity of the abridged evaluation form was verified. No correlations were seen in the following two categories: Management and Operation, and Collaboration and Cooperation.

From these results, correlation was shown in the 50-item form under the category of Organization but not in the 100-item form. Therefore, I recommend the use of the 50-item form if we wish to examine possible correlation with User Satisfaction in future surveys.

9 Discussion

There are three significant aspects in this study. One is the creation of new evaluation forms, and development of a methodology for their validation. In other words, I measured the level of achievement in the school library and the school library user satisfaction levels, and invented a method of verifying the newly created evaluation forms based on their correlations. Second, I made two types of evaluation form (100 items, 50 items). Third, the study reveals the aspects that may need improvement or could benefit from further consideration in each school library by conducting the evaluation with the new evaluation form and applying the results. Making improvements in these areas will lead to a better school library which would further satisfy user needs, and realize a school library with high level of user satisfaction.

There are four issues that require further examination/research:

1. Currently, the target of the study was limited to the elementary schools in two different districts in Tokyo. It would be useful to conduct the research in other areas.
2. As 42.9% of the schools in this study did not have a school librarian, it would be necessary to change some of the questions on the form depending on whether they have a school librarian or not.
3. Validity of major questionnaire categories that did not show correlations needs to be examined further. In this study, I examined the validity of the new evaluation form in correlation to the level of user satisfaction.
4. The percentages of digital media within library materials will most likely increase as the information technology spreads in educational systems. Library materials do not only mean the printed matters any more. The introduction of digital media to elementary school libraries is one of the main issues today; however, the evaluations on digital media were not included in this study, so I would like to consider this aspect in my future study.
5. The research utilizing this newly created Library Evaluation Form (50 items) should be conducted under exactly the same conditions as the previous study with the full-length form consist of 100 items, in order to investigate the correlations to the level of user satisfaction, and to prove the validity of the form. The abridged version was created for the
purpose of reducing the burden on the respondents. As the next step for this study, I need to measure the actual time required to fill out this form. Furthermore, although ten minutes seemed to be the appropriate length of time to me personally, I need to investigate the possible length of time the research respondents are willing to spend in filling out the form.

Acknowledgments:

This paper is based on a study in the doctoral degree course in Tsukuba University Graduate School. I would like to express my gratitude to Professor Yuji Hirakue of University of Tsukuba Graduate School of Library, Information and Media Studies. In addition, I give deep thanks to the teachers of the 92 elementary schools who completed the survey at a time when they were very busy. Furthermore, I thank the IFLA reviewers for their feedback.

References


