A Preliminary Research Study on the Library Collections and Services of Public Primary and Middle Schools in Guangzhou, China / Une recherche préliminaire sur les collections documentaires et les services dans les bibliothèques des écoles primaires et secondaires de Guangzhou, en Chine

Wenyan Zhang, Hui Wang, Mengmeng Ji, Sheng Xu*

Canadian Journal of Information and Library Science, Volume 40, Number 3, September / septembre 2016, pp. 254-285 (Article)

Published by University of Toronto Press

A Preliminary Research Study on the Library Collections and Services of Public Primary and Middle Schools in Guangzhou, China

Une recherche préliminaire sur les collections documentaires et les services dans les bibliothèques des écoles primaires et secondaires de Guangzhou, en Chine

Wenyan Zhang
Business College, Department of Information Resource Management, Nankai University

Hui Wang
Central Iron and Steel Research Institute of China

Mengmeng Ji
Inner Mongolia Medical University

Sheng Xu*
Academy of Psychology and Behavior, Tianjin Normal University mondlicht@126.com

Abstract: Primary and middle school libraries are able to play an important part in the development of librarianship in various countries. They help to develop reading and information skills and lay the foundation for a future information literate citizenry. While China has achieved much progress, its school libraries have not been studied from the perspective of school characteristics. This study used a survey approach to examine the collections and services of school libraries in the city of Guangzhou, China. Based on the responses to 133 questions, it was found that the collections and services varied significantly according to the types of schools, the locations, the boarding conditions, and the schools' running subjects with the first three factors contributing more significantly to the variations. It was found that, generally, primary schools and non-boarding schools have the weakest collections and services. This study, although based on a small sample, shows that Chinese school libraries are in need of much development. It is hoped that the findings will lead Chinese scholars, policy-makers, and administrators to put more effort and resources into school library development.

Keywords: primary and middle school libraries, school library services, school library collections, Guangzhou, China

* Corresponding author

Résumé : Dans divers pays, les bibliothèques des écoles primaires et du premier cycle du secondaire sont en mesure de jouer un rôle important dans le développement de la bibliothéconomie. Elles aident à développer la lecture et les compétences informationnelles et elles permettent de jeter les bases d'une citoyenneté de l'avenir alphabétisée. La Chine a fait beaucoup de progrès, mais les bibliothèques scolaires n'ont pas été étudiées du point de vue des caractéristiques de l'école. Cette étude a utilisé une enquête comme méthode pour examiner les collections et les services des bibliothèques scolaires de la ville de Guangzhou, en Chine. Sur la base des réponses à cent-trente-trois questionnaires, il a été constaté que les collections et les services varient considérablement selon les types d'écoles, les emplacements, les conditions d'admission, et les sujets de fonctionnement des écoles, les trois premiers facteurs contribuant de manière plus significative aux variations. Il a été constaté qu'en général, les écoles primaires et les externats ont les collections et les services les plus faibles. Cette étude, bien que basée sur un petit échantillon, montre que les bibliothèques scolaires chinoises ont un grand besoin de développement. Il est à espérer que les résultats conduiront les chercheurs chinois, les décideurs et les administrateurs à investir plus d'efforts et de ressources dans le développement des bibliothèques scolaires.

Mots-clés : bibliothèques d'écoles primaires et secondaires, services de bibliothèques scolaires, collections de bibliothèques scolaires, Guangzhou, Chine

Introduction

As one type of information resource, literature is still the most important source of information. Useful literature is absolute and objective; each document is useful. Saving information resources is the specific basic social function of a library, and it is the root rationale for the social existence and development of the library (Cheng and Pan 2016). One widely accepted theory is that literature (including books) and readers are the most basic and vital factors among the few elements of a library, which comprise less than six elements, and all other factors are generated and expanded from these two elements (Cheng 2000; L. Yu 2003, 81–84).[1] Based on these factors, the present study focuses on the collections and services of primary and middle school libraries (PMSLs or SLs).

From an international perspective, PMSLs are an important part of the development of librarianship in various countries (Cheng and Pan 2016), and they have been recognized and supported by different social circles (including governments, administrators and teachers in basic education, associated social organizations, and the relevant staff in universities and companies, and so on) in developed countries (Smalley and Baxter 2008; Lance, Rodney, and Hamilton-Pennell 2005; Lance, Rodney, and Russell 2007; Michie and Chaney 2009; Clark 2010; People for Education 2011; American Association of School Librarians 2011b, 2012; Williams, Wavell, and Morrison 2013).

With the development of society, the improvements in research on the specific subject of primary and middle school (PMS) librarianship has expanded and consolidated the functions of modern SLs. The widespread regional and

cross-regional studies conducted by governments or other communities in developed countries further provide powerful evidence for the social status and recognition of this area of the profession (Todd and Kuhlthau 2004; Creaser and Maynard 2005, 2006; Lance, Rodney, and Hamilton-Pennell 2005; Library Research Service 2005; Lance, Rodney, and Schwarz 2010; New York Comprehensive Center 2011; American Association of School Librarians 2011a, 2011b, 2012; Lance and Hofschire 2012; Australian School Library Association 2013). The quantity and quality of academic theses and books sketch out many relevant practices as well as thinking and theoretical construction processes. They also reflect the greater concern that developed countries have had on the practices and studies of PMSLs for a long time (Chai 1996; Haar 2005; Achterman 2008; Kaplan 2010; Hill 2012; Dickinson and Repman 2015). This type of regional and cross-regional empirical investigation widely exists not only in developed countries but also in relatively underdeveloped countries such as Iran, Turkey (Önal 2009), India, Pakistan (Shah and Farooq 2009), Uganda, Kenya, Tanzania (Dent 2006; Magara and Batambuze 2009), Togo, and Botswana (Secondary Education in Africa and Africa Region Human Development Department 2008, 71–74, 76, 79–80). A few of the authoritative academic publications from these countries have been widely read; however, there have been few research articles published on school libraries in the People's Republic of China (PRC) that investigate school libraries beyond the regional level.

With respect to the education system in China, the PRC has enforced a nine-year compulsory education system since 1 July 1986 (including all of the grades in primary schools and junior middle schools) for students ranging from the ages of six to seven to fifteen to sixteen. This mandate was established by the Law on Compulsory Education for the People's Republic of China, which was revised and again passed on 29 June 2006. Under this law, many PMSs have been built and operated by the government, rather than by the private sector. These public PMSs are controlled and supervised by different groups (mainly different levels of education departments—for example, provincial, municipal, or county-level government agencies). Schools with the highest grades are generally built for students entering high school, and they help to improve the overall cultural level of the Chinese. The Chinese Ministry of Education, from which the nation's highest educational development efforts originate, has little direct control over PMSs. Some of the provincial education departments as well as almost every city and county (the lowest administrative level of the organization) education departments are in charge of Chinese PMSs.

The general tasks in the higher organizations include evaluating educational quality, deciding which schools students and districts will attend, maintaining and safeguarding compliance with their orders, and so on. Currently, educational fairs, which are related to the vital interests of most people, have become a focus of Chinese society, in addition to domestic and regional economic and social development. In China, one of the major manifestations of education unfairness is the lack of equality among the social classes. This is most evident in the legalization of fees for school choice. With enough money, one can enter

a good school and gain access to quality educational resources, obtaining a broad education and increasing one's opportunities for a career path (Baidu Zhidao 2013; Baidu Baike 2016a, 2016b).[2]

As one type of vital educational resource, library collections, including their staff who have attained at least the basic professional requirement (that is, a bachelor's degree in LIS or equivalent) can play an important role in the development of a student's intelligence, personality, and spirit (Lai and Lin 2010; Qu 2012, 2013a, 2013b; Lv and Zhou 2013). While it is true that local children of similar ages deserve access to a similar amount and quality of information resources, this is not the reality. Thus, this study takes us away from such an ideal scenario and provides a more realistic portrait of PMS education in the PRC. There were more than 1,200 PMSs, within twelve districts, in Guangzhou in 2015, according to the media coverage for primary and secondary education (Liao et al. 2015, A11).[3] This article looks at the Guangzhou Educational (Teaching) Equipment Centre (EEC), which operates under the Guangzhou Bureau of Education (GBE).[4]

Research problem

Generally speaking, Chinese PMSLs have greatly improved after the founding of the PRC, particularly since the Reform and Opening Up (enacted by the third Plenary Session of the eleventh Central Committee of the Chinese Communist Party), which began in December 1978. The Regulation for PMSL Amendment (PMSL Regulation) was issued on 1 May 2013 by the Ministry of Education. The regulation proposed five requirements, including library investment and utilization, the construction of facilities, the construction of management teams, reader requirements, and library collections and management. Currently, the Chinese government has attached importance to, and strengthened, PMSLs to some extent. For instance, one government document, entitled *Opinions on Strengthening the Construction and Application of PMSL in the New Period* was released on 20 May 2015 and notes the following:

> As an important educational condition in servicing educational teaching and educational research, PMSL is vital to realizing educational modernization, important to balanced and reasonable allocation of education resources and is an indispensable key path for the broad masses of students and teachers to access informational resources … As an important national component of a library service system, PMSL has a profound impact on the construction of a "learning society" and "scholarly society," completing a public cultural services system and enriching the spiritual and cultural life of the people. (Chinese Ministry of Education, Culture, and the State Administration of Press, Publication, Radio, Film, and Television in the PRC 2015)

The opinion sets two short-term goals: that all districts with substantial conditions should supplement and rebuild their PMSLs by 2018, according to the school construction standards, and that they should improve their PMSLs where they are substandard (rural PMSs without substantial conditions should at least have book counters and corners).[5] Second, by 2020, most PMSs should have

built libraries according to the regulations of the state. Nevertheless, as a result of the weak foundation in the development of PMSLs, there appears to be a progressively significant gap between developed countries and the PRC. Moreover, in spite of this new development, there is still great disparity between China and the outside world concerning aspects in the development of PMSLs, and the attention given to them (Fan 2012; Hu et al. 2013).

To date, Chinese scholars have undervalued the theoretical construction of PMSLs. Correspondingly, librarianship lacks relevant theoretical guidance, and there are still distinct and detailed problems in school librarianship. These include the lack of sufficient grass-level government funding, a defective assessment system for PMSLs, and a low level of library services utilization (Fan 2012; Hu et al. 2013). Furthermore, there have always been significant disparities between the development of PMSLs, public libraries, and university libraries in China (Hu et al. 2013).

The GBE has conducted similar investigations over the past several years. This data analysis was limited only to descriptive statistical analysis (according to its informed insiders)—that is, the collected data were not been fully researched and made use of. When the analysis was finished, the analytic results of the relevant data were not made publicly available, which caused the development conditions of Guangzhou PMSLs (as well as those in other cities in China) to remain unknown for a long time, both in relation to domestic interest groups and the international professional community. This research primarily introduces the development of Guangzhou PMSLs and provides reliable facts and data for deeper thinking and the possible theoretical contribution to PMS librarianship.

Research objectives and questions

The purpose of this research on PMSLs in Guangzhou is to offer guidance and inspiration for the development of PMSLs in China and other developing countries. This research demonstrates the current situation in the collections and services of SLs in Chinese developed areas by exhibiting and analyzing survey data from the Guangzhou participants. It aims to increase awareness in the international society (in particular, the LIS professional community) of the actual state of PMSLs in the PRC. The study attempts to lay a solid foundation for the development of more valuable international comparative studies and a wider range of academic communication. Finally, it aims to narrow the large gap in academic research and career development.

The research questions were as follows: (1) are the collections and services of SLs in the industrialized areas in China satisfactory for international counterparts in LIS at present[6] and (2) will these collections and services be significantly different in different school types, school subjects, locations, and boarding conditions?

It can be seen from this discussion that the core concepts involve the collections and services of PMSLs, but these collections and/or services are comparatively abstract and cannot be measured directly. Therefore, we selected and

analyzed four aspects (more detailed information can be found in the Results and Appendix sections) to illustrate the conditions of the collections and services of PMSLs in the PRC as follows: book collection and its processing, semantic structure of the collections, specification and accuracy of bibliographic data, management and service conditions (for example, opening hours, library cards and their utilization, and readers' and administrators' satisfaction with resources).

Literature review

Although, to date, there have been few academic and applied papers about the current situation and few scholars that have conducted field surveys on the situation of SLs in China (in particular, surveys conducted in more than one school), and nearly none of them have constructed logical and reliable theoretical systems with solid arguments (F. Chen 2004; B. Yu 2013). In this article, the authors provide a brief literature review of research studies on Chinese PMSL's collections and services to provide reliable research references and wider theoretical visions for future research. Although the studies in the following literature may have only limited relevance to this study, more relevant research has not yet appeared, so we believe the research review could ensure the integrity of the study findings and contribute to the development of the research topic, perhaps even to library science as a whole.

The research conducted by scholars outside mainland China, which relate to the situation in the PRC, and cross-regional studies include Ruilian Lv and Qian Zhou (2013), who, in investigating Taiwanese PMSLs, note that abundant library collections and sufficient information technology equipment were important factors for improving students' learning and reading performance and were the cornerstone of promoting reading education. In addition, Geoffrey Liu and Wuhong Zhang (2008) conducted a survey via email in China, in which they gathered collection and circulation statistics from twenty-nine schools where the Hua Xia school library automation system had been in operation since 2000. They found that health-related publications within the library collections accounted for only 1.0 percent of the total. The researchers assert that this number is too small to provide meaningful support for users, and they noted that the types and themes of the sources were rather poor, yet half of the school librarians and most health teachers surveyed considered their health collections were generally adequate on specific topics. Interestingly, students and teachers' use of health-related books was extremely low.

Other research by Patrick Lo and colleagues (2014a, 2014b) indicates that circulation rates have been significantly correlated with reading promotion amounts and are not necessarily related to the collection size. Although both Shanghai and Japan had the highest percentage of schools with the largest collections of printed books, librarians in these two regions were very inactive in promoting and conducting reading programs, and there was a serious lack of library usage traditions within the school communities. Lo and his colleagues further examined and compared the different roles and expectations of school librarians as information literacy instructors within Hong Kong, Japan, Shanghai, South

Korea, and Taipei. They found that school librarians in Taipei (also in South Korea) outperformed the other regions in terms of the extent and scope of duties that these school librarians undertook as information literacy instructors. These comparative studies could highlight the strengths and deficiencies of the target education systems by identifying both the valuable features and defects in participating regions. However, since the authors of these studies did not attempt to explore the internal mechanisms of these phenomena and since the reports lacked generalizable research conclusions, it does appear that these studies lack depth and theoretical innovation.

To improve its services, China has recruited specialized staff to investigate the reading needs of primary, secondary, and high school students (Su 2003; Z. Zhang 2004; Zhou 2006; Y. Chen 2007; Zhou and Xiong 2009; J. Zhou 2005; Wei et al. 2013; Zheng 2015). The studies were all investigated based on one or two school or children's libraries, and provided very highly similar results and conclusions, mainly that the students were generally not satisfied with the present collections and their outreach services and that they considered that the school libraries generally did not have much influence on their individual study and life (with many differences reported among schools). (J. Zhou 2005; Z. Zhang 2004; Q. Zhou 2006; Lai and Lin 2010; B. Yu 2012; Wei et al. 2013; Qu 2012, 2013a, 2013b) While middle school students liked literary works best, primary school students were in favour of comics and joke books, in particular. Binbin Yu (2012) investigated a middle school library in Suzhou and found middle school students' utilization of libraries had no significant influence on their academic performance within the background of examination-oriented education. However, some sub-services (such as facilitating a student's ability to obtain books and so on) did have a significant influence on their scores. The researcher employed quantitative and qualitative empirical methods to explore the influence of library services on students' academic performance (including the teachers' perception of the functions of middle school libraries); however, the research was based on a rather small sample of one middle school in southern China, and its representativeness and legal premise of analysis (non-normal distribution) were questionable. Jiafu Qu (2012, 2013a, 2013b) employed a descriptive analysis method and explored the correlation between the number of books that senior high school students borrowed, their attitudes toward libraries, and their scores in the college entrance examination, finding an apparent positive correlation between the students' academic scores and the numbers of books they read in general. Zhipeng Wei and colleagues (2013) conducted a case study using two schools in western China that were financed by Evergreen Education Foundation. Based on the current state of the collections and the services of high schools, they hoped to promote reading to the whole community, including parents and teachers.

The other five studies collected data from districts (Northern of Jiangsu Province, Maoming districts in Guangdong Province) or cities (Tianjin; Shanghai; Changsha and Yongzhou; Changzhou) and found the present school libraries had inadequate and non-relevant collections (Zhou and Xiong 2009; Zheng

2015; Lu 2013; B. Chen 2007; Jiang 2008). Yanmei Chen (2007) also reported other problems, including the fact that there were very large intercollegiate differences in book-purchasing budgets and a serious lack of service awareness. Rong Jiang (2008) used quantitative methods to study students in eight schools in Changsha and Yongzhou and found the students possessed good reading skills. Teachers and parents paid more attention to students' extracurricular reading than they had in the past, and most of them gave students guidance and support. Yuan Su (2003) collected data from six primary schools in Changzhou City and the rural regions using questionnaires, finding that the extracurricular reading of primary school students had features typical of super-regions and super-families as well as being typical of the region and other families. The former may be affected by the mainstream values of the community, which include an emphasis on extracurricular reading, with the hope of improving the ability to read and write. To explain the differences, the focus of attention and analyses of this study sought to determine whether the students were from rural regions and what the parents' different occupations (family situations) were. It was found that the collections of rural school libraries were extremely insufficient compared to those in the cities. Moreover, in the city of Changzhou, the students from provincial experimental primary schools were found to enjoy reading more than ordinary primary school students and that the urban ordinary primary school students' utility and purposiveness of extracurricular reading was stronger than the provincial experimental primary school students.

Most of the relevant research has appeared over the past twelve to thirteen years, the most relevant studies being within the last five to eight years. The increase in higher-level research studies shows that the Chinese professional community in LIS has had a slow upward trend in the degree of concern and investment and is not being influenced by the media. This may be due to the great necessity of highlighting the considerable benefits of resource investment in PMSLs against the background of increasingly fierce competition for resources. Overall, research studies on PMS students' reading conditions are still deficient, with the general scenario not being clearly seen or depicted.

Methodology

The research team conducted a questionnaire survey on 138 PMS leaders or library managers in Guangzhou under the support of the Guangzhou's EEC from April to May 2015. In addition, a research report was conducted using screening, sorting, statistical analysis, and logical thinking. This research article comprises a deeper consideration of the previous report mentioned above and was concluded by summarizing similar research conclusions.

Research tools

The major research tool was a questionnaire designed by the research team without standard processing. Methodological experts reviewed the questionnaire, providing advice, and, as a result, it was modified many times.[7] The Questionnaire on the Construction of PMSL in Guangzhou was eight pages long and

consisted of an adaptation of a Survey on the Construction of PMSL in Guangzhou, which was written by the GBE and is an important tool for managing and monitoring the efficiency of PMSLs. The GBE had conducted several studies on the basic conditions of PMSLs in grassroots units based on this survey. Moreover, this survey was written and revised according to relevant requirements of the Regulations on the Specification of PMSL (revised version), which were implemented by the Ministry of Education on 1 May 2003. Except for some basic information about interviewed schools that was added, the questions in the questionnaire were totally consistent with these regulations. Therefore, the questionnaire under study can be regarded as the epitome of the requirements presented by educational administrative departments on current PMSL conditions in China. The questionnaire included an introduction, questions on the basic conditions of the schools, library collections, facility construction, management team construction, library management, and readers' work. Overall, the questionnaire (which is included in the Appendix at the end of this article) is a concrete reflection of the basic requirements for PMSLs under the education administration of the PRC.

This research only used, analyzed, and reported on data and questions that were relevant to the collections and services of PMSLs; these data were extracted from sections 1–2 and 5–7 of the questionnaire. Other academic issues that arose from the questionnaire findings included whether the resource investments of PMSLs are sufficient in developed areas in China, whether investments in PMSLs in Chinese developed areas vary significantly due to different attributes (for example, school types, school areas, and so on) and whether different types of PMSLs have progressed evenly in developed areas.

Sampling

There are more than 1,200 schools in Guangzhou, out of which we selected 138 PMSs using a stratified sampling technique. First, we identified the qualities of PMSs from different regions according to the actual percentages of the schools in each region. Furthermore, in each region, we determined various types of schools based on the proportion and total number of different school types in each district. Subsequently, the schools were arranged according to their names in alphabetical sequence using simplified Chinese and were numbered respectively. A random number generation table was used to identify the selected schools in the lists from all of the schools with a unique serial number of a particular type for one specific region. Due to the research limitations and the difficulty in execution, the selected schools and their percentages were adjusted in various aspects in the sampling investigation. This is evident from some objective factors and reflects how current Chinese society is still fragmented, relatively closed, and unproductive.

The questionnaires were checked several times. Questionnaires containing several mistakes in inputting and completion (for example, if the input values were beyond the scope of the topic, there were sequence errors, and/or data loss) were eliminated. Questionnaires containing more than twelve unanswered

Table 1: Basic conditions of the participating schools

Areas *n* (%)											
Yuexiu	Haizhu	Liwan	Tianhe	Huangpu	Panyu	Baiyun	Huadu	Nansha	Luogang	Conghua	Zengcheng
7 (5.3)	25 (18.8)	16 (12)	1 (0.8)	4 (3)	25 (18.8)	27 (20.3)	7 (5.3)	5 (3.8)	2 (1.5)	9 (6.8)	2 (1.5)

School running subjects (competent organization)			
Department of Municipal Education	Department of County Education	Other departments in country	Non-governmental school
25 (18.8)	77 (57.9)	1 (0.8)	26 (19.5)

School types					
Combined middle school	Primary school	Junior middle school	Senior high school	Nine-Year school (9S)	Twelve-year school (12S)
9 (6.8)	57 (42.9)	26 (19.5)	23 (17.3)	15 (11.3)	2 (1.5)

Students' boarding conditions		
All students boarding	Some students boarding	No one boarding
6 (4.5)	30 (22.6)	94 (70.7)

Notes: n stands for number; % stands for percentage.
The sums of participating schools, which are calculated from four perspectives, are all lower than 133; which is because even among the 133 valid questionnaires, the data provided was mostly incomplete. The uncertainties in the questionnaires led to alack of the schools interviewed in all of the specific provisions.

questions or answers showing a significant inconsistency, meaningless answers (for example, those containing the same answers for various questions or some other obvious regularity), were all considered to be invalid, which left a total of 133 valid questionnaires out of the 138 collected (96.3 percent). The basic situations of the valid questionnaires can be seen in Table 1. The research team then used IBM SPSS 22 (in Chinese) to generate descriptive statistics, a correlation analysis, a hierarchical clustering analysis, a chi-square analysis of different school characteristics, and a single/multi factor ANOVA and contingency table analysis of the PMSLs' collections and services.

Results

Book collection and its processing in libraries under survey

According to the statistics, the libraries under survey held an overall collection of approximately 46,266 books (including print and electronic books; serials and multi-volume books were counted as one book), of which approximately 24,991 were printed books. In 2014, the number of newly purchased books reached approximately 2,851 in total, and each school could provide approximately fifty-one books for each student. The average gross number of electronic books per library reached 2,289,000. With regard to the acquisition frequency (times/per year) for each library, there were 107 valid samples with a minimum of zero, a maximum of thirty and a mean value of approximately two times each year per library. The data indicate that SLs in China generally possess a small collection reserve. Limited commitment to book purchases seems to be another large problem. What is worse, some libraries have no funds for new books and never purchase books (55.3 percent of the participating libraries did not have any book purchasing funds in 2013); and some librarians rejected the opportunity to procure items even if they obtained a certain amount of funding. However, the discrete mean value level was high for purchasing frequency among those libraries with measures of book acquisition.

The thematic structure of the book collection in SLs

The thematic structure of book collections appears to be universally imbalanced for book collections in SLs in Guangzhou. As illustrated in Table 2, there were limited collections in the categories of philosophy, natural science, and comprehensive books. Table 2 shows the high discrete degree with respect to the types of natural science and comprehensive books, manifesting in a great discrepancy between the procurement policies of information resources and the motivations of schools with disparate properties. The data signify that the collection development in SLs, to a great extent, can be affected by the schools' daily teaching schemes and actual demand for management. Indeed, social science books appear to be the most read, thus providing knowledge, entertainment, and education for students in their spare time. Moreover, student groups generally found interest in reading, or were partially inclined to read, social science books at SLs currently in mainland China as well as in Hong Kong, Macao, and Taiwan

Table 2: The total approximate number of book numbers (excluding copies) and their percentages in school library collections

n (%)	Mean	Minimum	Maximum
The book numbers (excluding copies) in Marxism-Leninism and their percentages in the total collections	318 (1.51)	0 (0)	4,178 (15)
The book numbers (excluding copies) in psychology and their percentages in the total collections	1,139 (4.15)	0 (0)	4,608 (24)
The book numbers (excluding copies) in social science and their percentages in the total collections	14,179 (30.22)	0 (0)	91,210 (86.59)
The book numbers (excluding copies) in physical science and their percentages in the total collections	3,095 (9.9)	0 (0)	22,148 (42.8)
The book numbers (excluding copies) of general works and their percentages in the total collections	1,731 (9.91)	0 (0)	12,367 (97.4)

(B. Liu 2004; Lai and Lin 2010;Hu 2011; Lu 2013; Lv and Zhou 2013). This statistic indicates that the requests of numerous teachers, students, and school administrators probably counts for much in explaining the reason why SLs attach the greatest importance to social science books among the five categories.

Specification and accuracy of bibliographic data in SLs

"Bibliographic data is the type of information that reveals the literature resources of a library and the type of information that can be recognized and handled by computers" (Hui 2008). Bibliographic data can be treated as one key product provided by libraries and made use of by readers; they are directly related to the access to, and queries regarding, the collections and are a vital service provided by libraries. The accuracy of bibliographic data comprise the degree of coincidence between catalogue data and information resources as well as relevant specification. Specification and accuracy of bibliographic data are essential for SLs to run smoothly. Earlier studies have shown that bibliographic data lay the foundation for realizing library modernization and networks and form the core for constructing the entire literature service system in libraries (in the present study, the accuracy of bibliographic data were judged by the subjective opinions and the experiences of the respondents) (L. Yu 2003, 37–41; Y. Chen 2007; Duan 2008, 2–7, 13). Only by using the unified catalogue language to describe documents precisely and objectively can bibliographic data stop influencing how readers use document resources (Sun 2006). Currently, there are mistakes in how bibliographic data are provided by domestic booksellers (Hui 2008; Tang 2014), so booksellers must rely for the most part on librarians' work to revise and exclude mistakes. Studies indicate that a high quality in processing books has much to do with talented librarians (Sun 2006; Hui 2008).

On referring to the specification of bibliographic data in China, the first thing that comes to mind is the Chinese Library Classification (CLC) system, a large-scale general classification system compiled and published by an authoritative editorial committee. To meet the demands of different information services and documents, the CLC has been updated approximately every ten years since 1975 and has been equipped with abridged editions and periodicals, making it the most popular classification system used by libraries (Ma, Hou, and Xue 2009). This research shows that most PMSLs take advantage of the CLC for classification and cataloguing, which is the inherent demand for library work. Therefore, the research in this study has focused on two aspects in the examination of the specification and accuracy of bibliographic data, the available accuracy of bibliographic data and whether the collections abide by the CLC.

Specification of bibliographic data

We indicated schools as an independent variable and applied a contingency table analysis to see whether library collections comply with the CLC. The results are displayed in Table 3. More apparently, the two types with the lowest grades (PS and 9S) also had the lowest percentages of affirmative answers; the largest (possessing the most grades—12S) and the schools with the highest grades (SHSs) obtained full scores. This indicates that the scales and upper grades of PMSs are vital for PMSLs' development, while a chi-square test denotes a markedly significant difference among schools concerning the percentage of the collections' accordance with the CLC [$\chi^2(1) = 21.5$, $p < 0.001$]. A library's professional level can be judged from the classification criterion; the statistics show that the general condition and professional skills of SLs' bibliographic data were profoundly affected by the type of school.

Taking boarding condition as an independent variable and the compliance of library collections with the CLC as a dependent variable and applying a contingency table analysis (Table 4), we found that the collection conditions of

Table 3: Cross table on school types (whether the classification of PMSL collections was the CLC)

n (%)	Yes	No	Total
Combined middle school	8 (88.9)	1 (11.1)	9 (100)
Primary school	22 (43.1)	29 (56.9)	51 (100)
Junior middle school	24 (96)	1 (4)	25 (100)
Senior high school	23 (100)	0 (0)	23 (100)
9S	8 (72.7)	3 (27.3)	11 (100)
12S	1 (100)	0 (0)	1 (100)

Table 4: Cross table on boarding conditions of the students (whether the classification of PMSL collections was the CLC)

n (%)	Yes	No	Total
All boarding	5 (100)	0 (0)	5 (100)
Some students boarding	30 (100)	0 (0)	30 (100)
No boarding	50 (59.5)	34 (40.5)	84 (100)

Table 5: Cross table on areas (whether the classification of PMSL collections was the CLC)

n (%)	Yes	No	Total
Yuexiu	6 (85.7)	1 (14.3)	7 (100)
Haizhu	22 (91.7)	2 (8.3)	24 (100)
Liwan	11 (91.7)	1 (8.3)	12 (100)
Tianhe	0 (0)	1 (100)	1 (100)
Huangpu	1 (25)	3 (75)	4 (100)
Panyu	15 (71.4)	6 (28.6)	21 (100)
Baiyun	16 (66.7)	8 (33.3)	24 (100)
Huadu	6 (85.7)	1 (14.3)	7 (100)
Nansha	1 (20)	4 (80)	5 (100)
Luogang	2 (100)	0 (0)	2 (100)
Conghua	4 (44.4)	5 (55.6)	9 (100)
Zengcheng	1 (50)	1 (50)	2 (100)

schools with student boarding were much better than the other schools, which probably means that the classification styles of the collections were largely decided by the actual management needs of the schools. A chi-square test that delivered the difference among schools of different boarding conditions was greatly significant with respect to the ratios of different classification methods [$\chi^2(1) = 21.5,\ p < 0.001$]. Thus, it can be inferred that students' ways of life greatly influence the specification of bibliographic data, even the overall work in SLs.

Taking location as an independent variable and the compliance of library collections with the CLC as a dependent variable and applying a contingency table analysis (Table 5), we found apparent differences in the ratios among the schools from different districts of Guangzhou, implying the largely different work levels and qualities. Taking the school location as an independent variable, we employed a chi-square test to see whether library collections comply with the CLC. In addition, location proved to be an influential factor [$\chi^2(1) = 21.5$, $p < 0.001$]. Specifically, the Education Bureau in different districts of Guangzhou, together with individual educational conditions, exerts a certain impact on the specification of bibliographic data in SLs.

Accuracy of bibliographic data

According to the experience of the research team, the more accurate the bibliographic data are, the more consistent they are with the integrity of library collections(that is, the bibliographic data correspond to the document's integrity). Commonly, librarians or outsourcing company staff must double-check their work to obtain high-quality bibliographic data. In the designed questionnaire, there were five answer choices about the accuracy of bibliographic data in SLs, with a mean value of 2.12 (SD = 0.84), illustrating that SLs possess relatively accurate bibliographic data, and readers can obtain rather effective support in finding literature from collections. Taking the location of a school as an independent variable and the accuracy of library collections as a dependent

Table 6: Cross table on areas (the degree of accuracy of PMSL collections' bibliographical data)

n (%)	Almost all the data correct	Most of the data correct	Unidentified	A handful of the data correct	Barely any of the data correct	Total
Yuexiu	2 (28.6)	4 (57.1)	1 (14.3)	0 (0)	0 (0)	7 (100)
Haizhu	4 (16.7)	17 (70.8)	3 (12.5)	0 (0)	0 (0)	24 (100)
Liwan	3 (23.1)	9 (69.2)	1 (7.7)	0 (0)	0 (0)	13 (100)
Tianhe	0 (0)	0 (0)	0 (0)	1 (100)	0 (0)	1 (100)
Huangpu	0 (0)	1 (50)	0 (0)	0 (0)	1 (50)	2 (100)
Panyu	2 (10.5)	11 (57.9)	3 (15.8)	2 (10.5)	1 (5.3)	19 (100)
Baiyun	6 (25)	13 (54.2)	5 (20.8)	0 (0)	0 (0)	24 (100)
Huadu	1 (16.7)	5 (83.3)	0 (0)	0 (0)	0 (0)	6 (100)
Nansha	0 (0)	4 (80)	1 (20)	0 (0)	0 (0)	5 (100)
Luogang	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)	1 (100)
Conghua	1 (11.1)	6 (66.7)	1 (11.1)	0 (0)	1 (11.1)	9 (100)
Zengcheng	0 (0)	1 (50)	0 (0)	0 (0)	1 (50)	2 (100)

variable, and applying a contingency table analysis (Table 6), we found apparent differences among PMSLs in different districts. Comparatively, the four districts of Yuexiu, Haizhu, Liwan, and Huadu had much more accurate bibliographic data than all of the other districts, while a chi-square test uncovered that in different districts of Guangzhou, significant differences appeared among the different schools in terms of the accuracy of bibliographic data [$\chi^2(4) = 149.65$, $p < 0.001$]. The location of the schools and different education bureaus mattered considerably for their decisive effect on all aspects of the schools (involving libraries).

Management and service conditions of libraries under survey

Opening hours of libraries

SLs in Guangzhou obtained a mean value of 1.31 (SD = 0.5) in respect to opening hours during students' extracurricular time, including lunch hour, after-school time, weekends, and other legal holidays, which means that most libraries are open during students' after-class hours. During academic semesters, SLs remained open for 22.38 hours per week on average (SD = 21.31), while during vacations they were opened for 0.34 hours. This conveyed a great difference among various SLs. Most SLs tended to stay open for long periods during workdays, connected perhaps with their goal of serving teachers and researchers. SLs in Guangzhou were open for a relatively short period on holidays, appearing to indicate a rather large disparity among staff in SLs pertaining to service awareness.

Taking school running subject, type, boarding conditions, and SL as independent variables and the mean value of opening hours per week as a dependent variable, and applying a multi-way ANOVA test, the results were obtained. Primarily, dramatic differences for the main effect exist in school running subject [F (3,4838.07) = 1238.6, $p < 0.001$], type [F (4,1238.6) = 7.15,

$p < 0.001$]; boarding conditions [F (2,1238.6) = 514.53, $p = 0.005$]; and location [F (11,1238.6) = 3.29, $p < 0.002$]. In addition, remarkable differences for interactive effects exist in school running—type [F (4,1238.6) = 2.76, $p = 0.037$] and type—location [F (10,1238.6) = 2.07, $p = 0.043$]. Post hoc tests reveal the relationship between boarding conditions and the total opening hours during academic semesters. All-boarding and partly boarding schools had much higher values than day schools did ($ps < 0.001$); thus, reflecting the sense that opening hours were thoroughly influenced by teachers and students' lifestyles and school management. The results showed differences for different school types. High schools performed better than PSs yet had shorter opening hours than SHSs ($ps < 0.001$) and a little bit longer opening hours than schools older than twelve years ($p = 0.074$). PSs had many shorter hours than the other five types ($ps < 0.001$); junior high schools were opened significantly fewer hours than the senior high schools as well as schools at least nine years old ($p1 < 0.001$, $p2 = 0.015$). Senior high schools were open for a much longer time than schools at least nine years old ($p < 0.001$); and schools that were nine years old were open for a significantly shorter time than schools that were twelve years old ($p = 0.012$). It can be concluded that primary SLs have the shortest opening hours, which may impede the facilitation of students' knowledge and overall quality.

Library cards and their utilization

The cards used in 2014 had an average percentage of 42.19 percent (SD = 38.77) among all library cards, while the utilization rate for students ranged from 0 percent to 100 percent. In 2014, book serials had a total circulation of 8,326 times or eleven times per student per library (paper and electronic books were all included in the statistics; if a book is borrowed five times, then five is the figure used). These findings represent a huge inter-library gap—that is, the total number of books in circulation within no-boarding schools was significantly less than those of partly boarding and all-boarding schools ($p1 < 0.001$, $p2 = 0.015$). This illustrates that popularity, promotion, and reading atmosphere varies enormously within PMSLs, although they exhibit an overall lower utilization ratio. Concerning the utilization rates in 2014, partly boarding schools were significantly more than all-boarding ($p = 0.057$, marginally) and no-boarding schools ($p = 0.027$).

Applying a one-way ANOVA analysis to all valid library cards, significant differences were detected among different school types, and there was a remarkable inter-school gap [F (2,96) = 10.25, $p < 0.001$]. Hence, it is reasonable to conclude that school types and boarding conditions profoundly affect readers' service in PSMLs. An after-effect test disclosed the finding that all-boarding and partly boarding schools issue more library cards than day schools ($p1 = 0.007$, $p2 < 0.001$). PSs issue fewer cards than the five other types of schools ($p1 = 0.015$, $p2 = 0.014$, $p3 < 0.001$, $p4 = 0.011$, $p5 = 0.012$), while junior high schools issue slightly fewer than SHSs ($p = 0.05$). These account for the special library services and management of PSs and day schools compared with the other types.

Readers and administrators' satisfaction with resources

The readers' and administrators' satisfaction with resources was determined by the subjective analysis and judgments from the respondents through our questionnaire investigations. For 2014, the data show a mean value of 0.48, which denotes a low frequency of reading activities. This implies that school administrators, teachers, and library staff do not attach much importance to reading and its promotion.

For the question regarding whether or not teachers and students had access to the latest books, the mean value was 2.63 (SD = 1.17). Thus, it can be surmised that the question whether teachers and students had access to the latest book resources varied from one school to another; however, the result may be somewhat biased because service suppliers were the ones who answered the question. A mean value of 2.65 (SD = 1.05) was obtained for the question of whether library procurement staff had a strong and thorough understanding of the latest books. This question demonstrates that the staff, despite having only finite channels, still had a strong willingness to gain access to newly published books. A chi-square test suggested significant differences [$\chi^2(4) = 55.68$, $p < 0.001$] within different school types regarding satisfaction. That is, different school types provided different messages regarding satisfaction.

Significant differences [F (5, 88) = 2.7, $p = 0.025$] arose within different school types regarding how attractive large-scale reading activities, such as a Celebrity Forum, were to teachers and students. A post hoc test demonstrated a larger figure for PSs than junior high schools ($p = 0.019$); junior and SHSs had larger figures than schools older than nine years ($p1 = 0.006$, $p2 = 0.015$). Since the enthusiasm of teachers and students for cultural and educational activities can be a mirror of the academic atmosphere and cultural endowments, we can infer that high schools and even junior high schools can achieve further improvement, on the one hand, while, on the other hand, it is most urgent for PSs to continue to hold reading activities (Cheung 2001, 56–58; Divisenko 2009; J. Li 2009; McInerney 2014, 6, 8, 170–72, 293–97, 410–11; Toane and Rothbauer 2014). For other types of schools, teachers and students' enthusiasm appear to decrease as they face increasing academic pressure.

Discussion

Based on the studies above, the results show that the collections and services of PMSLs in Guangzhou have not attained levels equal to international standards. The data demonstrate unfavourable characteristics of PMSLs, including the students' average ownership of paper books, the total number of electronic books, the accuracy of bibliographic data (based on mean values), and opening hours per week during semesters and holidays. Negative aspects also include book purchasing to meet readers' needs, the readers' ability to access and borrow the latest quality books, book-purchasing personnel's understanding and access to the latest quality books, the utilization ratio of effective library cards (for 2014), the total number of items in the collection, each student's borrowing times, and the existing conditions of reading activities.

The imbalance among schools was mainly caused by the differences in school categories and locations. The significantly different indicators caused by school categories included whether the data are classified by the CLC, opening hours per week during the semester, the total number of effective library cards, and the condition of previous book purchasing for teachers' and students' needs as well as the attractiveness of lectures for teachers and students. The data show that school districts could make the following indicators appear significantly (or marginally) different: the total number of book types on Marxism-Leninism, philosophy and science, opening hours per week during the semester, and whether the items were classified by the CLC, as well as the accuracy of the bibliographic data.

This study concentrated its focus on the management and utilization of paper documents since printed paper publications still account for the major part of information resources worldwide. As Huanwen Cheng and Yantao Pan (2016) report, electronic resources are not comparable to print publications in academic evaluation.

The single indicator of a PMSL's condition

Research studies in China, as well as in Hong Kong, Macao, and Taiwan have revealed that collections and services of PMSLs are fundamental for guaranteeing and promoting PMS students' reading (Jiang 2008; Lai and Lin 2010; Lu 2013; Lv and Zhou 2013). The management members of SLs should also pay attention to the readers' interests and borrowing needs. Based on relevant data, when conditions permit, libraries should purchase more e-books. Existing PMSLs, as important information service agencies, should expand information channels of various publications, database subscription, and network access to ensure the quality and applicability of information collections. Previous research studies have made similar conclusions (for example, Lai and Lin 2010; Qu 2012, 2013a, 2013b; Lv and Zhou 2013), although there were a few research studies that reached opposite conclusions (for example, B. Yu 2012).

School types

The significant difference among the values of variables caused by different school types was actually led by school levels and scales. School types and scales were the indicators causing significant differences in Guangzhou PMSLs' collections and services. The significant differences between school types and scales were concentrated in the service of readers and the classification of books, indicating that in the development of PMSLs we should not neglect the reading needs of students in PSs, lower grades of JMSs, and small-scale schools (as these types of SLs were the weakest) and should enhance the development of PMSLs (for example, urge the government to increase investments in school libraries, hire more certificated professional librarians, and increase communications and collaborations with administrators and teachers). As evidenced in the literature review, there have been few comparative research studies in China between library resources and the services of different schools prior to the present study

and only a few research studies have concerned PS students (Lai and Lin 2010), JMS students (B. Liu 2004; Jiang 2008; Y. Liu 2008) and senior high school students (Qu 2012, 2013a, 2013b).

The locations of school libraries

The significant difference in the variable caused by school locations was weaker, and differences exist between cities and suburbs or single districts. Variables such as book purchasing and processing and reader services were significantly affected. In the era of big data and the explosion of information, the increasing information gap in developed areas' primary and secondary education is unfavourable to promoting education equity, to protecting the knowledge and information rights of urban and rural residents, and to constructing a harmonious society. The great difference in PMSL services between the city and country can be regarded as the epitome and specification of the dualistic structure between city and country in modern China.

Boarding conditions and other issues

The variables of significant differences caused by boarding conditions included the types of social science books, bibliographic data, whether books were classified according to the CLC, and opening hours per week during the semester. Its influential variables were concentrated on book purchasing, cataloguing, and reader services. School running subjects and the effect of their interaction mainly led to significant differences in the libraries' opening hours per week during the semester. The scope of significant influence caused by school running subjects is narrower than the significant influence caused by school types, locations, and boarding conditions. School running subjects and boarding conditions, which are two crucial attributes of schools, have not been researched by the Chinese LIS community or others.

Comprehensive analysis and measurement of single items and imbalanced indicators in the study

From the perspective of single indicators (mainly including library collections and service), most indicators of PMSLs in Guangzhou show that its overall development is not professionalized (Lei 2005). In addition, the sub-groups of PMSLs according to school types, locations, and boarding conditions have developed in an extremely imbalanced way. Among them, the conditions of primary and day SLs were the worst.

The weakest answers to the questions of day SLs included whether the species and collections of social sciences are classified according to the CLC, the number of opening hours per week during the semester, and the total number of valid borrowing cards. The analysis of the data shows the service scale, level, and accuracy of primary and day school needs to be promoted, which has a significant influence on students' healthy growth. The answers to several questions were not satisfactory, such as previous book purchases to meet users' reading needs and the attractiveness of reading activities toward readers. It indicates

that the management members of PMSs in China pay little attention to students' effective use of spare time and the improvement of their comprehensive quality.[8] They were also deficient in thinking about the resource investment in relative subjects. This problem is largely unresolved within Chinese educational circles, the basic education system (Meng and Fan 2003; Zhai 2007; Xing 2011; Zhai and Sun 2012), and the high school education system (F. Li 2008; Zeng and Sun 2011).

Through the above analyses and relevant literature, it can be concluded that some scholars have emphasized the importance of extracurricular reading but that, for the most part, Chinese PMSs only focus on class teaching. As homework occupies a small part of students' extracurricular time, it can be surmised that schools and the entire education circle have not paid sufficient attention to students' spare time. So far, in practice, the educational field has not dealt well with the relationship between learning and extracurricular activities (Yang 2006; Y. Zhang 2009; Z. Chen 2013; Zhao 2015, 88).

Since the 1990s, numerous research studies and academic papers have confirmed the crucial role of high quality after-school and extension programs, such as those common in Western societies for improving students' learning, lives, and future development. These research studies have shown that effective use of spare time promotes the healthy development of minors and could play a vitally important role in the education, culture, and entertainment of PMS students, but, to date, no reliable research studies have been conducted (for example, Yang 2006; Zhao 2015; Newell et al. 2015).

Research has also shown that the utility of this effect is not unconditional. There were stringent requirements upon organizers (as well as training resources investment), content, and participant involvement. For example, in the 2011 Progress in International Reading Literacy Study, the reading scores of PMS students who had taken part in private tutoring after school were significantly lower than that of students who had not. This means private tutoring either had no effect or even a negative effect on students' reading literacy improvements (Suryadarma et al. 2006; Tse 2014). It is undeniable that the arrangement of extracurricular activities is important to a PMS student's growth. Many Western schools have been keen to organize various and abundant regular extracurricular activities for many years. However, with few similar activities in domestic schools, PMSs should at least ensure the opening of basic information service facilities, such as reading and borrowing rooms.

Recommendations

The first recommendation is that the management members of SLs should recognize, accept, and uphold the principles of all works of SLs and should serve readers' interests and actual information needs. All domestic SLs should widen and deepen the types and channels of information collection. In regard to the aspect of library services, with the existing services being far from satisfactory, management members of SLs, or even school authorities, must overhaul or reset nearly all of their services. The length of opening times, bibliographic

data accuracy, the organizations' levels of reading activities, and the extent to which the services of SLs meet the basic needs of borrowing and reading need real and considerable attention from management. The people taking direct responsibility for minors' education must pay attention to students' extracurricular activities, their comprehensive development, opening hours, and the actual progress of quality education in China.

Second, no level of educational authorities in China should ignore the information needs of teachers and students from the PSs, lower grades in JMSs, and small-scale SLs. In particular, they should pay considerable attention to the comprehensive development of quality education and extracurricular activities. The Chinese authorities must ensure that the educational system is fair and relatively balanced for all educational resources (including PMSLs), and investment must be a primary concern.

Third, the LIS community should pay attention to, and strengthen, practice and research in the field. With a truly reliable and objective theoretical framework, PMS librarianship could achieve faster and greater development. Focusing on the lifelong healthy growth and happiness of children, society (and particularly parents) should pay greater attention to students' extracurricular activities and comprehensive development as well as support the actual progress of quality education.

Research limitations

Although the GBE has conducted much investigation into the basic conditions of PMSLs using questionnaires, the respondents in this study often did not understand what impact this investigation would have on them or their working units. Therefore, when approached to complete a questionnaire, they often showed indifference, resistance, and/or rejection. Under such conditions, this investigation collected only 133 pieces of valid data, which was not sufficient for a large advanced statistical analysis. Furthermore, a convenience sample was used, which meant that the conclusions are not universal. Despite these limitations, however, the research has accumulated experiences and lessons providing a strong foundation for broader research in the future.

Conclusions

As a vital educational institution serving educational research and teaching, PMSLs and their collections and services were found to be unsatisfactory. This was found in the Midwest and other areas in China that are not fully industrialized, including industrialized areas (represented by Guangzhou), according to the results of the investigation and its analysis. Only a small minority of the schools visited had achieved collections and services that were at a professional and satisfactory level from an international perspective. Moreover, there is still considerable room for improvement from a professional perspective (Lei 2005). Currently, most collections and services can only meet the basic daily operation needs of PMSLs in Guangzhou. The data show that there are significant differences in SLs' collections and services caused by different school types,

school running subjects, locations, and boarding conditions. The most common and significant differences came from school types and locations (urban or suburb), while these differences are not as obvious with respect to running subjects and boarding conditions. The research results show that PSs and day SLs have the worst and weakest basic indicators in collections and services. The developments of these two types of schools' libraries cannot be abandoned or neglected. Therefore, preferential resource investment, professional guidance, and the adjustment of these two types of schools are essential.

The contribution of this research is that it focuses on the collections and services of PMSLs in fully industrialized areas of China for the first time (taking Guangzhou as an example). In addition, it has carefully investigated the development of regional PMSLs on the basis of international research. This research may shed some light for relevant domestic interest groups and the international professional community. Drawing greater attention to the subject of PMS librarianship in the Chinese academic community and at all levels of governments, this research may well speed up the development and research on PMSLs. The research group is looking forward to narrowing the huge gap and disparity between the domestic developments of PMSLs and foreign ones through this preliminary study. As a precursor to future research studies on Chinese school libraries, we expect this article to play a valuable role.

Notes

1 For the purposes of this article, the word "readers" means the people who read the books in the libraries.

2 School choice fees have existed since 1990 in the People's Republic of China (PRC). When students enter a higher learning stage (especially the senior high schools), all schools try to recruit students with better achievement rankings. Still, there are quite a lot of students and their parents who want to enter into the better schools, even the best schools, despite not having high grades. In this case, they must pay school choice fees to the target school or the Local Education Bureau. School choice fees in many schools have become an important factor in maintaining the normal operation of the school as the financial allocations can only maintain the most basic operations in the majority of schools. The amount of the school choice fee is rather expensive for common citizens, costing on average one to five years of income for a typical urban resident, according to the figures of Guangzhou in 2015 (Guangzhou Bureau of Statistics and National Bureau of Statistics Guangzhou Investigation Team 2016) and Xingtai in 2015 (Xingtai Bureau of Statistics and National Bureau of Statistics Xingtai Investigation Team 2016). But during recent years, the central and provincial governments have further tightened the policies (for example, limiting the enrolment numbers of school students) and do not allow any school to charge any form of school choice fees without the approval of the local Bureau of Commodity Prices (or the Bureau of Finance). Thus, as a result of such tight control, this part of the fee often appears as a monetary donation in the name of some outfit to help with the education and joint relationship as a guarantee to ensure personal access to better schools and the operation of better schools (Baidu Baike 2016a, 2016b). Of course, schools in different regions, according to different local policies and the situation of the schools, may implement different policies. Therefore, this statement may not be applicable to every school in China.

3 The educational enterprise of Guangzhou has largely profited from the prosperity and openness of the city ever since ancient times. In the contemporary era, particularly since the Reform and Opening up of the PRC, basic education in Guangzhou has witnessed significant and stable growth. Guangzhou is located in southern Guangdong province in the north of the Pearl River Delta. It had a population of 13.5 million in 2015 and approximately US $21,040 gross domestic, product per capita by 2014, according to the domestic mainstream media coverage (Li, Chen, and Huang 2016, 68). As the capital of Guangdong Province, Guangzhou has been the political, military, economic, cultural, scientific, and cultural centre of southern China ever since the Qin Dynasty and has been praised as the ''City of Business for Millenniums.'' It is one of the famous Chinese historical and cultural cities and one of the birthplaces and prosperous locations of Lingnan culture. The State Council of China has positioned it as an international metropolis, the central city of the state, and one of the three comprehensive gateway cities. As the window on foreign trade, many foreigners reside in Guangzhou. It is thus known as the ''the Capital of the Third World.'' There are fifty-one consulate generals in Guangzhou, ranking second in the PRC (Guangzhou Government 2016).

4 The Guangzhou Educational (Teaching) Equipment Centre (EEC) is one specific agency affiliated with the Guangzhou Bureau of Education (GBE), which is in charge of planning, allocating, purchasing, exchanging, and charging teaching equipment (for example, library collections, teaching facilities, and so on) in the junior and middle educational system. As an authoritative management branch, the EEC plays a vital role in the overall development of primary and middle school libraries (PMSLs) in Guangzhou and is evaluated according to the situation of teaching equipment for PMSLs.

5 This substantial situation can be found in the districts that have average or high levels of economic development, excluding those remote and especially poor areas for special reasons.

6 The basis of measurement of satisfaction is whether the collections and services of PMSLs fully meet the information and reading needs of the teachers and students in primary and middle schools.

7 The experts include Xu Jianhua and Yu Liangzhi in the Business College of Nankai University and Chen Hao in the Zhou Enlai Government Administration College of Nankai University.

8 The comprehensive quality generally includes the following seven aspects: personality quality, ability, professional quality, physical constitution, psychological diathesis, aesthetics, and role quality (Baidu Zhidao 2013). In recent years, China's basic and secondary education has been too focused on the cultivation of students' professional quality, and other aspects have been more or less ignored.

References

American Association of School Librarians. 2011a. ''AASL Urban Schools Task Force Survey Report..'' http://www.ala.org/aasl/sites/ala.org.aasl/files/content/researchandstatistics/AASL%20Urban%20Schools%20Taskforce%20Report_v2.pdf (accessed 4 July 2016).

——. 2011b. ''School Libraries Count! A National Survey of School Library Media Programs 2011.'' http://www.ala.org/aasl/sites/ala.org.aasl/files/content/researchandstatistics/slcsurvey/2011/AASL-SLC-2011-FINALweb.pdf (accessed 4 July 2016).

——. 2012. ''School Libraries Count! A National Survey of School Library Media Programs 2012.'' http://www.ala.org/aasl/sites/ala.org.aasl/files/content/researchandstatistics/slcsurvey/2012/AASL-SLC-2012-WEB.pdf (accessed 4 July 2016).

Achterman, Douglas. 2008. "Haves, Halves, and Have-nots: School Libraries and Student *Achievement* in California." PhD dissertation, University of North Texas.
Australian School Library Association. 2013. "Future Learning and School Libraries." http://www.asla.org.au/site/DefaultSite/filesystem/documents/2013-ASLA-futures-paper.pdf (accessed 4 July 2016).
Baidu Baike. 2016a. "Jiedufei." http://baike.baidu.com/view/963250.htm (accessed 4 July 2016).
——. 2016b. "Zexiaofei." http://baike.baidu.com/view/1763966.htm (accessed 4 July 2016).
Baidu Zhidao. 2013. "What Does It Mean by the Comprehensive Quality?" http://zhidao.baidu.com/link?url=IPtDzO4rE9Et0bSnr_ee5Qw1fsY5NpYsWoNDgsZlov9X__oCK2ekr-KkYY4dqZhCNfzYg21H2mnQGSXJZc5Qu_ (accessed 4 July 2016).
Chai, Su-Ching. 1996. "A Study of Elementary School *Students' Use* of Libraries for Study and Leisure Reading in Taichung City, Taiwan, the Republic of China." PhD dissertation, University of Tennessee.
Chen, Bai. 2007. "Present Situation and Thinking of Middle School Library in Tianjin." *World of Library and Information in Primary and Middle Schools* 15 (2): 18–22.
Chen, Feng. 2004. "Review and Thinking of 100 Years Development of Chinese Children Library Science." *Library Work and Study* 26 (1): 84–86.
Chen, Yanmei. 2007. "Discussion on the Quality Control of Bibliographic Data in the Academic Library." *Library Journal* 26 (4): 105–12.
Chen, Zhi. 2013. "My Understanding of Reading Teaching in Primary Schools." Primary School Edition. *New Curriculum* 2 (11): 70–71.
Cheng, Huanwen, and Yantao Pan. eds. 2016. *Information Resources Sharing*, 2nd edition. Beijing: Higher Education Press.
Cheng, Yanan. 2000. *The Introduction of Library Work*. Peking: Peking Library Press.
Cheung, Chi-Kim. 2001. "The Use of Popular Culture as a Stimulus to Motivate Secondary Students' English Learning in Hong Kong." *English Language Teaching Journal* 55 (1): 55–61. http://eltj.oxfordjournals.org/content/55/1/55.
Chinese Ministry of Education, Culture, and the State Administration of Press, Publication, Radio, Film, and Television in the PRC. 2015. "Opinions on Strengthening the Construction and Application of PMSL in the New Period." http://www.sxysedu.net/newsInfo.aspx?pkId=4546 (accessed 4 July 2016).
Clark, Christina. 2010. "Linking School Libraries and Literacy: Young People's Reading Habits and Attitudes to Their School Library, and an Exploration of the Relationship Between School Library Use and School Attainment." http://www.literacytrust.org.uk/assets/0000/5760/Linking_school_libraries_and_literacy_2010.pdf (accessed 4 July 2016).
Creaser, Claire, and Sally Maynard. 2005. *A Survey of Library Services to Schools and Children in the UK 2004–05*. Loughborough, UK: Library and Information Statistics Unit.
——. 2006. *A Survey of Library Services to Schools and Children in the UK 2005–06*. Loughborough, UK: Library and Information Statistics Unit.
Dent, Valeda. 2006. "Observations of School Library Impact at 2 Rural Ugandan Schools." *New Library World* 107 (9/10): 403–21. http://dx.doi.org/10.1108/03074800610702598.
Dickinson, Gail K., and JudiRepman. 2015. *School Library Management*. 7th edition. Columbus, OH: Linworth Publishing.
Divisenko, K.S.2009. "The Dynamics of the Values of School Students." *Russian Education and Society* 51 (10): 18–25. http://dx.doi.org/10.2753/RES1060-9393511002.

Duan, Minglian. 2008. *Information Resource Cataloguing*. 2nd edition. Peking: Peking University Press.

Fan, Bingsi. 2012. ''The Bases and Resources of Minors Service Theory in Public Libraries.'' *Journal of Metropolitan Library* 1 (1): 87.

Guangzhou Bureau of Statistics and the National Bureau of Statistics Guangzhou Investigation Team. 2016. ''Statistical Bulletin of the National Economic and Social Development of Guangzhou City in 2015.'' http://www.wj001.com/car/news/2016-03-27/1273872.html (accessed 4 July 2016).

Guangzhou Government. 2016. ''Stepping into Guangzhou.'' http://www.gz.gov.cn/gzgov/s2294/zjgzcon.shtml (accessed 4 July 2016).

Haar, Dale. 2005. ''Public School Libraries: Their History, Curriculum, and Impact on Student *Achievement*.'' PhD dissertation, Kennedy-Western University.

Hill, Renee F. 2012. ''Strengths and Opportunities: School Librarians Serving Students with Special Needs in Central New York State.'' *School Library Research* 15: 1–14.

Hu, Jie, Dongbo Wang, Juan Zhi, and Bin Li. 2013. ''The Interpretation of the Fifth Evaluation and Grading Standards of Public Libraries (on Children's Libraries).'' *Journal of the Library Science in China* 39 (2): 18–26.

Hu, Yanhui. 2011. ''Problems and Countermeasures of 7-9 Grade Students' Reading Habits- Taking the Fifth Middle School in Shijiazhuang as an Example.'' PhD dissertation, Hebei Normal University.

Hui, Juanche. 2008. ''Research on the Quality Control of Bibliographic Data in Network Environment.'' PhD dissertation, Xibei Univerisity.

Jiang, Rong. 2008. ''Investigation on the Current Reading Situation of the Primary and Middle School Students.'' PhD dissertation, Hunan Normal University.

Kaplan, Allison G. 2010. ''School Library Impact Studies and School Library Media Programs in the United States.'' *School Libraries Worldwide* 16 (2): 55–63.

Lai, Kunyu, and Shanru Lin. 2010. ''Research on the Influential Factors of Taipei Mingchuanguo Primary School Children's Usage of the School Library.'' *Educational Documentations and Library Science* 47 (1): 3–34.

Lance, Keith Curry, and Linda Hofschire. 2012. ''Change in School Librarian Staffing Linked with Change in CSAP Reading Performance, 2005–2011.'' https://www.lrs.org/documents/closer_look/CO4_2012_Closer_Look_Report.pdf (accessed 4 July 2016).

Lance, Keith Curry, Marcia J. Rodney, and Christine Hamilton-Pennell. 2005. ''Powerful Libraries Make Powerful Learners: The Illinois Study.'' http://www.islma.org/pdf/ILStudy2.pdf (accessed 4 July 2016).

Lance, Keith Curry, Marcia J. Rodney, and Becky Russell. 2007. ''How Students, Teachers and Principles Benefit from Strong School Libraries: The Indiana Study.'' http://c.ymcdn.com/sites/www.ilfonline.org/resource/resmgr/aisle/executivesummary.pdf (accessed 4 July 2016).

Lance, Keith Curry, Marcia J. Rodney, and Bill Schwarz. 2010. ''How Idaho School Librarians, Teachers and Administrators Collaborate for Student Success.'' http://libraries.idaho.gov/files/Full%20rpt.pdf (accessed 4 July 2016).

Lei, Shuxia. 2005. ''Direction of the Modernization of School Libraries in Western China.'' *Journal of Library Science in China* 25 (2): 95–97.

Li, Zhihong, Siqin Chen, and Wei Huang. 2016. ''GDP in Guangzhou Was over 1810 Billion in 2015.'' *Southern Daily*, 21 January.

Li, Furong. 2008. ''Analysis on the Current Situation of the General High School Education Investment in China.'' *Research on the Development of Education* 29 (11): 55–59.

Li, Jun. 2009. "Fostering Citizenship in China's Move from Elite to Mass Higher Education: An Analysis of Students' Political Socialization and Civic Participation." *International Journal of Educational Development* 29 (4): 382–98. http://dx.doi.org/10.1016/j.ijedudev.2008.10.001.

Liao, Yingyi, Ruoran Zhang, Jia Lu, Yuanyuan Xie, Yinghua Li, Yifu Deng, Yanglin Fang, Yiyun Shen, and Lijuan Zhang. 2015. "There Are More Than 1200 Primary and Secondary Schools in Guangzhou, but Only 170 Open Sports Venues." *New Express*, 26 October.

Library Research Service. 2005. "Statistics and Input-output Measures for School Libraries in Colorado." https://www.lrs.org/documents/slmc04/staffing_2004.pdf (accessed 4 July 2016).

Liu, Baolian. 2004. "Investigation and Study on the Extracurricular Reading of Junior Middle School Students in Macao." PhD dissertation, Zhongshan University.

Liu, Geoffrey Z., and Wuhong Zhang. 2008. "School Library Support of Health Education in China: A Preliminary Study." *International Electronic Journal of Health Education* 11: 13–31.

Liu, Ya. 2008. "On the Function of Library to the Elementary Education in England from 'Potter Harry':The Analysis of 'Harry Potter'." *Library and Information* 28 (2): 86–90.

Lo, Patrick, Dana Dukic, Joyce Chao-chen Chen, You-ra Youn, Yuji, Hirakue, Masaaki Nakashima, and Guanghui Yang. 2014a. "Attitudes and Self-Perceptions of School Librarians in Relations to Their Professional Practices: A Comparative Study between Hong Kong, Shanghai, South Korea, Taipei, and Japan." *School Libraries Worldwide* 20 (1): 51–69.

Lo, Patrick, Joyce Chao-chen Chen, Zvjezdana Dukic, You-ra Youn, Yuji Hirakue, Masaaki Nakahima, and Guanghui Yang. 2014b. "The Roles of the School Librarians as Information Literacy Specialists: A Comparative Study between Hong Kong, Shanghai, South Korea, Taipei and Japan." *New Library World* 115 (7/8): 314–39. http://dx.doi.org/10.1108/NLW-01-2014-0012.

Lu, Min. 2013. "School Library in the Minds of Children: 2013 Shanghai Children's Reading Research Report." *Ideological and Theoretical Education* 13 (12): 35–37.

Lv, Ruilian, and Qian Zhou. 2013. "Research on the Management of Primary and Middle School Libraries in Taiwan Area." *Journal of Library and Information Science Research* 7 (2): 29–79.

Ma, Zhanghua, Hanqing Hou, and ChunxiangXue. 2009. *Introduction to the Literature Classification Method*. Revised edition. Beijing: Beijing Library Press.

Magara, Ellsam, and Charles Batambuze. 2009. "The School Library Development Programme in Pallisa District, Uganda: An Impact Study." *IFLA Journal* 35 (2): 141–51. http://dx.doi.org/10.1177/0340035209105670.

McInerney, Dennis M. 2014. *Educational Psychology: Constructing Learning*. 6th edition. Freches Forest, Australia: Pearson Australia.

Meng, Xu, and Xianglan Fan. 2003. "Problems and Suggestions in the Investment of Basic Education in Our Country." *Journal of the Chinese Society of Education* 15 (4): 10–13.

Michie, Joan S., and Bradford W.Chaney. 2009. "Second Evaluation of the Improving Literacy Through School Libraries Program." https://www2.ed.gov/rschstat/eval/other/libraries/libraries09.pdf (accessed 4 July 2016).

New York Comprehensive Center. 2011. "Information Brief: Impact of School Libraries on Student Achievement." http://www.nysl.nysed.gov/libdev/nyla/nycc_school_library_brief.pdf (accessed 4 July 2016).

Newell, Alana D., Linda R. Zientek, Barbara Z. Tharp, Gregory L. Vogt, and Nancy P. Moreno. 2015. "Students' Attitudes toward Science as Predictors of Gains on

Student Content Knowledge: Benefits of an After-school Program.'' *School Science and Mathematics* 115 (5): 216–25. http://dx.doi.org/10.1111/ssm.12125.

Önal, H. 2009. ''IFLA/UNESCO School Library Manifesto for Creating One World.'' *Libri* 59 (1): 45–54. http://dx.doi.org/10.1515/libr.2009.005.

People for Education. 2011. ''The Measure of Success: What Really Counts? The Annual Report on Ontario's Publicly Funded Schools 2011.'' http://www.peopleforeducation.ca/wp-content/uploads/2011/07/Annual-Report-on-Ontario-Schools-2011.pdf (accessed 4 July 2016).

Qu, Jiafu. 2012. ''The Concurrent of Reading and College Entrance Examination in the Context of Non-Gate Library: Taking the Grades of Yinzhou Senior School in 2012 as an Example.'' http://blog.gmw.cn/blog-268510-457475.html (accessed 4 July 2016).

——. 2013a. ''Research on the College Entrance Examination Grades and Borrowing Quantity of 422 Students of Science in 2012.'' *Teaching Instrument and Experiment* 30 (6): 22–23.

——. 2013b. ''Take the Borrowing Quantity and Scores of the College Entrance Examination Students to Test the Reading Positive Energy of High School.'' *Teaching Instrument and Experiment* 30 (11): 21–24.

Secondary Education in Africa and Africa Region Human Development Department. 2008. *Textbooks and School Library Provision in Secondary Education in Sub-Saharan Africa*. Washington, DC: International Bank for Reconstruction and Development.

Shah, Syed Zia Ullah, and Muhammad Shahid Farooq. 2009. ''Effect of School Library on Students' Learning Attitude.'' *South Asian Studies* 24 (1): 145–51.

Smalley, Ann Walker, and Susan J. Baxter. 2008. *Check it out! The Results of the School Library Media Program Census: Minnesota School Library Media Programs*. Saint Paul, MN: Metronet.

Su, Yuan. 2003. ''The Survey and Analysis on the Extracurricular Reading of Primary School Students.'' *World of Library and Information in Primary and Middle Schools* 11 (7): 35–38.

Sun, Cuiqin. 2006. ''The Analysis and Control of the Quality of Library Collection.'' *Library Journal of Henan* 26 (2): 52–54.

Suryadarma, Daniel, Asep Suryahadi, Sudarno Sumarto, and F. Halsey Rogers. 2006. ''Improving Student Performance in Public Primary Schools in Developing Countries: Evidence from Indonesia.'' *Education Economics* 14 (4): 401–29. http://dx.doi.org/10.1080/09645290600854110.

Tang, Gaofang. 2014. ''The Research and Analysis of the Booksellers' Bibliographic Data.'' *Journal of Library and Information Sciences in Agriculture*26 (5): 104–07.

Tse, Shek Kam. 2014. ''To What Extent Does Hong Kong Primary School Students' Chinese Reading Comprehension Benefit from After-school Private Tuition?'' *Asia Pacific Education Review* 15 (2): 283–97. http://dx.doi.org/10.1007/s12564-013-9307-4.

Toane, Carey, and Paulette M. Rothbauer. 2014. '''Pure Delight and Professional Development': The Reading Practices and Library Use of an Active Poetry Community.'' *Canadian Journal of Information and Library Science* 38 (2): 97–126. http://dx.doi.org/10.1353/ils.2014.0010.

Todd, Ross J., and Carol C. Kuhlthau. 2004. ''Student Learning through Ohio School Libraries: Background, Methodology and Report of Findings.'' http://webfiles.rbe.sk.ca/rps/terrance.pon/OELMAReportofFindings.pdf (accessed 4 July 2016).

Wei, Zhipeng, Guodong Jiang, Tuowen Niu, Tim Zou, and Elaine Dong. 2013. ''A Tale of Two Counties: How Two School Libraries in Rural Western China Serve Local

Needs.'' *Library Trends* 62 (1): 205–33. http://dx.doi.org/10.1353/lib.2013.0029.
Williams, Dorothy, Caroline Wavell, and Katie Morrison. 2013. ''Impact of School Libraries on Learning: Critical Review of Published Evidence to Inform the Scottish Education Community.'' https://openair.rgu.ac.uk/bitstream/handle/10059/1093/Williams%20Impact%20of%20school%20libraries%20on%20learning%20SLIC.pdf?sequence=4&isAllowed=y (accessed 4 July 2016).
Xing, Hongjun. 2011. ''On Chinese Basic Education Curriculum Reform: The Dangerous Trip in the Lost Direction.'' *Educational Science Research* 22 (10): 5–22.
Xingtai Bureau of Statistics, and the National Bureau of Statistics Xingtai Investigation Team. 2016. ''Statistical Bulletin of the National Economic and Social Development of Xingtai Municipality in 2015.'' http://www.xingtai.gov.cn/zwgk/zfgb/zftjgb/201603/t20160324_181585.html (accessed 4 July 2016).
Yang, Lijuan. 2006. ''The Extracurricular Reading and Teaching of Middle School Chinese.'' *Primary and Middle School Teacher Training* 22 (4): 44–46.
Yu, Liangzhi. 2003. *The Introduction of Library Science*. Peking: Science Press.
Yu, Binbin. 2012. ''Impact Study of School Library Usage to Students' Academic Achievements: Take XJ Middle School as an Example.'' PhD dissertation, Nankai University.
——. 2013. ''A Literature Review of the Research on the Influence of the Library on the Academic Performance of the Students in Foreign Countries.'' *Journal of the Library Science in China* 57 (5): 98–108.
Zeng, Shuibing, and Chuixia Sun. 2011. ''The Development Dilemma and Solution of the General High School Education.'' *Education Research Monthly* 28 (6): 72–74.
Zhai, Bo. 2007. ''Demonstrative Analysis on the Equilibrium Development of Chinese Basic Education.'' *Education Research* 29 (7): 22–30.
Zhai, Bo, and Baicai Sun. 2012. ''An Empirical Study on the Balanced Development of Basic Education in China.'' *Educational Research* 34 (5): 27–62.
Zhang, Yankun. 2009. ''The Exploration and Practice of the Extending of Middle School Chinese Teaching from the Inside Class towards the Outside Class.'' PhD dissertation, Beijing Normal University.
Zhang, Zhouhong. 2004. ''The Investigation and Analysis on the Students' Reading Needs.'' *World of Library and Information in Primary and Middle Schools* 12 (11): 8–9.
Zhao, Xueya. 2015. ''The Integration of Reading Teaching and Extracurricular Reading in Junior Middle School's Chinese Course.'' *Curriculum Education Research* 4 (7): 88.
Zheng, Wenhui. 2015. ''The Survey and Analysis on the Information Needs and Usage of the Teenagers- Based on 7 Middle Schools in Maoming Stricts in Guangdong Province.'' *Library and Information Work* 59 (19): 68–74, 99.
Zhou, Jiemin. 2005. ''The Survey and Analysis on the Reading Situations of the Teenagers.'' *World of Library and Information in Primary and Middle Schools* 13 (1): 115–17.
Zhou, Yunmei, and Xiaoyan Xiong. 2009. ''Investigation Report of the Middle School Library in Jiangsu Province in 2009:A Report on the Investigation of Students' Questionnaire and Teachers' Questionnaire.'' *World of Library and Information in Primary and Middle Schools* 12 (5): 4–9.
Zhou, Qin. 2006. ''Reading Psychology and Reading Needs of Middle School Students-a Questionnaire Survey and Analysis of Professional Middle School Students.'' *World of Library and Information in Primary and Middle Schools* 14 (10): 37–39.

Appendix

Questionnaire on the Current State of Library Construction as Elementary and Junior High Schools in the Guangzhou Area

March 2015

Questionnaire No. Data Entry Clerk

Hello, this is _____, an interviewer from the research team entrusted by the Center for Educational Equipment at the Bureau of Education in Guangzhou. I am conducting a survey on the current state of library construction at elementary and junior high schools in Guangzhou area. This questionnaire is for research purposes only. All information provided will be held in the strictest confidence.

Thank you for your support and cooperation!

Executive Team for Investigation

General Information	
School Name	School Code
Start Data and Time	End Data and Time
Interview duration	Contact No.
Title of Interviewee	Interviewee Signature
	Interviewer Signature

A. School Overview

A1. Operating Body of the School

Municipal department of education	1 ☐
Prefecture department of education	2 ☐
Other prefecture departments	3 ☐
Private	4 ☐

A2. School Type

Elementary School	1 ☐
Junior High School	2 ☐
Senior High School	3 ☐
Nine-year School	4 ☐
Twelve-year School	5 ☐

A3. Student Boarding Options

All-boarding	1 ☐
Semi-boarding	2 ☐
Day School	3 ☐

A4. School Location

Yuexiu	1 ☐
Haizhu	2 ☐
Liwan	3 ☐
Tianhe	4 ☐
Huangpu	5 ☐
Panyu	6 ☐
Baiyun	7 ☐
Huadu	8 ☐
Nansha	9 ☐
Luogang	10 ☐
Conghua	11 ☐
Zengcheng	12 ☐

A5. No. of Classes are as follows: elementary School __;
Junior High School __; Senior High School __.

A6. Total Number of Teachers __.

A7. Total Number of Students __.

A8. Gross Expenditure on Educational Equipment in 2014: RMB (a variation of % compared to that in 2013) in which the financial investment of __ RMB accounts for % of the gross expenditure, and the amount of self-financing of RMB accounts for % of the gross expenditure.

A9. Total Fund on Educational Equipment in 2013: __ RMB. The book procurement fund is RMB, account for __ % of the total fund on educational equipment in 2013.

A10. Book Procurement Fund in 2014: __ RMB (accounting for % of the total fund on educational equipment in 2014) in which the procurement funds for paper books, journals and newspapers, and digital resources are RMB, RMB, and RMB, respectively.

A11. Frequency of Book Procurement at the library __ time/year.

D. State of Library Collection

D1. Total number of books collected: (book series, multi-volume books, etc are counted as one book). There are __ types of paper books and an average of __ copies for each type. The number of books available to each student is __ per person. There is __ GB of electronic books.

D2. Total number of new books purchased in 2014. Compared to 2013, more books are available to each student. Types of paper journals and newspapers subscribed in 2014 are __ and __, respectively.

D3. Distribution of various book categories:

	Marxism-Leninism	Social Sciences	Physiology	Natural Sciences	Comprehensive
Number of books for each category					
Percentage of total collection					

D4. Requirement for book borrowing/reading by students and teachers under certain budget constraint is: 1. Fully fulfilled ☐; 2. Mostly fulfilled ☐; 3. Uncertain ☐; 4. Mostly unsatisfied ☐; 5. Completely unsatisfied ☐.

D5. Do you think teachers and students could have all access to and borrow the latest excellent books from the library under current circumstances? 1. Absolutely ☐; 2. In most cases, yes ☐; 3. Uncertain ☐; 4. In most cases, no ☐; 5. Absolutely not ☐. (Question A)

D6. Under current conditions, whether the purchasing personnel have full knowledge of and accessibility to up-to-data quality read: 1. Absolutely ☐; 2. In most cases, yes ☐; 3. Uncertain ☐; 4. In most cases, no ☐; 5. Absolutely not ☐. (Question B)

E. Library Management and Reader services

E1. Is the library constantly expanding? 1. Yes ☐; 2. No ☐.

E2. Number of people holding a valid library card is __ people. In 2014, total number of library cards used in anyway are __ (account for % of all valid cards).

E3. Total circulation of various kinds of books and publications (both print and electronic) in 2014: (Note: total circulation refers to the total number of times the books are borrowed from the library. In the case where no books is borrowed multiple times, the total circulation should be calculated as per the actual number of times the book was borrowed.) Total circulation of books is __ times. The number of books borrowed per student in 2014 is __.

E4. Are the collections classified according to *Chinese Library Classification*?
1. Yes □; 2. No □.

E5. To your knowledge, how is the accuracy of library bibliographic data? (Note: accuracy of bibliographic data refers to the alignment of cataloging and classification data with the source of information per se and related specifications)
1. Almost all accurate □; 2. Mostly accurate □; 3. Uncertain □;
4. Few accurate □; 5. Very few accurate □.

E6. Stack room management takes the style of
1. Closed shelves; 2. Open shelves; 3. Half open shelves.

E7. Average number of days it takes to shelve new books: __.

E8. Average open hours during the academic semester are __ hrs/week. Average open hours during holidays are __ hrs/week (Note: write 0 if closed during holidays).

E9. Is the library open when there are no classes (noon, after school, weekends, and other national holidays)? 1. Yes □; 2. No □.

F. Others

F1. Reading activities held by the library throughout 2014:

	Name of reading activities	No. of participating students	Influence and Effect
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Not a single activity held in the entire year. □

F2. How attractive do you think large-scale reading activities such as master classes conducted by children's literature or junior writers are to the teachers and students?

Extremely attractive □; 2. Highly attractive□; 3. Uncertain □;
4. Moderately attractive □; 5. Not attractive □. (Question C)