

Using the image drawing method to examine student perceptions of school libraries

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Abstract

This study examine, changes in the pictures university students drew of their school library over time while taking a course focusing on explaining the importance of school libraries. The results revealed an increase in the tendency of pictures to depict librarians; However, even so, librarians featured in only 12 of the 32 pictures drawn by the students. Since the importance of librarians was a focus of the course, there appears to be a need to improve the curriculum

Keywords: perception of school libraries, image drawing method, teacher training

1. Aim

A course on “The Planning of a School Library” was held at the researcher’s university in 2013–2014, led by the researcher, in order to help change the perceptions of teachers (excluding school librarians) regarding the future of libraries in teaching (table 1).

Table 1: Overview of “The Planning of a School Library”

Time	Subject
1	Guidance / What is the school library?
2	What is a school library lesson?
3	Elementary school library lessons 1
4	Elementary school library lessons 2
5	Junior high school library lessons
6	Senior high school library lessons
7	Special school library lessons
8	How to determine learning objectives
9	Tour of the school library
10	Privacy in the school library
11	Book selection in the school library
12	Guest speaker: school librarian
13	How to make a lesson plan
14	Simulated Teaching 1
15	Simulated Teaching 2

The objective of this course was to foster “effective teaching in the school library as a class teacher.” This course was an introductory course, and in its syllabus it was said, “There is no problem if you have no interest in school libraries now.” This was for students who become a teacher to know the school library as much as possible, school library education is not currently

popular in Japan.

In Japan, there are two types of librarian in schools: the “school librarian” and the “teacher librarian.” Qualified teacher librarians are found in 98% of the schools in Japan. Most of them are class teachers as well as librarians. Therefore, school librarians are also provided for in some cases, but schools are not required to have a school librarian, and these people work as non-regular employees in many cases. For most Japanese (excluding librarians, but including most of the students in my course at first), the difference between the two types is not clear. Therefore, in this paper, the term “librarian” covers both types.

In the course, general learning objectives (across sessions) included “teaching methods in the school library,” “how to team teach with the librarian,” and, in particular, “the importance of the librarian.” In 2005, the students in the course had been in elementary school; in Japan in this year, about 30% of elementary and junior high school libraries did not have librarians (Japanese Ministry of Education, Culture, Sports, Science, and Technology [MEXT], 2006). Therefore, the students did not have much experience of education in the school library. In 2012, this percentage is increased to 50% (MEXT, 2013). Therefore, there is in an urgent need to improve teaching methods in school library lessons.

Making a lesson plan for use in the school library was the final assignment of the course. However, this assignment is insufficient to accurately measure students’ understanding of the school library’s purpose and function. Thus, in this study, I tried to examine the degree to which students understood the use of the school library and the importance of the librarian, in other words, to determine whether the course was a success or a failure, by another method, namely, the image drawing method (IDM). The purpose was not the evaluation of performance of individual students but of the instruction.

2. Method

2.1 Previous research

IDM was proposed by Tsukamoto, Kosaka, and Akahori (2006) to gather feedback on their lectures on information technology education. In their study, students were asked at the beginning and in the middle of the semester to draw pictures representing their attitudes toward computers. These pictures, which were classified into three categories, provided valuable feedback to the researchers on how they could improve their lectures.

Sunaga (2006) advocated that students be asked to write onomatopoeic impressions of school libraries at the beginning of the semester. (Japanese has an exceptionally large onomatopoeic (sound symbolic or mimetic words) lexicon expressing many concepts in an emotionally resonant and visceral way (Hamano, 2006).) The goal was to share students’ impressions of school libraries and to encourage their interest in the school library.

2.1 IDM in this study

2.2.1 Questionnaire

The questionnaire used by the present study to gain IDM feedback was composed of three questions written on A4-size paper (Figure 1):

学校図書館計画論 第1回「アンケート」			
課程	プログラム コース	年	名前
<p>学校図書館 (図書室) の印象</p> <p>1. あなたの「学校図書館のイメージ」を絵で書いてください。(3分)</p> <div style="border: 1px solid black; height: 150px; margin: 5px 0;"></div> <p>2. 上の絵を書いた理由を文章で説明してください。(2分)</p> <div style="border: 1px solid black; height: 40px; margin: 5px 0;"></div> <p>3. あなたの「学校図書館のイメージ」をオノマトペ (擬音語・擬態語) で書いてください。(2分)</p> <div style="border: 1px solid black; height: 40px; margin: 5px 0;"></div>			

Figure 1: The questionnaire

1. Please draw a picture of your image of the school library. (2 minutes)
2. Please explain in writing why you drew the picture above. (2 minutes)
3. Please write an onomatopoeia of your image of the school library. (2 minutes)

Question 2 was used only when it was difficult to determine, for example, whether a person in the picture was a student or librarian (The determinate method is described in 2.2.4). Question 3 was not used in this study. This questionnaire was non-anonymous, to facilitate examination of individual changes.

2.2.2 Method of analysis of images

The pictures produced by the students reflected the following seven themes:

- Bookshelves
- Desks for users
- PC(s)
- Student(s)
- Librarian (or “adult,” to reflect the possibility that class teachers were represented; see 2.2.3)
- Sofas
- Class in session

Probably, it is considered that students who understood the importance of the librarian did not always draw a librarian. Furthermore, it was also possible that students would draw negative impressions of the present condition of their school library, because they were not directed to draw an ideal situation. It was thought that if the objective of the lectures were achieved, the number of students drawing a librarian would increase compared with previous drawings.

PC(s) and sofas may be required for school libraries, but they were not considered in the lectures. Therefore, it was expected that changes in representations of them would be smaller than in

representations of the librarian, so they were used as a baseline.

2.2.3 Method of differentiation of librarians and students

It was not easy to determine whether a given human figure in a picture was an adult (librarian) or a student. Therefore, criteria were set as follows—a librarian was:

- drawn larger than other figures
- designated “librarian” in writing
- given features of a stereotypical librarian in Japan, for example an apron

The pictures were evaluated by the researcher and three graduate students in psychology; when they reached different conclusions, they conferred and reached consensus. The concordance rate was 94%.

Most “adults” were represented inside a counter, showing that they were librarians, not class teachers. However, as we have noted, class teachers may also teach in the library; the matter ultimately cannot be settled within our methodology. Therefore, the exact status of “adult” figures was not determined, and it was assumed that they were librarians.

However, it was necessary to determine whether a figure was a librarian or a student on the library committee. When there is no school librarian in a Japanese school library, the students of the library committee are responsible for lending books. Therefore, they may be represented in the same way as librarians; people who are inside the counter may not be librarians. When it is difficult to determine this point, the student was asked individually.

2.2.4 Testing

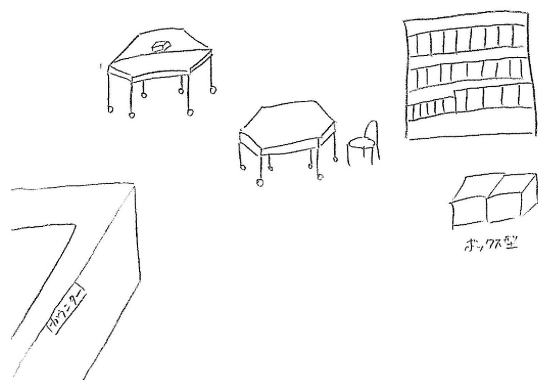
A pretest was held on October 3, 2013, at the time of the initial lecture, and a posttest was held on February 23, 2014, at the time of the final lecture. All lectures were conducted as scheduled; throughout all, the role of the librarian was emphasized and no special descriptions of sofas or PCs were included.

3. Results

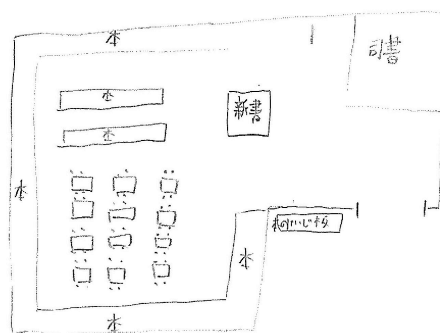
The material for analysis was 64 drawings produced by 32 students.

3.1 Examples of the pictures

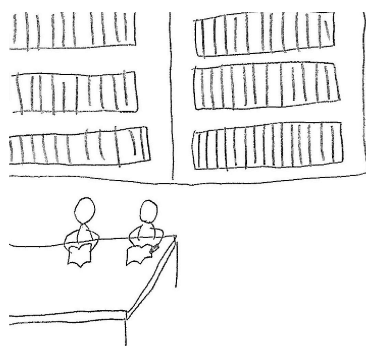
Examples of the pictures are presented in Figure 2.



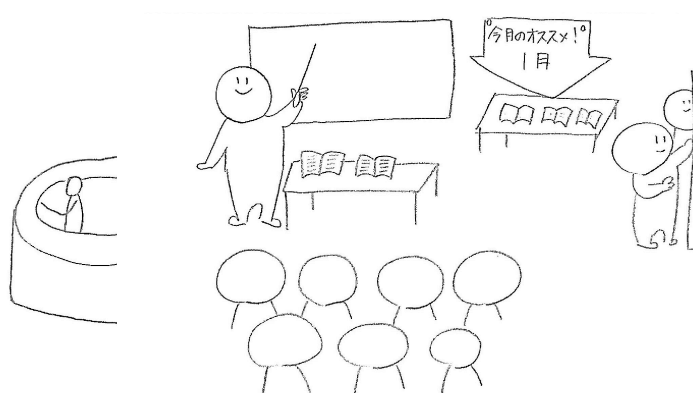
ex. 1. Bookshelves and desks for users



ex. 2. Bookshelves, desks for users, and librarian (written in Japanese, not drawn)



ex. 3. Bookshelves, desks for users, students, and librarian



ex. 4. Bookshelves, desks for users, students, librarian, and class in session

Figure 2: Example pictures

The other examples of the pictures which didn't contain the seven themes were an abstract painting and the closed door of the school library.

3.2 Results of the analysis

The study focused on increases in representations of student(s) and a librarian. McNemar's test was conducted to analyze increases in both, yielding p-values between 5% and 10%, indicating no significant difference in PC(s) and Sofas.

Table 2: The frequency of appearance of a theme ($N = 32$)

	pre-test	post-test	applicable →not	not applicable → applicable	χ^2	McNemar's test
Bookshelves	29	29	0	0	NaN	n.s.
Desks for users	24	24	3	3	0	n.s.
PCs	4	5	2	3	0.2	n.s.
Studen(s)	10	16	2	8	3.6	$p = 0.0578$
Librarian	6	12	2	8	3.6	$p = 0.0578$
Sofas	2	3	0	1	1	n.s.
Class in session	0	3	0	3	3	$p = 0.0833$

("applicable→not": pretest is applicable and posttest is not applicable; "not→applicable": pretest is not applicable and posttest is applicable)

In addition, a statistical relationship was found between desks, sofas, and the student's performance graded by researcher (Table 3).

Table 3: The number of the theme by the performance ($N = 32$)

	the score of performance			Spearman's rank correlation coefficient between performances	
	70-79.9 (n=3)	80-89.9 (n=15)	90-100 (n=14)	Spearman's ρ	p-value
Bookshelves	2	14	13	0.250	.1682
Desks for users	1	10	13	0.485**	.004942
PCs	1	3	1	-0.098	.5941
Students	0	8	8	0.190	.2988
Librarian	0	8	4	-0.014	.9395

Sofas	0	0	3	0.377*	.03323
Class in session	0	2	1	-0.087	.6355

(* $p < .05$, ** $p < .01$)

4. Conclusion

Based on the drawings, it seems that 12 out of the 32 students recognized the importance of the librarian. Impressionistically, this value seems low (but see the next section), and statistically, it did not show an increase; since there was a focus in educating the students on the role of the librarian, this seems to indicate a need for improvement of the course curriculum.

There was no statistical relationship between the representation of a librarian and the students' performance; thus, it is a possibility that IDM is another barometer. In order that it was improved as a better barometer and verified, their themes and ideas need to be discussed.

5. Future directions

5.1 Is 12 out of 32 high or low?

In order to know whether 12 out of 32 high or low, there is needed to investigate the rate of librarian in the picture drawn by the students teacher librarian major and school librarians in the field. In Japan, in the 2014 spring semester, a trial similar to the one presented here was implemented in other universities by collaborating researchers. However, a larger sample still is needed for better statistical validity and to identify regional differences.

5.2 Will IDM be a barometer of school libraries?

In addition, the scope of the study is to be expanded to include both teachers and librarians' training. If there is the trial for elementary and junior high school students, it may be one of the barometers of libraries.

We need collaborators; please get in touch if you are interested in the trial.

5.3 How do we improve curriculum based on the findings of this study?

If 12 out of 32 is low, there is needed to improve the curriculum. But IDM does not tell much improvement points about lectures.

5.4 Is IDM able to be used with Sunaga's method at the same time?

Maybe, if another purpose is added to IDM, it is considered to be effective to share students' pictures with each other, as in Sunaga's method, whose goal is to share students' impressions of school libraries and to encourage their interest in the school library. However, there is a possibility of bias in the pretest due to sharing. In the posttest, in contrast, there are no bias problem, but it is too late that the students are interested in the school library at the time of the final lecture.

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Biographical note

Mr. Daisuke Okada is an Assistant Professor at Wakayama University Library, Japan.

From 2007–2010, he served as a teacher librarian at private junior high school.

He currently offers “learning support” at the university library reference desk. He lectures on information literacy classes in the liberal arts. He is currently working on team teaching at the university library.

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He is the author of *Ask essential questions : handbook for inquiry-based learning beginners* (in Japanese).