Information Literacy Status of Chinese School Students under International Education Accreditation Requirements

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Abstract: *Information literacy ability is essential in today's networked society. Considering that the development of information literacy education started late in China, elementary and secondary schools have many gaps to fill. Fortunately, this phenomenon has been compensated in international schools, but this is an objective result under the concept of international education. From the perspective of the international school accreditation, this article summarizes the development of international education accreditation and information literacy cultivation in China, and introduces the aspects of information literacy from accreditation standards, requirements and processes of those high reputation international accreditation agencies and third-party associations; After comparing the current situation in Chinese public schools and specific cases of the international school libraries that had met the standards and been accredited might bring some enlightenment about information literacy education in Chinese public primary and secondary schools.*

Keywords: *international school accreditation; information literacy; library; primary and secondary school*

1. Definitions of International School and International School Accreditation in China

In the context of a global economy, Chinese and international education have collaborated more often than ever, and international schools (including the international department of public schools) have become an important piece in this puzzle. The obvious features of these international schools are adopting international curriculums, such as IB (International Baccalaureate), participating international education organizations to create a diversity culture, driven by market combined with ideological education philosophy and the needs of particular community [1]. In this context, schools are required to obtain relevant certifications from international agencies, invest in a structure of teachers and students that is multinational and multilingual, and provide English-based or bilingual courses.

The school accreditation system was created in the United States in the second half of the 19th century. With the continuous expansion of the number and scale of schools across the country, it has gradually formed a guide to conform to the certification standards after the development of the education field, self-assessment and on-site inspection as the process of certification system. Regarding the concept of school accreditation, Mo Jingqi believes that the school accreditation system is based on the particular philosophy, training goals and mutual standards recognized by the stakeholders of each school. The combination of a self-evaluation process and peer review can help schools to provide and assure education quality and promote the continuous improvement of school education. [2]

Table 1 Mainstream selection of international education accreditation agencies and associations

Full Name	Known as	Members in China
Western Association of Schools and Colleges	**WASC**	60
Council of International Schools	**CIS**	47
Association of China and Mongolia International Schools, China-Mongolia International Schools Association	**ACAMIS**	84 (including Hong Kong, Macao and Taiwan)
World-class Instructional Design and Assessment	**WIDA**	71
The world advanced education organization	**Cognia (formerly AdvanceED)**	119

Note: the data is collected from the released membership list of each institutions' official websites in 2022.1.

With the support of the central and local administrative department of the Ministry of Education of China, the accreditation system of international schools was implemented in China [3]. According to the report issued by Newschool Insight Media in 2018 [4], a specialized media dedicated to study international school's development in China, there are around 1,300 international schools in China, and some of them are very well known around the country. And six reputable associations are welcomed in China as Table 1.

2. Comparison of the development and status quo of information literacy standards of primary and secondary schools in China and America

According to the Student Information Literacy Standards jointly formulated by the American School Librarians Association and the Education Exchange Technology Association in 1998, the information literacy abilities of basic education students should meet three standards [5]:

1) The student who is information literate accesses information efficiently and effectively.

2) The student who is information literate evaluates information critically and competently.

3) The student who is information literate uses information accurately and creatively." (Information Literacy Standards 1998).

These abilities are significant for students when they first start having contact with outside information. Such skills can help them to develop their own way to search for the information they need and differ the sources that are reliable and the ones that are not.

In order to foment opportunities for students to develop these abilities, many American states have successively introduced information literacy capabilities and evaluation standards, and have effectively cooperated with universities and library industry associations to form a top-down guarantee and implementation system. The process was done in partnership with the American Association of School Librarians and Educational Communication Technology Association in 1998 and promoted the creation of a virtuous circle to boost the development of elementary and secondary education-universities-industry associations. The formulation of information literacy standards is closely integrated with the library industry associations. Information literacy has become one of the most important goals of library services and the future trends of these establishments. Elementary and middle school students have benefited a lot and got the chance to invest on their research capabilities because of this new way of promoting information literacy education.

Comparing the development of student information literacy skills in China, the main implementation targets of this new form of education are college students or those pursuing higher degree. In China , the unsatisfied existence varies in tertiary education with student's academic research needs, depend on the level of region economic development and the quality of education, the imbalance of information literacy education is obvious [6], not to mention the problems faced by information literacy education in primary and secondary schools.

In 2000, the Ministry of Education of the People's Republic of China published an official notice about popularizing information technology education in primary and secondary schools. The initiative required the adoption of positive measures to accelerate the construction of information technology courses that could meet the corresponding goals. [7] However, the document mentions that only primary and secondary schools should be able to access the Internet. Teachers and students of those schools should share online educational resources to improve the quality of education and teaching method. There were no relevant requirements established on how to properly use these online resources.

Regarding the requirements for primary and secondary school libraries, the second document published in 2015 "Opinion from Ministry of Education, Ministry of Culture, National Radio and Television Administration about Strengthening the Construction and Application of Primary and Secondary School Libraries in the New Era" mentioned: "We must use certain classes to cultivate students have the abilities of collecting, sorting, analyzing, and selecting information resources to improve their information literacy skill."[8] Still, in China, primary and secondary school libraries are mainly focused on providing reading-related services.

3. The role of libraries and information literacy requirements in reputable educational accreditation institutions

International schools in China have unique advantages when compared to the Chinese schools of the public education system: they adopt an international curriculum system, follow international evaluation standards and are private institutions. In order to demonstrate its good reputation and co-branding effect with accreditation or curriculum system, the introduction of international school accreditation system has become an important indicator of quality assurance and student recruitment in China. In order to meet the standard requirements of these accreditation institutions and associations, these schools have to work hard to improve the literacy skills of their students and obtain authoritative certification.

The requirements for libraries and information literacy skills in the standards of international education accreditation agencies, the relevant descriptions in the official websites and the documents mentioned by different education accreditation agencies are mentioned bellow.

The core concept of **WASC** is FOL --"Focus on Learning". Their official newsletter published in 2019 [9]- *WASC Focus on Learning Criteria Revisions: Information Literacy and Digital Citizenship* - emphasized that the information literacy ability of students should be cultivated to adapt to the influence of social media development and the environment based on rapid information access promoted in our modern society. The agency stresses that schools have the responsibility to teach students information literacy and technology-related courses. Taking the Finnish information literacy education as an example, the system illustrated the importance of using technology to read and evaluate information, and to distinguish the authenticity and accuracy of different types of data. WASC has improved the standards and indicators of information literacy, and hopes that students can establish the concepts and abilities of information literacy, so that students can: (i) evaluate the reliability of the information when selecting information sources before research; (ii) focus on understanding how information technology is today affect other people's awareness, including what to pay attention to when accessing content to keep academic integrity; (iii) maintain online safety; (iv) balance online technology application and face-to-face communication (2019). In other words, students can have the chance to obtain knowledge from the library, but this knowledge is not only limited to what is conveyed in textbooks. Other resources can also benefit the learners.

The Council of International Schools, also known as CIS, is one of the most well-known educational NGOs. The organization was created with the aim to provide high-quality international education and encourage the development of global citizens. In its official website, there are no specific regulations regarding the literacy ability on the certification standards. However, looking at the details of the introduction of the library on the website of its member schools in different regions, it was found that the establishment guarantees that students can learn independently and have space for reading and conducting academic research. The goal is to provide a space for students to work on their abilities and cultivate the interest of those who like to read and study, providing materials and suitable research assistance. For example, the Hannover International School in Germany, one typical member of CIS, regards its library as center for popularizing knowledge and learning, with and pleasant reading environment for teaching and studying. Beijing City International School claims that the library does not only provide a safe and delightful reading environment. It can be concluded that, the place is also seen as an academic research department based on the basic functions above.
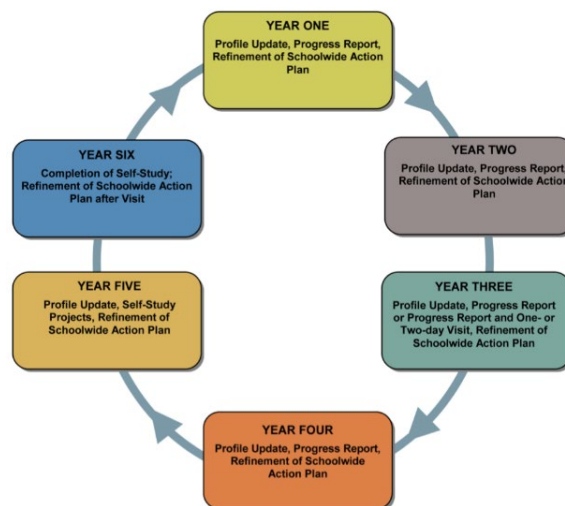
ACAMIS is a popular association that Chinese international schools seem to be looking forward to join, including the ones in Hong Kong, Macao and Taiwan. Unlike accreditation agencies, ACAMIS's admission requirements are already accredited by CIS, WASC, MSA, NEASC, or AdvancED (now Cognia) [10]. Recognition from the aforementioned agencies is a prerequisite to join this association and the selected members have to meet really high standards. Recently, ACAMIS issued a notice on a member unit meeting to discuss teaching methods, technology, design, and evaluation.[11] The event happened in 2020), the librarian has become one of the convened targets, and has joined the discussion as part of the teaching crew. In addition, the information literacy courses offered by the association are great opportunities for students might become true.

WIDA takes school teaching, growth and evaluation as its standard. From pre-school education to K12, WIDA is guided by the "*Can Do Philosophy*" and uses it to support students' language development research in Can Do Philosophy [12]. WIDA's design focuses on data-based decision support, which is undoubtedly closely related to the information literacy of students. In English learning, schools are required to provide students with professional materials and specialized teachers, e.g., literacy coaches in Can Do Booklet [13]. Librarians are undoubtedly the best choice for this role based on their experiences and extended classification knowledges.

Cognia was developed from AdvancED after 2019 and is now one of the world's largest education accreditation organization. Cognia has the largest number of Chinese members among the above-mentioned accreditation or third-party organizations. The institution has over 300 years of experience with historical development and provides its member schools with strong data research support, a broader global perspective, knowledge regarding development trends and other professional services. In its accreditation standard overview (APS-Schools-Overview), there are clear requirements for the field of data application. Cognia makes it clear that the use and distribution of data should be combined with and support the needs of the overall (school) systems and organization department. In this case, faculty and staff should be able to improve their knowledge and abilities related to student performance and achievements, and their skills should be developed based on the professional guidance of the school system itself. Digital materials and information resource materials can be attached to courses and other project implementations, and the school has to commit to provide teachers and students with information and demonstrate strategic data management capabilities, including long-term planning and the ability to use data to support the school's goals and directions. Based on the aforementioned standards of Cognia, it is evident that they consider acquisition, use and distribution of digital information and materials is the most basic educational function of the library. It is also a premise that libraries and librarians need to have strong information literacy capabilities. The library needs to be more closely integrated with the teaching department and be able to provide professional academic advice to other departments of the school. Since the end of 2019, under the influence of the COVID-19 pandemic, digital learning has also become a new focus of attention in the Cognia certification standards. Due to the changes brought be the virus outbreak, distance online education has become an important means to foment education. Under the reliance on face-to-face courses and teacher guidance, students have been forced to stay away from the school environment. It is important to consider that can be quite challenging to acquire learning materials, academic integrity, and information literacy while being separated from the normal educational environment. Students with the corresponding background knowledge will undoubtedly be able to adapt to the remote self-study environment more easily.

It can be seen from the standards of the above education accreditation agencies and associations. In order to absorb advanced international education concepts represented by Europe and the United States, and to integrate with its education system as the goal, China International School accepts and applies for the guidance of international education certification agencies to improve itself. It is important for library and students to improve their information literacy ability and reflect its role by finding a practical way meet the requirements.

4. International school Libraries participation and cases in the process of applying for international education accreditation

Note: ACS WASC (2017). "ACS WASC accreditation Cycle of Quality for Schools", Focus on Learning (international edition). Burlingame, 16.

Figure 1 ACS WASC Accreditation cycle of quality (five or six years)

Certification agencies naturally require member schools to meet the standards imposed by them, and also prevent member schools from "cramming preparation" just for temporary task achievement. This is a way to ensure the continuity of the implementation process of their member schools. Periodic inspections also play an important role in this process. Taking WASC certification as an example, it is necessary to follow each specific step since the very beginning. Schools have to file a request and go through qualification reviewing, application, investigation, self-assessment, specialist group inspection, certification decision, and later follow-up procedures [14]. The whole process can last from five to six years. As in Figure 1[15] shows, during and after one cycle, schools that meet the criteria will be announced as candidates or accredited.

Some of the specific aspects of the certification process of a library regard the features of the establishment that makes it a teaching and learning supporting department. Many certification processes also pay attention to how each library conducts its work and looks at aspects such as layout, course auditing, and material reading during the inspection.

Therefore, to meet the requirements of the certification information literacy standards, the library needs to provide corresponding services in a real way to prevent falsification documents and to avoid teachers and students of the school from getting contradictory answers during random interviews. To keep the whole process objective and effective, the library's information literacy capabilities have to be divided according to the goals of the establishment and should be implemented daily via normal activities, e.g., library literacy courses and material providing. These services are meant to attract students and encourage participation. It is also important to work on collaborating with other departments that can truly benefit the learning process of students, so as to form a virtuous circle of improvement for the next certification cycle.

The homepage of the Beijing Royal School Library website (library.brs.edu.cn) displays its goals and main philosophy and provides reading recommendations, library-related courses, e-journals, e-book database services and other academic services. The official library website of Keystone School (keystoneacademy-cn.libguides.com) is more detailed, and there are corresponding online learning guides from elementary and middle school to high school to help students that are learning online. The school divides the library into three different levels dedicated for elementary school, junior high school and high school to better serve all the students. In order to meet the needs of students for specific materials for their classes or for their academic research, junior high schools and high schools provide full-time Chinese and English librarians with corresponding professional introduction and contact information.

Under the cross-requirements of the international school's curriculum system, the IBDP curriculum requires students to complete an Extended Essay to obtain their high school diploma, based on the academic support they got from their assigned library. Competence and research service levels are undoubtedly stronger than those of international schools without certification, not to mention the corresponding services in public Chinese schools.

Generally speaking, under the supervision of accreditation agencies the trend of international school libraries service is more individualized, and students are encouraged to conduct independent research and study by themselves acquiring some basic knowledge.

5. Learning outcomes of Chinese students from international schools and public schools under different educational system

According to the numbers of the International Baccalaureate Organization (IBO) official website, there are 248 IB schools in China, and about 18% of international schools with over half million students choose IB as their standard educational curriculum[16]. This means that, in China, there is a considerable number of students under IB education, with knowledgeable, open-minded, reflective and fast-thinking profiles. Nevertheless, AP and A-level students may be more willing to develop their information literacy skills because they know they will need them to complete research assignments in university. So, it's safe to say that, because of the assessment requirements of the accreditation system, students are encouraged by international schools to inquire and research during their early school years, before entering the college life.

As a result, Chinese students in international schools may have better cognitive abilities and tend to be more flexible. Yu analyze the reason of this phenomenon and explained that this difference happens because of the diversity of curricula, facilities and family backgrounds. Her results were based in 48 questionnaires applied to Grade 10 students of one international school and one public school in

Guangzhou [17].

Knowledge acquisition is catalyzed by students' cognitive skills boosted by substantial positive correlations with achievement test scores and may influence long-term success [18]. It is evident that students will benefit from increasing their cognitive skills since they can adapt to more flexible environments and requirements, which is different than the reality of many standard schools in China.

6. Conclusion

The rich method of acquisition, the huge amount of information, and the difficulty of authenticating data are unprecedented faced by all people. The scenario in the United States - that has already invested on information literacy education for a long time – has proved that an active creative mind and scientific contribution abilities have a long-term effect on education. This context once again proves that, when it comes to international advanced education, cultivating students' information literacy abilities can not only improve their learning skills, but also cultivate their abilities to evaluate reliability resources and conduct basic academic research.

Because of accreditation standards, some international schools are forced to become leaders in information literacy education under the guidance of international education certification agencies. It might be a good idea for the future to invest on setting up the courses that could improve students' literacy skills so they can better meet some specific requirements. The Chinese curriculum needs to go through a reform to better provide quality-oriented education that, when combined with the relevant experiences of international education and accreditation agencies, can improve the way Chinese students learn.

References

[1] Hayden, M., & Thompson, J. (1995). International Schools and International Education: A Relationship Reviewed. Oxford Review of Education, 21(3), 327–345. http://www.jstor. org/stable/ 1050876

[2] Mo Jingqi (2015). Accreditation of International School: Philosophy and Methods , People's Education Press. 18.

[3] Mo Jingqi (2015). Accreditation of International School: Philosophy and Methods , People's Education Press. 21.

[4] Newschool Insight Media (2018). Report of International School Development in China 2018. China Reference & Exhibition. 28-48.

[5] American Association of School Librarians and Association for Educational Communications and Technology (1998), information literacy standard for student learning: standards and indicators Retrieved 2021-02-05, from https://www.ala.org/ala/aasl/aaslproftools/informationpower/ Information LiteracyStandards_final.pdf

[6] Huang Lei (2015). A Review of the Research and Practice on the Domestic Information Literacy Education in the Last Two Decades. Library Journal，2015(3): 16- 22. DOI: 10.13663/j.cnki.lj. 2015.03.003

[7] Ministry of Education of People's Republic of China (2000). Notice about Popularizing Information Technology Education in Primary and Secondary Schools from Education Ministry. Retrieved 2021-04-05, from http://www.moe.gov.cn/s78/A06/jcys_ left/zc_jyzb/201001/t20100128_82088.html

[8] Ministry of Education, Ministry of Culture, National Radio and Television Administration (2015). Opinion from Ministry of Education, Ministry of Culture, National Radio and Television Administration about Strengthening the Construction and Application of Primary and Secondary School Libraries in the New Era. http://www.moe.gov.cn/srcsite/A06/jcys_jyzb/201505/t20150520_189496.html. 2021-04-05

[9] Western Association of Schools and Colleges. ACS WASC. Retrieved 2021-04-05, from https://www.acswasc.org/fall-2019-international-newsletter/

[10] ACAMIS (2020). Junzi: On Knowing and Doing Chinese Conference , June 25-26, 2021 at Canadian International School of Guangzhou. Retrieved 2021-02-05, from https://www. acamis.org /professional-development/chinese-conference

[11] Advance Education, Inc (2020). APS-Schools-Overview: AdvancED Performance Standards. Retrieved 2021-02-05, from https://www.cognia.org/wp-content/uploads/2020/05/APS-Schools-Overview.pdf

[12] Board of Regents of the University of Wisconsin System (2019). Can Do Philosophy. [EB/OL].

Retrieved 2021-02-05, from https://wida.wisc.edu/resources/can-do-philosophy.

[13] Board of Regents of the University of Wisconsin System (2012). The WIDA English Language Learner Can Do Booklet, Grades 9-12. Retrieved 2021-02-05, from https://wida.wisc.edu/resources/can-do-booklet-grades-9-12

[14] Mo Jingqi (2015). Accreditation of International School: Philosophy and Methods , People's Education Press. 115-123.

[15] ACS WASC (2017). "ACS WASC accreditation Cycle of Quality for Schools", Focus on Learning (International Edition). Burlingame, 16.

[16] Newschool Insight Media (2016). Chapter 2. Report of International School Development in China 2016. China Reference & Exhibition. 7.

[17] Yu Mijun (2014). Comparison of Students Cognitive Flexibility from International School and Public School in China. New curriculum (middle), 2014 (04). 154-155.

[18] Finn, A., Kraft, M., West, M., Leonard, J., Bish, C., Martin, R., Gabrieli, J. (2014). Cognitive Skills, Student Achievement Tests, and Schools. Psychological Science, 25(3), 736-744. Retrieved May 18, 2021, from http://www.jstor.org/stable/24540134