

Reconstruction of College Library Video Databases in China

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Abstract

At present, the rapid development of internet technology is altering the habits of students and teachers continuously. The famous MOOC system has been introduced by many universities, the educational administration department asks the students to adapt the new teaching pattern anyway, on the other hand, the incredible high speed of downing becomes common, the 5G era is coming now. Besides the elementary function of college library, the reader services would hold the new content, in this paper, a series of advices are proposed to suit the new modern environment. They will improve and benefit the practice of the MOOC system, in addition, some regulations should be applied to construct video databases, which was useful for scholarly communication, science popularization and so on.

Keywords

Reader Services; MOOC; Scholarly Communication; Science Popularization.

1. INTRODUCTION

Recent years, IT has made massive progress, the common library functions should be tuned or modified, some of them may be reconstructed to meet the requirements of the new era. For examples, in order to improve the reader services of college libraries, many papers have been contributed to by the library researchers and experts [1-3]. In this paper, only influences on the college libraries are discussed. The main body of universities comes from the students and the teachers. The 4G era has changed their life and study dramatically, people buy something via mobile payment, it brings the convenience of the life. Acquisition of knowledge can be done well by a smartphone anywhere, the workspace of college libraries is enlarged unlimitedly, it profits naturally from a large quantity of contributions of librarians and researchers [4-6]. However, the 5G era has been coming in 2019 [7], the ministry of industry and information technology of the people's republic of china has awarded the 5G business license to the four major network communicators in china, it means the 5G smartphones will occupy the market and enter every family and campus. The most differences between 5G and 4G lie in the downloading speed, the former is hundredfold than the later in theory, in fact, the actual test result shows the 5G has twenty times downloading speed than that of the 4G [8]. For instance, a 4K high quality video file on the website would provide more better watching experiences by the 5G. It infers that the ratio of video stuffs and media in library collections will arise, the reason is that the knowledge in a high-quality video clip is more easily understood for students than traditional paper document.

2. CONSTRUCTION OF VIDEO DATABASES

Nowadays, people may acquire knowledges via the high-speed internet, especially by smartphones of 5G or 4G, in fact, this becomes the most common ways. The video materials for students and teachers should be with high-definition file format, the lowest limit is 720p, the

perfect is 1080p and 4k. All the databases of video collections must have the index keyword for the quick search query. It will provide users good experiences of reader services.

2.1. Science Popularization

Science popularization is one of the most important functions for a college library. It will open views of the readers widely for every aspect of science and its development. The interesting and curiosity are usually stimulated and evoked, it makes students love science and study, create a good atmosphere of learning on campus. The video collections are more convenient and vivid than conventional books for students, so it is very important to enhance the function module in library services.

The video materials of science popularization always come from two cases. The first, the university often invite some famous scientists or professor to make science report, which is always easy to understand but interesting, and refers to various research field. The library and other department must record the whole report scenario by the advanced equipment, including 4K recording and playing, webcasting and so on.

The live broadcasting of a science report is necessary and important. Before the report, a notification should be put on the college net and public internet web. People outside the campus may concern and watch on time via the webcasting. The students and teachers nearby the campus may come to the report site to get a closer look at the scientist, while some of them may watch it at the lawn, playground and dormitory because of the site restrictions, of course, many drinking a cup of tea or coffee at home. On the one hand, the number of concurrent users of the live broadcasting is tremendous, it will promote popularity and prestige of the university, on the other hand, it meets the social needs of science popularization.

The report process should be recorded by the 4K equipment. One knows the general live broadcasting does not record the video clips, however, the science report has the properties: short, interesting, highly valued, easily classified, the famous reporter and so on, while many of students and teachers are in class and can't take part in the report, they need watch it later on free time. The most important reason is the college library needs to collect the videos to construct video databases, which can be retrieved by the keywords such as science popularization, the name of reporter or scientist, the title of the report, the report time and place and so on. The college library and network administration center must be responsible for the normal work together, the continually accumulated video collections will provide preferable reader services.

Finally, the common open video clips for science popularization may be collected by the special librarians, such as all sorts of award ceremony of science, including the Nobel prize, Fields Medal and so on.

2.2. Scholarly Communication

The college library has played an important role on the scholarly communication. The science research level is one of the most important factors for the ranking of the universities. The scholarly communication is always paid more attention to by the administrators. Besides the downloading or reading online for the papers of journals, there are two ordinary ways for the scholarly communication, academic exchange conference and academic report.

First, we discuss the international or domestic academic exchange conference which is held in the university. The organizing committee is always consisted of the specific professional college and responsible professor and his research group, they will take charge of the progress of the meeting and something about meeting papers, including the submission, sending to referees and publication. However, we emphasize here, the organizing committee must own the participation of the network administration center and library of the university. The former brings their 4K recording and internet equipment and is in charge of the recording with high

definition and smooth live broadcasting of whole meeting process, the later collects all the video clips of the meeting into the databases, which were designed in advance and should be connected to the OPAC (On-line Public Access Catalogue) system of the library [9], it will provide students and teachers online watching the whole meeting process after the meeting, while all the electronic papers of the meeting are listed and available for download on the website of the library. The number of watching and downloading should be seen on the web for the heat assessment of the meeting.

Second, the college invites some famous professors and scientists for the professional report, the reporters come from other universities. The strong professionalism makes the listeners fewer, the academic report has narrow and limited scope of interested parties. In general, the report is held at a classroom or small lecture hall, it does not need to webcast, in most cases, the report process is not recorded even more. In common, we realize that it is to save the funds. However, a smartphone is always used to record 4K video clips for hours, while it is easy to carry on a webcasting task via the famous broadcasting platforms such as Douyu, Huya and so on [10]. The task may be carried by the department of the sponsor, like that of the academic exchange conference, the department is responsible for handing over the video clips to the college library with detailed documentations, the library accomplishes the subsequent work. If we do it according to the above stipulation, all the reports with video clips are collected and classified into the video databases, and can provide the readers the convenience for their interested stuffs on the net, it will enhance the reader services. On the other hand, the video clips will be checked by the readers, if the content satisfies the readers, they will gain more 'like', the report of the sponsor will be more cautious for inviting the specialists, the content of the reports will become more and more interesting and beneficial.

2.3. MOOC and Library

Massive open online courses (MOOC) is prevailing all over the world, a large-scale network of open courses. It is composed of many individuals and institutions who are willing to share and collaborate in order to enhance the learning of knowledge. In 2012, the top ten universities of America begin to set up the net platform of study, the presented courses are free, the three famous providers are Coursera, Udacity and edX, which give the students chances to study free and systematically, more and more universities take part in these famous platforms, the MOOC has made a great progress in the world soon. For instance, there are hundreds of courses in Coursera platform, 5.65 million students have registered online. In 2013, MOOC has entered into china and flourished rapidly, twelves famous universities in china such as Beijing University, Tsinghua University, Fudan University and Shanghai Jiao Tong University have taken part in MOOC. MOOC produces a deep effect on the higher education in china. On 9 April 2019, the meeting of china MOOC has held in Beijing. The leaders of universities in china have paid more attention to MOOC. MOOC brings the reform in higher education, then as librarians, how we do to conform to MOOC and serve better for students and teachers [11] ?

In china, the platform of China MOOC [12] has provide one thousand six hundred and seventy free classes for learners, the MOOC of china universities [13] has 4.48 million students and teachers registered, the platform consists of 461 cooperative universities. The website of library should give the link of all the MOOC platforms including that of exotic and domestic. The keynote is to track record every registered student the detailed cases of MOOC study. The Statistic data for MOOC is very important for dean's office manager to analyse and give the good advices for the MOOC learners. The reason is as follows, the learners must take personal responsibility, as contact with teaching staff is highly restricted. In order to complete their courses successfully, learners must effectively master digital tools, reasonably manage their time and continuously motivate themselves. Thus, the requirements for participation are high and can't be fulfilled by

all participants. Accordingly, there is a high probability that many participants will not successfully complete their courses.

For the MOOCs made by our teachers, leading by the school leadership, the library should construct a ranking system for every MOOC, including the register number, the degree of accomplishment of the learners. To design a net message board system and provide convenience for teachers to improve their MOOCs. Of course, with the development of MOOC in higher education, library will initiate more functions for application of MOOC.

3. CONCLUSION

The high speed of internet and prevailing of smartphone with 5G bring the readers massive changes, one of traditional collections, the video materials and media with high definition become more and more important, this is a sign of contemporary libraries. Scholarly communication and science popularization in campus need the construction of video databases, even more, the online webcasting with high definition should be provided, because it will extract many interested readers into the live broadcasting, just like going to the report site, the limited space of the library is enlarged unlimitedly, in addition, the readers is not confined to the students and teachers within the campus. Scholarly communication and science popularization are only the examples presented in the paper; others should follow them. MOOC makes the library do some work to enhance and retain the effect on the education reform. Besides posting all the link of the MOOC platforms on the library web site, the most keynote is for the MOOCs made by the teachers of the campus, the library should construct the MOOC video databases, track every student registered in the university and record the progress of his MOOC study, the Statistic data not only provides the information to leaders of the university to make effective policies, but also for a ranking system to encourage a MOOC teacher to improve his course. The work of library for MOOC may be include more content with the development of the MOOC.

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