

# Growing from Nothing: the performance of teacher librarians in Taiwan

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## **Abstract**

*Since 2009, Taiwan's Ministry of Education has begun to add the post of teacher librarians in some elementary schools. Teachers who are enthusiastic about reading education become teacher librarians to take charge of managing school libraries and promoting reading after receiving short professional training. This study aims to probe into whether the system is helpful to the management of libraries in elementary schools and to the establishment of reading environment at school.*

*Specifically speaking, this study aims to discuss whether there is any difference in the activities of school libraries and schools' attitudes toward reading between schools with teacher librarians and schools without ones. The study surveyed elementary schools in Taiwan with a questionnaire which was filled out by teacher librarians or general librarians at school. The questionnaire was tested with Cronbach's  $\alpha$  reliability, and a coefficient of 0.975 was obtained, which is considered excellent reliability.*

*742 copies of the questionnaire were retrieved, and 741 of them were considered valid after the elimination of one with incomplete answers. Among which, 213 copies were from schools with teacher librarians, and the rest 528 copies were from schools without teacher librarians. In addition, the fill rate of schools with teacher librarians reached 80%. The study found that schools with and without teacher librarians had significant differences in library management of their libraries and behavior and attitudes toward reading.*

**Keywords:** Professional development, Teacher librarians, Taiwan

## **Introduction**

Most of Taiwan's elementary school libraries are primarily supervised concurrently by the section chief of the equipment section; most of these libraries do not hire full time librarians. If these libraries are to open to the students, the assistance of the parent volunteers are required; they are to be in charge of the basic circulation services of the library. To enhance

the function of the library and to promote reading, the Ministry of Education of Taiwan began to establish the position of teacher librarians in 2009. The selected teacher was to reduce ten of his or her teaching hours; he or she is responsible of the operation of the library and the reading promotion tasks. The number of teacher librarians assigned has been increased year by year. In 2014, 308 schools have employed teacher librarians. Because the small number of schools that are financially supported by the Ministry of Education, cities such as Taipei, New Taipei City, and Taichung started to subsidize the grant to financially support the schools that have not received any grant from the Ministry of Education to organize their establishment of teacher librarians. The teacher librarians are not full time professionals. In addition to assist with the operation of the school libraries and the promotion of reading, they are required to provide official course instructions. The teacher librarians do not receive complete professional training; they only received three-day short-term training for beginners and for advanced learners.

Although the conditions for teacher librarians are inadequate, to the education authorities, the establishment of teacher librarians is the enthusiastic work resulted from the resources. In addition, to the school, the establishment of teacher librarians displays the evidence that the school does place its focus on reading. Thus, the purpose of this study is to explore the issue that whether the schools that provide the professional services of teacher librarians possess better quality in reading awareness and attitudes displayed by the teacher librarians (or the person in charge of operating the library), the staff, and the parents in comparison to the schools without the establishment of teacher librarians.

## **Literature Review**

The elementary school libraries in many countries include full-time teacher librarians or school librarians. For examples, many European elementary schools employ school librarian and chartered librarians. Similarly, the elementary schools and the junior high school in the US include library media specialist or school media specialist. In addition, the elementary schools in Japan and Korea acquire teacher librarians and in Hong Kong, "director of the library" (Lu and Lin, 2008).

In 1988, the U.S. Department of Education formalized the appointment standards of school librarian teachers. The law requires that the school must include a full time library media specialist who meets the appointment standard. The responsibility of the library media specialist is to provide the curriculum teaching resource and the teaching material consulting services for the entire school. In addition, the law clearly specified the roles of the library media specialist; the specialist plays the role of a teacher, teacher partner, information specialist, and administrator. To ensure that the library media specialists are able to play the diverse roles, they must acquire a master's degree and receive curriculum training in library and information science, teaching technology, and communication theories (AASL & AECT, 1988).

Loertscher, Ho, and Bowie (1987) investigated the personnel organization and services of the teaching resource center from 209 public elementary schools in the US. The study found that up to 84% of the school included at least one full-time professional personnel and several staff members who were responsible of managing the teaching resource center. In addition, between 2006 and 2009, Dow, Lakin, and Court (2012) conducted an investigation in the library at the public school located in Kansas. The study examined whether or not the library media specialist had positive influence on the learning achievement of the students. The participants of the study included approximately 2,500,000 students from 1389 schools; the schools comprised of elementary, junior high, and high schools in Kansas. The results of

the study showed that in schools where full-time library media specialists were employed, the academic achievement of the students were significantly better than the school where no library media specialists were employed or only part-time library media specialists were employed.

To enhance the reading ability of the students, in September 1998, the Education Bureau in Hong Kong started to provide elementary schools with financial assistance to support the operation of the school library including its construction and book collection. In addition, the funding required that the schools provided the position of the director of the school library who must have at least two years of teaching experience and a professional employee history in library management. The directors of the library who obtained an employment offer must study the day-time training courses or other professional training courses organized by the Hong Kong Education Bureau.

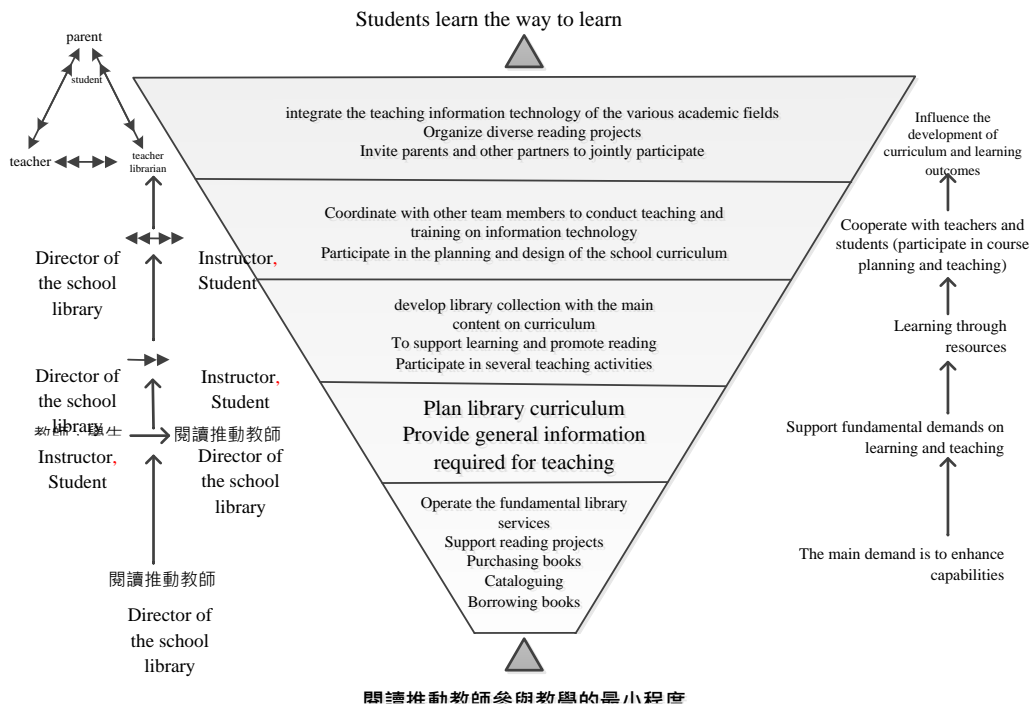
The Hong Kong curriculum development council recommended that in addition to planning and managing the daily operation, the directors of the school library are to play the role of a coordinator for reading resources and reading projects. Specifically, the director must also play the roles of information literacy trainers, and the assisting personnel of teachers of various subjects and curriculum development (Hong Kong Curriculum Development Council, 2002). The following figure explained the five service levels of the directors of school library. The work content of the five service levels are shown as follows:

The First level: the basic operations of the library including the recommendation and purchasing of the library data, assigning the call number and formatting files, borrowing and returning of books, library spatial planning, book collection development, and reading promotion activities.

The Second level: the planning and the conducting of library utilization educational courses for the entire grade levels.

The Third level: the directors of the school library must cooperate with the need of the teachers from the various subjects to purchase books required for teaching instructions.  
The Fourth level: the directors of the school library must conduct team teaching with other teachers, thereby cultivating the information sensitivity of the students. In addition, the teacher librarians must participate in the planning and designing of the curriculum; the library should support the teaching and learning demand of the school.

The Fifth level: The integration of diverse data resources from the community, the public, and the schools; the planning of school-wide, diverse reading projects that encourage the teamwork of the faculty and staff, the parents, and the students to jointly participate in the reading projects organized by the school.



**Figure 2-1. The five service levels of the director of the school library in Hong Kong**

Data source: Curriculum Development Council (2002). Basic Education and Curriculum Guide: Building on the Strength (1<sup>st</sup> grade to 9<sup>th</sup> grade). Hong Kong: Hong Kong Education Bureau.

### The least participation in teaching by the director of school library

In conclusion, professional librarians or teacher librarians are necessary professional personnel of the elementary school libraries in advanced countries. The work responsibilities of the teacher librarians not only include the basic operation and management of the libraries, they are required to instruct the educational use of the library, to provide library resources for the teachers of the various subjects in order to team teach with the teachers of the various subjects and to participate in the curriculum design of the entire school including planning school-wide reading activities.

## Method

### Research Hypotheses

Based on the previously mentioned studies, this study hypothesized several differences between the schools that offer teacher librarians and the schools that do not offer the position. The differences are stated in the following hypotheses:

H1: There is difference in the basic operation and management of the library such as book purchasing, cataloguing, borrowing and returning books, training volunteers, and promoting reading.

H2: There is difference in the library education.

H3: There is difference in developing the library collection to support teaching and learning and to support reading activities.

H4: There is difference in collaborative teaching and the participation of school curriculum planning.

H5: There is difference in the integration of the teaching resources and the planning of school-wide reading projects.

H6: There is difference in the reading attitudes and behaviors between teacher librarians and non-teacher librarians.

H7: There is difference in the reading attitudes of the faculty and staff, students, and parents between the schools that offer teacher librarians and the schools that do not offer the position.

### 3.2 Research Method and Tool

This study adopted questionnaires; the questionnaires mainly included the two major dimensions: the management of libraries and the reading attitudes and behaviors. In the management of libraries, the study mainly referred to the job responsibilities defined by the Hong Kong Curriculum Development Council in issue designing. In reading attitudes and behaviors, the study mainly referred to *the Reading Habits and Literacy Attitudes of In-service and Prospective Teachers* compiled by Morrison, Jacobs, & Swinyard (1999) and *the Reading Attitudes of Teachers* compiled by Wang (2009) when designing the questions. In addition, the questionnaire adopted 5-point Likert scale. The Cronbach's test was adopted to test internal reliability. The overall reliability or the coefficient of Cronbach's  $\alpha$  was 0.975, which indicated the excellence of the reliability of the questionnaire.

### Data Collection

In May 2014, the questionnaires were distributed to the 2768 elementary schools in Taiwan. 742 questionnaires were retrieved; one questionnaire was invalid because of incompleteness. Thus, the number of valid questionnaire was 741; the availability factor of the questionnaire was 99.87%. Of the 741 valid questionnaires, 213 were from the schools that employed teacher librarians and 528 were from the school without such positions. The completed ratio of the schools that employed teacher librarians reached 80% whereas the completed ratio of the schools without such position reached 21.87%. The distribution and the retrieving of questionnaires of the schools with teacher librarians and those without such position were compiled in Table 3-1.

	Schools with teacher librarians	Schools without teacher librarians	Total
The number of valid questionnaires	213	528	741
The number of school nationwide	264	2414	2678
Percentage	80.68	21.87	27.67

Table 3-1. The distribution and the retrieving of valid questionnaires of the schools with teacher librarians and those without such positions.

## Results

The analysis of variance on the basic operation of libraries between the schools that employ teacher librarians and the schools without the position

The basic operation management is the fundamental service that meets the demands of the teachers and students and also provides the necessary tasks before the high-level of services can be offered. The basic task of the librarians include purchasing library resources, cataloguing, borrowing and returning books, volunteer training, theme exhibition, and reading promotion activities.

Table 4-1 showed that regardless of the employment of the teacher librarians, the mean number of the operation task: borrowing and returning books was the highest in the 7 dimensions. However, the independent sample t-test analysis indicated that the significant differences were found between the two types of schools in the various dimensions. Of the 7 dimensions, the items with the most differences were found in the following dimensions such as whether the libraries are cultivating volunteers, organizing theme exhibition, and promoting reading activities. The data indicated that the school's employment of teacher librarians was beneficial to the basic operation and management of the school libraries.

	School with teacher librarians		School without teacher librarians		T value	Significant test (P)	df
	Mean	Standard deviation	Mean	Standard deviation			
The school will assign budget annually to purchase library books	4.13	0.99	3.44	1.14	8.22	0.00***	452
The school will assign budget annually to organize reading promotion projects	4.15	0.99	3.47	1.10	8.32	0.00***	436
The school library conducts book purchasing and cataloguing	4.80	0.46	4.34	0.80	9.85	0.00***	651
The school library conducts putting books on the shelves, organizing shelves, burrowing and returning books	<b>4.93</b>	0.25	<b>4.55</b>	0.67	11.47	0.00***	735
The school library conducts the recruitment, training, and management of volunteers	4.61	0.70	3.67	1.20	13.24	0.00***	643
The school library conducts spatial planning and theme exhibition	4.57	0.65	3.75	0.98	13.18	0.00***	580

	School with teacher librarians		School without teacher librarians		T value	Significant test (P)	df
	Mean	Standard deviation	Mean	Standard deviation			
The school library often organizes reading promotion activities	4.52	0.66	3.60	0.94	15.21	0.00***	554
Total	4.53	0.45	3.82	0.70	16.29	0.00***	600

Table 4-1. The variance analysis on basic operation of libraries between schools that employ teacher librarians and those that provide no such position

\*\*\*P<0.001

The variance analysis on library education between the schools that employ teacher librarians and the schools without the position  
 Library education is to nurture students' basic skills to use the library and search for the various resources. This required capability is necessary for the students to conduct research project.

Table 4-2 indicated that the overall performance of the 4 items including "planning library usage courses for all grade levels", "instructing library use for students from all grade levels", "providing relevant book recommendation for the courses of the various subjects", and "providing relevant resource websites for the courses of the various subjects" are better than that of the school without the employment of teacher librarians. The results of the independent t test analysis indicated significance among the variance of the various dimensions.

	School with teacher librarians		School without teacher librarians		T value	Significant test (P)	df
	Mean	Standard deviation	Mean	Standard deviation			
The school library plans library-utilizing education for the various grade levels	<b>4.57</b>	0.61	<b>3.40</b>	1.14	18.11	0.00***	684
The school library instructs library education courses for the various grade levels	4.49	0.66	3.28	1.07	18.79	0.00***	621
The school library provides reading recommendation for the	3.82	0.97	2.96	1.11	9.81	0.00***	739

	School with teacher librarians		School without teacher librarians		T value	Significant test (P)	df
	Mean	Standard deviation	Mean	Standard deviation			
various subjects for all the grade levels							
The school library provides course-related resource websites for the various subjects	3.67	1.00	2.85	1.07	9.65	0.00***	739
Total	4.14	0.63	3.12	0.94	17.04	0.00***	576

Table 4-2 The variance analysis on library education between schools that employ teacher librarians and those that provide no such position

\*\*\*P<0.001

The variance analysis on developing library collection to support teaching and learning, and to promote reading activities between schools that employ teacher librarians and those that provide no such position

The third level of the job responsibilities of teacher librarians is to develop library collection to support teaching and learning, and to promote reading activities, thereby allowing the library resource, teaching and learning to become closely connected.

Table 4-3 indicated that on “the use of reading strategies to conduct reading instruction curriculum”, “the cooperation of the demands of the teachers from various subjects to purchase relevant library collection”, “the integration of curriculum of the various subjects to organize relevant reading promotion activities”, and “the integration of curriculum from various subjects to provide relevant learning recommendations or homework”, the schools that employed teacher librarians showed greater quality compared to the schools without such positions. The independent t test analysis indicated that on developing library collection to support teaching and learning and promoting reading activities, the differences between the two types of schools reached significance.

	School with teacher librarians		School without teacher librarians		T value	Significant test (P)	df
	Mean	Standard deviation	Mean	Standard deviation			
The school library uses reading strategies to conduct reading instruction curriculum	<b>4.33</b>	0.78	3.20	1.03	16.24	0.00***	511



The school library cooperates with the demands of the teachers from various subjects to purchase relevant library collection	4.20	0.82	<b>3.45</b>	1.06	10.33	0.00***	504
The school library integrates the curriculum of the various subjects to organize relevant reading promotion activities	3.95	0.89	3.08	1.08	11.36	0.00***	472
The school library integrates the curriculum from various subjects to provide relevant learning recommendations or homework	3.69	1.01	2.88	1.13	9.50	0.00***	437
Total	4.04	0.69	3.15	0.93	14.38	0.00***	524

Table 4-3 The variance analysis on developing library collection to support teaching and learning, and to promote reading activities between schools that employ teacher librarians and those that provide no such position

\*\*\*P<0.001

The variance analysis on teacher librarian's (or the person in charge of the library) conduction of collaborative teaching and participation in planning school curriculum between schools that employ teacher librarians and those that provide no such position. If the teacher librarians or the person in charge of the library can coordinate with the teachers of the various academic fields to conduct team teaching and participate in school curriculum planning, the role of the library will be more incorporated with the teaching and learning of the school.

Table 4-4 indicated on "the participation of planning and designing of school curriculum", "the establishment of the group for developing teachers' reading expertise", "the team teaching with teachers of the various academic subjects", and "the design of teaching materials that nurture students' information literacy", the schools that employed teacher librarians showed greater quality compared to the schools without such positions.

Compared to the tasks of the other 3 dimensions, the mean of teacher librarians' participation in team teaching was significantly lower; this dimension requires further development.

The independent sample t test analysis indicated that on team teaching and the participation of school curriculum planning, significant difference were found between the schools that employ teacher librarians and the schools without this position.

	School with teacher librarians	School without teacher librarians	T value	Significant test (P)	df
	Standard Mean	Standard Mean			
	deviation	deviation			

The school library participates in planning and design of the school curriculum	4.02	0.92	<b>2.89</b>	1.13	14.15	0.00***	478
The school library plans and establishes the group for developing teachers' reading expertise	<b>4.20</b>	0.94	2.86	1.20	16.24	0.00***	499
The school library conducts team teaching with teachers of various subjects	3.81	0.84	2.68	1.10	15.06	0.00***	507
The school library designs materials that nurture students' information literacy	3.95	0.85	2.69	1.09	16.79	0.00***	497
<b>Total</b>	<b>4.00</b>	<b>0.69</b>	<b>2.78</b>	<b>1.00</b>	<b>18.91</b>	<b>0.00***</b>	<b>556</b>

Table 4-4 The variance analysis on collaborative teaching and the participation in school curriculum planning between schools that employ teacher librarians and those that provide no such position

\*\*\*P<0.001

The variance analysis on the integration of teaching resources of the various academic fields and the planning of school-wide and comprehensive reading project between schools that employ teacher librarians and those that provide no such position

Reading is not an activity that confines to the students and teachers; the role of the parents is crucial. Thus, the greatest challenge for promoting reading by the school is to integrate the relevant resource and academic subjects and to incorporate the comprehensive reading planning of the parents and the community.

Table 4-5 indicated that on “the integration of public libraries and civil resource to jointly organize reading activities”, “the invitation of the entire faculty and staff to jointly participate in reading activities”, “the invitation of parents of the entire student body to jointly participate in reading activities”, “the coordination of school-wide activities such as school anniversary to plan relevant reading activities”, and “the integration of teaching resource and related technology of the various academic fields to plan school-wide reading projects”, the mean of the schools that employed teacher librarians was higher than the school without such positions. The independent sample t test analysis indicated that on “the integration of teaching resources of various academic fields and the planning of school-wide and comprehensive reading projects”, the difference between the two types of schools was significant.

	School with teacher librarians		School without teacher librarians		T value	Significant test (P)	df
	Mean	Standard deviation	Mean	Standard deviation			
The school library integrates public libraries and civil resources to jointly organize reading activities	4.15	0.95	3.04	1.26	13.14	0.00***	516
The school library invites the entire faculty and staff to jointly participate in reading activities	<b>4.51</b>	0.63	<b>3.45</b>	1.13	16.20	0.00***	670
The school library invites the parents of the entire student body to jointly participate in reading activities	4.28	0.78	3.13	1.14	15.75	0.00***	567
The school library coordinates with school-wide activities such as school anniversary to plan relevant reading activities	4.39	0.77	3.20	1.18	16.16	0.00***	589
The school library integrates the teaching resources and relevant technology of the various academic subjects to plan school-wide reading projects	4.09	0.86	2.99	1.14	14.34	0.00***	518
<b>Total</b>	<b>4.28</b>	<b>0.61</b>	<b>3.16</b>	<b>0.99</b>	<b>18.76</b>	<b>0.00***</b>	<b>621</b>

Table 4-5. The variance analysis on the integration of teaching resources of the various academic fields and the planning of school-wide and comprehensive reading project between schools that employ teacher librarians and those that provide no such position

\*\*\*P<0.001

The variance analysis on the reading attitudes and behaviors between teacher librarians and the personnel who are not

Reading is a habit. The person who promotes reading must possess passion for reading and a positive attitude toward reading. Table 4-6 indicated that for teacher librarians and the personnel who do not possess this title, they are aware that reading is a valuable activity and a habit that is beneficial to lifelong learning. In addition, they were able to feel the joy of reading and were willing to share with their families and friends. However, the mean of

reading during leisure time and carrying books while traveling, and sharing their reading with their families are higher for the teacher librarians compared to the individual who do not carry this title.

The independent sample t test analysis indicated that on reading attitudes and behaviors, the two groups were significantly different.

	School with teacher librarians		School without teacher librarians		T value	Significant test (P)	df
	Mean	Standard deviation	Mean	Standard deviation			
I can feel entertained while reading	4.89	0.33	4.40	0.66	13.33	0.00***	705
I will read for the purpose of leisure entertainment	4.73	0.59	4.31	0.77	8.13	0.00***	504
I believe that reading is a valuable activity	<b>4.93</b>	0.25	<b>4.54</b>	0.60	12.67	0.00***	738
I enjoy the fulfillment after reading	4.87	0.36	4.44	0.66	11.52	0.00***	678
I believe that reading is beneficial to the habit and growth of lifelong learning	4.92	0.27	<b>4.54</b>	0.61	11.85	0.00***	731
When I have time, I usually read	4.73	0.51	4.22	0.79	10.52	0.00***	592
When I travel, I will carry books and read	4.51	0.75	3.80	1.02	10.46	0.00***	529
I would be happy to purchase my own reading material	4.70	0.54	4.13	0.86	10.67	0.00***	609
When I find interesting reading material, I will share it with others	4.77	0.47	4.26	0.81	10.63	0.00***	646
I will read with other family members and friends	4.62	0.61	4.01	0.92	10.65	0.00***	586
Total	4.77	0.34	4.26	0.62	14.12	0.00***	676

Table 4-6. The variance analysis on the reading attitudes and behaviors between teacher librarians and the personnel who are not

\*\*\*P<0.001

The variance analysis on reading attitudes of the entire faculty and staff, students, and parents between schools that employ teacher librarians and those that provide no such position

The attitudes of the entire faculty and staff, the reading habit of parents, and the reading interaction between parent and child all provides positive influence on a child's reading attitude and behavior. During their participation in relevant reading activities, the teacher and parent not only can share their learning experience, they can create a model that helps students to engage and become highly involved in reading, and create a reading atmosphere for the students. Thus, the reading attitudes and behaviors of the faculty and staff and parents can influence the reading attitudes and behaviors of the students.

This major issue is to investigate the reading attitudes and behaviors of the faculty, staff, parents, and students. However, the questionnaire did not directly inquire the faculty, staff, parents, and students. The teacher librarians or the personnel in charge of the library were asked to answer the questions based on their understanding of the situations.

Table 4-7 indicated that on the attitudes of faculty, staff, parents, and students, the parents of all the schools (regardless of having teacher librarians or not) did not oppose their children in reading extracurricular books. All the students enjoyed participate in reading activities organized by the libraries. The faculty and staff greatly support the library in reading promotion projects. The parents all supported their children in participating in the reading activities organized by the library. The findings of this study indicate that the parents, faculty and staff, and students shared positive attitude toward reading and reading activities.

The independent sample t test was adopted to analyze the difference between the two types of school on the reading attitudes displayed by the faculty, staff, students, and parents. The results indicated significant difference in each dimension. The school that employed teacher librarians showed higher support from faculty, staff, students, and parents compared to the schools without such position.

	School with teacher librarians		School without teacher librarians		T value	Significant test (P)	df
	Mean	Standard deviation	Mean	Standard deviation			
The faculty and staff are supportive of the reading promotion projects organized by the library	4.35	0.72	3.75	0.88	9.61	0.00***	472
The faculty and staff enjoy reading and are willing to share their joy in reading	4.07	0.82	3.57	0.92	7.20	0.00***	437
The students enjoy participating in reading activities organized by the library	4.44	0.61	3.76	0.90	11.93	0.00***	571
The students enjoy reading and are willing to share their joy in reading	4.22	0.68	3.63	0.94	9.51	0.00***	533

The students can motivate themselves spontaneously to reading extracurricular books	4.06	0.77	3.43	0.92	9.55	0.00***	463
The parents support their children to participate in the reading activities organized by the library	4.36	0.75	3.73	0.92	9.62	0.00***	477
The parents do not oppose their children in reading extracurricular books	<b>4.55</b>	0.59	<b>4.03</b>	0.82	8.54	0.00***	739
The parents will read with their children	3.77	0.86	3.04	1.03	9.18	0.00***	739
Total	4.23	0.57	3.62	0.76	11.97	0.00***	520

Table 4-7 The variance analysis on reading attitudes of the entire faculty and staff, students, and parents between schools that employ teacher librarians and those that provide no such position

\*\*\*P<0.001

## Conclusion

- 1) After the analysis of this study, the following conclusions were found:
- 2) Significant difference was found in fundamental operation and management of the library; the schools that employed teacher librarians possess higher qualities in this area compared to the school without such positions.
- 3) Significant difference was found in the library-utilizing education; the schools that employed teacher librarians possess higher qualities in this area compared to the school without such positions.
- 4) Significant difference was found in the development of library collection to support teaching and promoting reading activities; the schools that employed teacher librarians possess higher qualities in this area compared to the school without such positions.
- 5) Significant difference was found in team teaching and the participation in school curriculum planning conducted by the teacher librarians; the schools that employed teacher librarians possess higher qualities in this area compared to the school without such positions.
- 6) Significant difference was found in the integration of teaching resources of the various academic fields in planning school-wide and comprehensive reading projects; the schools that employed teacher librarians possess higher qualities in this area compared to the school without such positions.
- 7) Significant difference was found in the reading attitudes and behaviors between the teacher librarians and the personnel who did not carry this title; the schools that employed teacher librarians possess higher qualities in this area compared to the school without such positions.
- 8) Significant difference was found in the reading attitudes of faculty, staff, students, and parents; the schools that employed teacher librarians possess higher qualities in this area compared to the school without such positions.

- 9) The job responsibilities of a teacher librarian including library operation management, library education, supporting teaching and learning, collaborative teaching, and comprehensive reading planning and promotion indicated that the position is a professional work that requires professional training. Although the current teacher librarians in Taiwan do not require a full-time commitment and obtained short-term training, this study indicated the excellent performance achieved by the teacher librarians. The schools that employed teacher librarians showed higher qualities on reading environment, reading education, reading support, and reading attitude compared to the schools without this position. The finding supported the significant value of investment by the government in supporting professional reading personnel.

## References

- AASL, & AECT. (1988). *Information Power : Guidelines for School Library Media Programs*. Chicago: American Library Association.
- Curriculum Development Council (2002). *Basic Education and Curriculum Guide: Building on the Strength (1<sup>st</sup> grade to 9<sup>th</sup> grade)*. Hong Kong: Hong Kong Education Bureau.
- Dow, Mirah J., Lakin, Jacqueline McMahon, & Court, Stephen C. (2012). School Librarian Staffing Levels and Student Achievement as Represented in 2006–2009 Kansas Annual Yearly Progress Data. *SCHOOL LIBRARY RESEARCH*, 15.
- Loertscher, David V, Ho, May Lein, & Bowie, Melvin M. (1987). " EXEMPLARY ELEMENTARY SCHOOLS" AND THEIR LIBRARY MEDIA CENTERS. *School Library Media Quarterly*, 38-40.
- Lu, Jui-Lien, & Lin, Chi-Hui (2008). A Delphi Study of Elementary Library Science Teachers' Information Management Competence. *Journal of National Taiwan Normal University*,53(2),83-110.
- Morrison, T. G., Jacobs, J. S., & Swinyard, W. (1999). Do teachers who read personally use recommended literacy practices in their classrooms? . *Reading Reserch and Instruction*, 38(2), 81-100.
- Wang, Ling Yan (2009). A study of relationship between the kindergarten classroom reading environments, teacher reading attitudes and young children reading attitudes (Unpublished master's thesis). National Chengchi University, Taiwan.