Analysis of Children's Maker Education in Public Libraries

Yu Yongli

Shandong Sports Institute, Rizhao City, Shandong Province, 276826, China

Abstract: Against the background of the rapid development of digital reading, children's maker education in public libraries is an important extension and extension of library reading promotion. At present, there is still a certain distance between the education of children's makers in public libraries in China and the developed countries abroad. In view of the shortage of children's makers in public libraries in China, the advanced experience of foreign children's libraries provides us with many references Experience, in order to improve the level of children's maker education in contemporary public libraries, extend the content of library services, through questionnaire surveys and case analysis, analyze the current status of children's maker education in public libraries in China, and point out that space construction and funding preparations are inadequate and work Insufficiency of professional qualities of personnel, insufficient practice of educational activities, etc., put forward a series of measures and suggestions to strengthen joint education, strengthen professional team building, and enrich educational content.

1. Introduction

With the widespread application of network technology and multimedia technology, the social status of libraries, especially public libraries, has been seriously challenged. In order to attract readers, public libraries gradually changed the service concept, expanded the scope of services, took children as the main service objects of public libraries, and strengthened the relevant service content and service depth. Each library put "inspire the imagination and creativity of children and young people, etc." As an important mission, provides children's maker education to stimulate and nurture children's interest and hobbies in science. Comprehensive maker culture and education derives maker education. Based on student interest, with the help of digital tools and through project learning, it actively cultivates students' interdisciplinary problem-solving ability, innovation ability and team collaboration ability. Comprehensive quality education. Children's libraries provide ways to build maker space, promote digital reading, and participate in early education, and provide a diversified service model. We can integrate the advanced experience of Chinese and foreign children's libraries, analyze and explore successful cases, and spur children's books. Library staff develop new thinking, provide new resources, and launch new education.

2. Problems Faced by Children's Maker Education in Public Libraries

Foreign children's libraries have accumulated a lot of practical experience in service innovation, which is worth learning and learning from other children's libraries in China. Children's maker education in public libraries has been absorbed by the domestic library community, and the services they have developed have achieved certain results, but it is undeniable Yes, there are still problems such as insufficient space construction and insufficient capital preparation, insufficient professional quality of personnel, and insufficient practice of educational activities at this stage.

2.1 Insufficient Space Construction and Funding Preparation

Library space has increasingly become a bottleneck for library development. Maker education requires independent space, but many public library children's maker education is in the construction stage, failing to take into account the needs of maker education , leading to subsequent children's education Optimal design and renovation of the library requires a lot of financial support,

so it limits the smooth progress of various tasks to the greatest extent. At the same time, the current development of library maker education is faced with a large funding gap. It is also not to be ignored. It is impossible to obtain financial support in a timely manner, coupled with the restriction of procurement policies, which affects the construction of maker education space and fundraising. Only by paying a large amount of funds can the library optimize and renovate the existing space. The lack of sufficient development funds and the inability to obtain corresponding financial support in a timely manner are the key factors that make it difficult for library Maker Education services to be implemented.

2.2 The Professionalism of the Staff is Not Enough

If the library wants to complete the Maker Education project, the entire process requires the comprehensive quality of professionals to cooperate. But in fact, the librarian's Maker education experience is very scarce. The development of Maker Education requires the support of professional human resources and is responsible for various tasks such as project identification and activities. Most of the existing librarians have not received maker education. Even if librarians are interested, if they want to achieve professional standards, they need to accumulate after a long period of training. The existing library human resources quality level is difficult to support the development of maker services. It is difficult for professionals to gather for a long time, which also restricts the overall development of domestic maker education. If the city has strong economic strength, it means that its Maker Group is stronger, and the library can choose more Maker Education Carriers.

2.3 Insufficient Practice of Educational Activities

From the actual situation of the current public libraries, most of the hosting and promotion of maker education activities are carried out by social education institutions. Social institutions want to study teaching methods, develop teaching software and design courses, it takes a long time to develop. Generally, if public libraries and social institutions cooperate, the public welfare courses can only open some shallower courses. Although they can get some help, the knowledge of some Maker education courses in social institutions is open and can promote Social institutions open up markets in a timely manner.

3. To Strengthen the Strategy Research of Children's Maker Education in Public Libraries

In view of the problems in the source of education, professional literacy, educational activities, and space construction of public library education in domestic and foreign public libraries, drawing on the advanced experience of foreign Maker education and combining the characteristics of children's groups, this article believes that the following Several aspects to strengthen the education of children's maker.

3.1 Strengthen Joint Education to Solve the Problem of Space Cost

Firstly, define the cooperation methods of public libraries. The public library carries out children's maker education, because it is a model of cooperation and win-win, which requires the joint participation of internal and external forces. Therefore, in the promotion of joint education, we must first clarify the cooperation method. From the perspective of cooperation methods, there are inter-library cooperation, internal cooperation, and cooperation between institutions and educational organizations. Second, strengthen inter-library cooperation. Due to regional differences and funding issues, inter-library cooperation is a common practice for children's maker-cooperative education, through cooperation and sharing with teachers in areas, universities, and primary and secondary libraries in terms of teachers and equipment. Under normal circumstances, the equipment owner can provide the venue, and the teacher owner can provide the teacher, and then the joint educational activities are constructed to achieve the effect of complementing the shortcomings; the site owner can also build together with the teacher and the equipment owner. Third, strengthen the depth and breadth of cooperation. In order to carry out the education of children's makers in public libraries, the most important thing is the strong faculty and sufficient equipment resources. Under a

reasonable cooperation model, the common library obtains important resources by taking what it needs and reduces the cost of activities. For example, the public library children's maker education cooperates with the maker organization to provide a technology incubation place for the maker's organization, and the funds for the public library children's maker education activities can be realized using the economic benefits formed by the incubation results; and The school cooperates to attract more children to the public library, and collaborates on the children's maker education project in the library in the form of library volunteers or assistant tutors.

3.2 Strengthen Professional Team Building and Improve Personnel Quality

At present, many public libraries in China have begun to attach importance to the construction of teachers in the library. Through the "librarian + volunteer" model, measures have been taken to encourage librarians to strengthen academic research to meet the increasingly diverse educational needs of children's makers in public libraries.

Firstly, enhance the professionalism of the teaching staff. The literacy of children's maker education teachers in public libraries focuses on "consciousness, knowledge and skills", that is, professionalism, professional knowledge and professional skills. Specifically, it is to build a STEAM interdisciplinary integrated knowledge system, master pedagogy, psychology, educational psychology and other professional knowledge, and form a general knowledge diversified knowledge structure system; possess Maker space facilities maintenance skills and be familiar with Makers Curriculum development and information technology application, with the ability to continuously innovate education and teaching capabilities; to have innovation, design thinking, practice sharing awareness, establish team awareness, and improve the professional spirit system. At the same time, public libraries can provide teacher protection for Maker Education, and establish a Maker Education Expert Database with provinces and cities as units to promote the sharing of local teachers. In public library children's Maker Education curriculum design and talent training, Provide guidance and guidance for library maker education teachers; strengthen cooperation with universities and professional curriculum research and development teams, and use children's libraries as educational bases to build a talent training and practice base to ensure public library children's maker education teachers The stability of the team. Second, form a volunteer team. Regarding the construction of the Maker Education Volunteer Team, one method is to recruit volunteers who already have the skills of the Maker Education Project, and the other method is to recruit volunteers who are preparatory mentor volunteers, who do not have the project skills. Among them, the recruitment of volunteers who already have professional skills should mainly be recruited from colleges and Maker education organizations. It is necessary for the library to start the outreach mechanism and establish benign linkage and collaboration with universities and Maker education organizations.

3.3 Enrich Educational Content and Increase Educational Activities

Firstly, stay close to real life. From the perspective of children's libraries for young people, it is rare for them to actively contact and participate in the Maker Education activities of the library. Under the influence of traditional educational ideas and concepts, young children have not developed the habit of active learning for learning and reading. Therefore, children's libraries need to use works display, live demonstrations, etc. to let young children fully understand the courses and contents of Maker Education, and then choose the courses they like to participate. The content of the course is not limited to the traditional form of graphic posters, but is displayed in various intuitive ways, which greatly improves the expectations of children for Maker courses. At the same time, schools and parents need to further change the concept and understanding of the children's library maker workshop, and promote it through TV advertisements, Internet self-media, etc. to improve children's creativity and imagination. Second, innovate themed content. Regular Makerspace experience exchange seminars, mainly Makerspace staff from all over the country, share and exchange their experience and service experience on Maker education, and encourage librarians to innovate and create activities, and strive to absorb Maker education concepts and methods with extremely high sense of innovation. Third, strengthen the use of new media. The

children's library of our country has very rich collection resources, and the content involved includes many natural subjects. Online platforms such as learning and reading are also in place, including digital resource browsing, online event participation, and offline event notices, etc., laying a good platform for communication and sharing. Carrying out offline activities can actively promote digital reading, so as to obtain the effects displayed by various brands and maximize social benefits.

The creation and operation of children's maker education in public libraries is a concentrated manifestation of the public welfare of public libraries. At the same time, it is a useful exploration under the trend of "public entrepreneurship and innovation". Infiltrating the maker space into the education of children and children, providing children with a free and encouraging environment to encourage innovation, expanding the social performance of public libraries, and achieving a great improvement in their social benefits. Therefore, the public library should completely transform the traditional concept of "tallness", and under the premise of its own conditions, around the exploration consciousness and innovative spirit of children, combined with the interests and hobbies of children, based on the children's desire to realize themselves It is urgently expected to actively extend in the field of maker education, give full play to the educational functions of the library, and contribute to the strength of the library for the cultivation of high-quality and comprehensive talents.

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