



Student Deep Participation in Library Work: A Chinese Academic Library's Experience



Lifeng Han ^a, Yuan Wang ^a, Lili Luo ^{b,*}

^a Tsinghua University Library, No. 1, Qinghuayuan, Haidian District, Beijing 100084, China

^b School of Library and Information Science, San Jose State University, One Washington Square, San Jose, CA 9519-0029, USA

ARTICLE INFO

Article history:

Received 25 April 2014

Accepted 17 June 2014

Available online 8 July 2014

Keywords:

User participation

Student deep participation

Academic library

ABSTRACT

Student deep participation in library work allows students to actively participate in library operation and become deeply involved in library service and program development. There are usually two levels of deep participation: level I refers to the employment of student assistants in different areas of library routine work, ranging from shelving to IT support; and level II refers to the engagement of students as library partners or collaborators, working with librarians to complete independent project. Sharing Tsinghua University Library's experiences, we provide a holistic view of how the two levels of student deep participation are implemented at an academic library, with a focus on level II. We seek to generate a thorough understanding of the practices and benefits of student deep participation, and encourage academic libraries to create more opportunities to deeply involve students in library work, and to ultimately demonstrate the value and relevance of the library to the campus community.

© 2014 Elsevier Inc. All rights reserved.

INTRODUCTION

Academic libraries have a well-established tradition of involving students in library work. Student participation usually falls under two categories—shallow participation and deep participation. Shallow participation indicates that students' role is library users, and their involvement in library work is rather superficial and minimal, where they participate in librarian-led studies and offer input that could help the library improve its collections/services/programs. In deep participation, students are no longer merely library users; instead, they are active participants in library operation. A common deep participation practice is the employment of student assistants in different areas of library work, ranging from shelving to IT support. Recently, a new form of student deep participation is emerging where students become library partners or collaborators on particular projects, and work with librarians in developing and implementing library services and programs.

In this paper, we present an in-depth discussion of a Chinese academic library's experience in engaging students in deep participation in library work. The discussion includes an overview of routine-work based participation where students are involved in the day-to-day operation as library assistants, and then focuses on two project-based scenarios where students collaborate with librarians on innovative library marketing and research support projects. The collaborative projects allow the library to integrate library service with teaching

and learning, and create opportunities for students to enhance their academic experience. Bennett (2009) opined that librarians should be more like educators rather than service providers, and it is our goal to contribute more to the university's educational mission by facilitating student learning through their deep participation in library projects.

LITERATURE REVIEW

Student involvement or participation is frequently discussed in the field of education, referring to the quantity and quality of the physical and psychological energy that students invest in the college experience (Astin, 1984). In the business literature, Brodie, Hollebeek, Jurić, and Ilić (2011) define “involvement” and “participation” to be viewed as customer engagement antecedents, based on the existence of a customer's interactive, co-creative experiences with a specific engagement object (e.g., a brand). In this literature review, we focus on the examination of “participation”, including both participation theories and typologies, and student participation in library work.

PARTICIPATION THEORIES AND TYPOLOGIES

The ladder theory of citizen participation proposed by Arnstein (1969) includes three levels and eight rungs: (1) nonparticipation (manipulation, therapy); (2) tokenism (informing, consultation, and placation) and (3) citizen power (partnership, delegated power, and citizen control). To evaluate the degree of participatory activities, Daigneault and Jacob (2009) suggested three areas for investigation: control of the process, stakeholder diversity and extent of involvement. Harder,

* Corresponding author. Tel.: +1 408 537 3520; fax: +1 408 924 2476.
E-mail address: lili.luo@sjsu.edu (L. Luo).

Burford, and Hoover (2013) renamed these three areas as depth, breadth and scope respectively, and put forward a fourth dimension “output” to evaluate participation impact and output content. Cornwall and Jewkes (1995) viewed participation as points on two scales—from “shallow” to “deep” on the depth scale, and from “narrow” (few participants) to “broad” (many participants) on the scope scale. Wals and Jickling (2009) pointed out that in their study of youth education and sustainable development, shallow participation refers to “superficial, obligatory, detached, false, cosmetic and strategic”, whereas, deep participation tends to “real, intrinsic, involved, genuine and meaningful”. Another typology of participation degree was proposed by Claycomb, Lengnick-Hall, and Inks (2001), and three vertical levels of customer participation were identified—low, moderate and high. Level “low” indicates that customers’ involvement is limited to mere physical presence or attendance, and the organization is responsible for developing and providing all the services. Level “moderate” indicates that customers act as a consultant, quality inspector and reporter to the organization. Level “high” indicates that customers work in partnership with the service organization, where customers can be regarded as co-producers, co-creators or partial employees who contribute time and effort or other resources.

In this study, we decided to draw upon the depth scale of participation discussed by Cornwall and Jewkes (1995) and Wals and Jickling (2009) because they provided a vertical view of participation on a continuous spectrum. We propose a three-level typology to characterize student participation in the work of academic libraries.

- (1) Shallow participation. Students as users—students participate in librarian-led studies (e.g. survey questionnaires, focus group interviews, usability studies) and provide input from the user perspective to help the library improve services/collections/programs.
- (2) Deep participation level I. Students as partial employees—students work with librarians as assistants, sharing librarians’ day-to-day workload.
- (3) Deep participation level II. Students as collaborators and co-creators—students, with special expertise, collaborate with librarians in the development and implementation of library services/collections/programs.

STUDENT PARTICIPATION IN LIBRARY WORK

The literature is abundant with evidence of student shallow participation, where they offer input in library studies from the user perspective. As for deep participation level I, numerous studies have discussed students’ participation as assistants in routine activities (White, 1985; Hasty, 2001; Foley, 2004; Reeg-Steidinger, Madland, & Hagness, 2005; Maxey-Harris, Cross, & McFarland, 2010). Traditionally, students are employed as shelving assistants or in clerical roles (Black, 1995). Now their assistant work has expanded to other library departments, including but not limited to IT, reference, and cataloging. For instance, Royal College of Surgeons in Ireland Library employed students as IT and Library Monitors to help with queries related to IT and the use of e-resources. Student computer assistants that require above-average computer and communication skills were hired in Butler Library (Foley, 2004). Student Advisors at Huddersfield University Library in

England helped with publicity, surveys, and answering basic directional queries. Lincoln University employed PALs (Peer Assisted Learning) who promote services and resources to fellow students. Similarly, the University of Connecticut Library employed library student ambassadors to promote a specific online database to their fellow students (Betz, Brown, Barberi, & Langendorfer, 2009).

The literature on deep participation level II is rather scant. An extensive literature search only resulted in two articles (Saines, 2011; Martin, 2012). Saines (2011) reported a case where the Ohio University Libraries created short videos about library services for the university’s Freshman Year Experience classes. Librarians collaborated with a film student in the video production process. Martin (2012) described a streaming video communication effort developed at the California State University, Northridge Oviatt Library to reach out to campus faculty. The videos were accessible on YouTube and the library’s website, aiming at promoting new and existing library resources and services. Two library staff members, a librarian and a Cinema and Television Arts student joined forces to produce the videos with support from other campus departments.

However, in both articles, the focus was the descriptive process of the project, and collaborating with students was merely mentioned as part of the process without much detail. Meanwhile, students’ role in the two collaborative projects was primarily to technically execute librarians’ ideas in the video production and they did not contribute to the development of content.

Although these two articles show that libraries are seeking new ways to engage with students as partners and collaborators (Walton, 2010), particularly in the development of innovative services such as video marketing, more research is needed to examine students’ participation in the collaborative efforts and to understand how both libraries and students benefit from them. Scupola and Nicolajsen (2010) are one of the few authors who explore the students’ role in innovation services in academic libraries. They state that the importance of involving customers in service innovation and development has been a popular theme of business innovation literature over the last decade. Yet, based on an analysis of Roskilde University Library (RUB) in Denmark where the authors work, they find that RUB involves students in service innovations in a limited way and lacks a systematic approach to student involvement in the management perspective. This is another testament to the need for more empirical studies on student deep participation in library work, and particularly, in library service innovation. We hope to address this need by sharing students’ deep participation experience at Tsinghua University Library.

STUDENT DEEP PARTICIPATION LEVEL I.

Tsinghua University Library has a long history of engaging students to participate in library day-to-day work. As early as 1921, among the 14 staff members at the Library, three were student assistants. Currently, both undergraduate and graduate students participate in a wide range of library work. As shown in Table 1, they have varying titles and job responsibilities.

Students participating in routine library work are considered library part-time employees, and their regular assistive contribution is deemed as deep participation because it is “real, intrinsic, involved, genuine and meaningful” as defined by Wals and Jickling (2009). Their participation

Table 1
Student deep participation level I

Categories of students	Title	Job description	Total number/working hours
Undergraduate students	Work-study team members	Shelving books	270 students/no longer than 8 hours per week per person
Graduate students (master’s and doctoral students)	Teaching Assistants, Research Assistants, Management Assistants	Conducting assistive work for teaching, research and management at different library departments such as reference, IT, and maintenance.	45 students (20 in the department reference and instructional services, 12 in IT and 13 in other departments)/12–15 hours per week per person

enables them to gain practical work experience with the different aspects of library operation, and achieve a heightened understanding and appreciation of the library. At Tsinghua University, student positions at the library are popular and competitive.

As revealed by the literature review, student participation in day-to-day library work, or student deep participation level I, is quite commonplace in libraries. However, students' role in this type of participation is primarily auxiliary and assistive. Their contribution to the library's everyday accomplishments, though concrete and substantial, is usually guided and supervised by librarians. A higher level of participation, student deep participation level II, allows students to get engaged at an equal footing and play the role of collaborators and co-creators. In the next section, we are presenting two cases where students participated in library projects and collaborated with librarians in shaping and delivering library services.

STUDENT DEEP PARTICIPATION LEVEL II.

Level II of student deep participation brings students' involvement to a more advanced degree, where they become librarians' partners in independent library projects. Their participation is solely project-based—therefore it is transitory and yet focused. Students play a more active role in the participatory process. They work with librarians instead of working for them. The relationship between students and librarians is a partnership. The project success is their shared goal and they collaborate with each other to achieve that.

In recent years, liaison librarians at Tsinghua University have been exploring opportunities for student deep participation level II. We believe that students' subject knowledge, skills and creativity are beneficial to the library. In return, participating in library projects as collaborators is equally beneficial and rewarding to the students as they are provided a real-world outlet to reinforce and apply what they have learned in class (Table 2).

“FALLING IN LOVE WITH THE LIBRARY”—A VIDEO MARKETING CAMPAIGN

Tsinghua University Library holds a library promotion month every two years since 2006, aiming to market library resources and services to users. Over the years, we have noticed that traditional marketing events tend to be a one-way channel that is not engaging and interactive enough to attract the attention of library users across campus. It is thus necessary to think innovatively and consider new approaches to widen the impact of the library promotion month. Given the widespread use of social media among students, we decided to take advantage of that and bring the marketing efforts to social media platforms. In 2011, we planned to create marketing videos and distribute them via social media, and we believed that such a project would greatly benefit from student participation for the following two reasons:

- Students' expertise in video production. Many students at Tsinghua University are veteran users of popular video sharing sites such as Youku (the equivalent of Youtube in China). In addition to their personal use of Youku, they also create videos that promote or document various campus events and activities, and post them to Youku to share with the entire campus community. Librarians, mostly lacking the special knowledge and skills in producing high-quality marketing videos, could benefit from student's technical expertise.

- Students' input in content design. Students are the target audience of the marketing videos. Incorporating them in the project would provide us an enriched understanding of popular trends on campus and students' video viewing/sharing behavior on Youku, and therefore help us gain insights regarding what kind of content and style is most appropriate and appealing to students.

We determined the project's goal to be improving library brand awareness, promoting library resources, facilities and services, and encouraging the optimal use of the library in a popular and effective way. To support this project, we secured funding from the university's Student Research Training (SRT) program, which aims to engage undergraduate students in research and professional training and to nurture their capacity and capability for innovation. The detailed process of the project implementation has been published in a previous journal article (Luo, Wang, & Han, 2013), and in this paper, we focus on students' deep participation in this project, providing a thorough discussion on how our partnership with them made this innovative marketing project a success.

Four students were recruited to participate in the project, and they each specialized in a particular area of video production, such as film making, script writing, camera work, and post-production editing. To recruit student partners, we first posted an announcement on the campus intranet, on the library homepage and on the library's Weibo (the equivalent of Twitter in China) page. Thirteen students from various disciplines such as medicine and electronic engineering applied. We carefully examined the applicants' profiles and then arranged interviews with them. Interest and motivation, actual experience and skills, time commitment, and teamwork capability were the main factors considered.

Projects funded by SRT are credit-based and supervised by faculty members. Students earn credits based on their performance on the project. Thus, in this project, three librarians served as faculty supervisors. However, the relationship between the librarians and the students was in fact a collaborative partnership. Working together, the team decided the outcome of the project to be a series of videos that would evoke a feeling of love for the library via an entertaining and romantic story. The videos would be posted to the popular video sharing site Youku and promoted in multiple channels.

In this partnership, although the librarians and the students had different responsibilities, they worked closely together on the key components of the project, including developing an operational plan, outlining the project schedule and workflow, creating the script, auditioning the cast and promoting the videos via social media. As for their different responsibilities, the librarians were responsible for crafting the messages to be imparted through the videos. They provided basic training on library skills and library marketing for the student team members. They arranged the sets for filming the videos. Overall, they were in charge of the management of budget, personnel and other logistics. Students, on the other hand, handled the video production process.

Over the seven-month project period, the team held regular face-to-face meetings every two weeks and occasional meetings whenever necessary to ensure the smooth accomplishment of every milestone. An online group was also built on Fetion (popular Chinese instant messaging software) for team members to easily communicate with each other.

The end product of this marketing project was a five-episode video series titled “Falling in Love with the Library”. Each episode was four to five minutes in length. The entire series featured a love story between

Table 2
Two case studies for student deep participation level II

Categories of students	Project title	Job description	# of participating students	Student involvement
Undergraduate students	Falling in Love with the Library	Creating a library video marketing campaign	4, plus volunteers	Writing the story for the video series, shooting and producing the videos
Doctoral students	New Materials Research	Providing literature research support for a grant project	5	Searching, reviewing, evaluating and synthesizing literature in a specific domain

two college students, and each episode had a focus that highlighted a particular aspect of using the library. Throughout the video series, the romantic love story unfolds in a light-hearted and humorous way. Many details of the story were based on real college life so that students could resonate with it and therefore feel a connection with the library.

The video series was posted to Youku, a popular video sharing site in China. It was then announced and promoted in multiple channels, including the library website, poster displays, post cards and book marks, word-of-mouth advertisement, RenRen (the equivalent of Facebook in China), and the library's Weibo page. The videos received more than 160,000 visits within twenty days of release. The library's Weibo page witnessed over 1000 comments about the video series. The popularity of social media greatly aided the dissemination and promotion of the videos.

We believed that "Falling in love with the library" was a successful example of students' deep participation in library work. During the collaborative working process, the librarians and the students maintained an open communication channel and engaged in numerous brainstorming sessions to generate the best possible ideas for the video content, style and promotion. Inviting students to participate in innovative library marketing efforts facilitates a necessary transition from library-centric to user-centric outreach. Incorporating library users in the design and execution of marketing campaigns leads to products that are more appealing to and impactful on the target audience.

The success of "Falling in love with the library" was widely acknowledged. Our project was selected by Tsinghua University as one of the 20 Outstanding SRT Projects from a pool of 865 applications. In addition, it won a renowned International Library Marketing Award. More importantly, students participating in this project all expressed appreciation for this opportunity to grow their knowledge about the library and marketing, and enhance their skills in video production and collaborative teamwork. Two of the student team members were admitted into prestigious graduate programs in media and communication, and they considered their experience in this project greatly beneficial in the advancement of their academic career.

Due to the success of our project, the partnership model to invite students' deep participation in library projects has gained positive recognition and support from the university. In the following year, ten library-based SRT projects were approved and about forty undergraduates were involved, representing a significant increase from the previous years. Lewis (2007) stated that there are obvious opportunities to place librarians in centers for teaching and learning and to involve them formally in undergraduate education. We believe our experience has served as a testament to that statement.

PROVIDING LITERATURE RESEARCH SUPPORT FOR A GRANT PROJECT

In 2010, Tsinghua University was awarded a multi-disciplinary grant about new materials by the Municipal Science and Technology Committee in China. Multiple campus units participated in this grant project, including the library, which was tasked to provide literature and research support for the entire project. Subject librarians in the areas of new materials were expected to conduct literature searches to identify relevant and timely research literature on a regular basis as the grant research progresses, and provide information consultations for the project team. However, like many other academic libraries in China, we were short-staffed and the subject librarians alone were not able to offer the adequate support required by the grant project. In order to sustain our commitment to the grant and provide the necessary support, we decided to invite participation from student scholars and collaborate with them in completing the task. We were inspired by the case study discussed by Richman and Windsor (1999)—at the University of Houston Law Center, a student-pooled research department within the law library was established, where students were employed to work together with librarians to assist faculty research. This innovative model presented a feasible solution to the problem of staff shortage and

therefore would allow us to support the grant project without any compromise of quality.

We recruited five PhD students from different research fields to join the team of four new materials subject librarians. The recruitment announcement was posted on the campus intranet. Ten doctoral students responded, and we selected five from the Physics Department, the Materials Engineering Department, the Electronics Engineering Department and the Chemical Engineering Department.

The main area of new materials was divided into five subareas: electronic materials, nano materials, metal materials, chemical materials and new energy materials. Each student was assigned to conduct literature research and analysis in a subarea. At the beginning, the subject librarians provided a training session for the students, focusing on information searching, key subject databases, web resources, and bibliometric skills. Jaguszewski and Williams (2013) noted that "liaisons can play a role in shortening their learning curve and connecting them directly with the information and resources they need." The training session helped the students quickly master the knowledge and skills of literature searching, and become adequately prepared for this one-year project.

During the project process, the librarians and students met regularly to discuss the literature research progress. As young scholars, the PhD students' subject knowledge was beneficial to the process of searching, reviewing and synthesizing the literature in their assigned subareas. One of the challenges we faced was to determine the value, relevance and timeliness of the retrieved literature. In addition to conducting bibliometric analysis, the students' subject knowledge enabled them to make more prudent judgments in literature selection and compilation. Every month, the team published an information bulletin on new materials, containing the most up-to-date review and analysis of research literature in the five subareas. At the end of the project, a final literature research report was submitted and well received by the grant.

Collaborating with PhD students on this literature research project, the library was able to deliver comprehensive and customized literature research services to the campus research community, therefore enhancing its role in providing research support. The student partners, through this deep participation experience, also found this project beneficial to them academically. One of the students commented, "as a doctoral student, my thesis focuses on a very specific topic; this project allowed me to broaden my research perspective, sharing my view with the academic community. I learned a lot from the librarians too. They really help a lot to improve my skills at information searching, evaluation and management." Another student received a research grant because of his work on this project.

Embedding library services into academic activities is becoming increasingly popular in supporting campus research. However it also presents a challenge as most libraries are under staffed and thus the subject librarians sometimes cannot fully meet the research needs of the different campus units. We believe that the solution we experimented with, the collaboration between subject librarians and doctoral students, has proven to be successful. The Association of Research Libraries points out that "the enduring need within the library for deep subject expertise will increasingly be met by teamwork and cross-institutional partnerships" (Association of Research Libraries, 2012), and echoing that, we plan to continue seeking partnerships with master's and PhD students in a variety of academic activities to meet the demands of productive scholarship.

DISCUSSION

Student deep participation in library work allows libraries to better engage the user community and enhance their library experiences. Between the two levels of deep participation, level I, where students work as library assistants and participate in routine-base library operation, is commonplace among academic libraries. However, level II, where

students collaborate with librarians in independent projects, has not been reported much in the literature. We hope through sharing our experience at Tsinghua University library, the academic library community will be able to develop a more concrete idea of involving students in library work. We have learned from our experience that the librarian–student project collaboration can be a win–win model that is mutually beneficial.

BENEFITS TO THE LIBRARY

Libraries are often faced with budget and staffing constraints when developing and implementing new programs and services to meet the ever evolving user needs. Collaborating with users and utilizing the expertise and interest of the user community can help mitigate the constraints, and allow underbudgeted and understaffed libraries to continue their engagement in innovative programming and service delivery. Jaguszewski and Williams (2013) stated that “librarians cannot be experts themselves in each new capability... Just as researchers are often working in teams to leverage compatible expertise, liaison librarians will need to be team builders among library experts where this advances client research.” In both of our cases, students possessed knowledge that librarians lacked, and their skills set was complimentary to the librarians. A team of librarians and students melded the expertise of both sides, and greatly improved the chances of successful completion of the project.

Meanwhile, student participation allows librarians to better understand their user community’s perspective on library programs and services. For instance, in the video marketing campaign, “Falling in Love with the Library”, the participating students contributed great ideas to the style and content of the videos because they are familiar with campus life and they understand how to connect with other college students. Thus, the videos were able to create a sense of belonging and resonance among Tsinghua University students, and the messages conveyed by the videos were more likely to make an impression.

Furthermore, collaborating with students is beneficial to community building. Lankes (2012) stated that “Bad libraries build collections. Good libraries build services. Great libraries build communities.” Community building is an integral element of libraries’ efforts toward greatness. According to Davenport and Beck (2001), co-creation and engagement are two significant factors in community building. Student involvement in the development of library services and programs encourages a sense of public ownership among them, which in turn helps strengthen their trust of and loyalty to the library. In other words, student deep participation in library work enables the community to learn more about the library and therefore fosters a strong and lasting relationship between the library and the community.

BENEFITS TO STUDENTS

From their deep participation in library projects, students are able to gain a more in-depth and precise understanding of the library, and the services and programs it provides. Lack of awareness is often found to be one of the major reasons for students’ low use of library services (Naylor, Stoffel, & Van Der Laan, 2008; Connaway, Radford, & Williams, 2009). Once the participating students become more aware and knowledgeable of library services and programs, they can spread the word to their peers and friends on campus, therefore creating a ripple effect and reaching further into the user community. In some sense, they become the “ambassador” that could help enhance library awareness and appreciation among the larger student body through the word-of-mouth advocacy.

More importantly, participating in the collaborative projects provides them with opportunities to hone their information literacy skills, teamwork capability and creative thinking skills. Their knowledge and expertise in specific subject areas are also properly applied and reinforced through these opportunities. Both of our cases have shown

that the projects support student growth and help propel them toward further academic or professional accomplishment.

IDENTIFYING STUDENT COLLABORATORS

Selecting the most fitting student collaborators is key to the success of any librarian–student partnership. The university has a sizable student population, and it is unlikely that all students have the same interest or capability to participate deeply in library projects. In the business literature, Claycomb et al. (2001) pointed out that some users may prefer not to participate actively in service production and innovation, and some would like to but fail to have the required skills or expertise. The users that do become involved through deep participation usually have leading skills, and they are typically known as lead users.

We believe the “lead” students that have the most potential to become successful collaborators tend to be intrinsically motivated. They often respond to intrinsic rewards such as self-actualization and are driven by the actual creative process, including the interactive experience, the challenge of the problem and the potential for cognitive stimulation (Nambisan & Baron, 2007, 2009; Greer & Lei, 2012). Meanwhile, we believe that it is essential to maintain a balance between ensuring project success and facilitating learning. According to our experience, participating deeply in library projects is a popular learning opportunity among students. Therefore, when selecting students, we give the most weight to interest and motivation. While we value students’ subject knowledge and expertise, it is not the decisive factor. Usually, we recruit both students who are highly capable in the subject area, and students who are not as strong in subject expertise but extremely motivated and interested in the project. The latter could learn from the former through knowledge sharing among the team and then grow to become equally capable team members. To highlight the library’s role in supporting and facilitating learning, Lewis (2007) even suggested using exploratory project development strategies that ensure learning rather than success and that preserve resources for the second and third attempts at getting it right.

MANAGING THE COLLABORATION

Indisputably, student deep participation helps the library enhance organizational capability to meet new demands and improve performances. However it is also challenging to manage the collaborative efforts. In the business literature, Nambisan (2002) identified three roles of customers in new product development: customers as a resource, customers as co-creators and customers as users. Scupola and Nicolajsen (2010) theorized that involving customers as co-creators is far more demanding as the involvement complicates the development process and requires other qualifications of the employees in order to manage such a process. This notion was shared by Wagner and Piccoli (2007), who stated “it is difficult to garner user attention throughout a complex and lengthy development project because end users are busy. Thus, the project team must think creatively about how to foster users’ active participation”.

In our experience, to tackle this challenge, it is important to pay close attention to student collaborators’ experience and feelings throughout the project. As mentioned earlier, they are the “ambassador” sharing their project experience with their fellow students through word-of-mouth marketing, which could impact other students’ view of the library. The publicity effect of their personal feelings could be more powerful than library promotional activities (Cui, 2005). If a student’s deep participation experience is positive, pleasant and even successful, it could spread to other students, and thus enhance the sense of loyalty of the student community to the library. Conversely, if the student’s experience is negative, it is most likely to have a negative impact on the larger student community’s attitude toward the library.

From the managerial perspective, Kotze and Du Plessis (2003) noted that, in business, customer participation could be problematic because it

raises the level of uncertainty. Customers cannot be controlled or handled as normal employees, and they may abandon their role. We have learned from our experience that in order to alleviate the risks, clear roles and responsibilities need to be defined, open communication channels need to be established, trust needs to be fostered, and the mutual benefits of the project need to be fully understood.

Nowadays, academic librarians are expected to build strong relationships with faculty, students and other campus professionals, and establish collaborative partnerships within and across institutions. Our experience has made it clear that managing successful and sustainable partnerships and collaborations is becoming increasingly pivotal to librarians.

CONCLUSION

In this paper, we discuss two levels of student deep participation, with a focus on level II, where students collaborate with librarians in independent projects. Student deep participation allows the library to “engage the users, educate the users and empower the users” (Jennings, 2013), and offers opportunities for the library to be effectively integrated to the campus ecology of teaching and research. We hope our experience at Tsinghua library will help more academic libraries understand the practices and benefits of student deep participation, and create more opportunities to deeply involve students in library work, and to ultimately demonstrate the value and relevance of the library to the campus community.

References

- Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners*, 35(4), 216–224.
- Association of Research Libraries (2012). 21st-century collections: Calibration of investment and collaborative action. Retrieved from <http://www.arl.org/storage/documents/publications/issue-brief-21st-centurycollections-2012.pdf>
- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, 25(4), 297–308.
- Bennett, S. (2009). Libraries and learning: A history of paradigm change. *Portal: Libraries and the Academy*, 9(2), 181–197.
- Betz, B., Brown, S. W., Barberi, D., & Langendorfer, J. M. (2009). Marketing library database services to end users: Peer-to-peer outreach using the Student Ambassador Program (SAM). *The Serials Librarian*, 56(1–4), 250–254.
- Black, W. K. (Ed.). (1995). *Libraries and student assistants: Critical links*. Psychology Press.
- Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer engagement conceptual domain, fundamental propositions, and implications for research. *Journal of Service Research*, 14(3), 252–271.
- Claycomb, C., Lengnick-Hall, C. A., & Inks, L. W. (2001). The customer as a productive resource: A pilot study and strategic implications. *Journal of Business Strategies*, 18(1), 47–69.
- Connaway, L. S., Radford, M. L., & Williams, J.D. (2009). Engaging net gen students in virtual reference: Reinventing services to meet their information behaviors and communication preferences. Paper presented at the Fourteenth Annual National Conference of the Association of College and Research Libraries (Retrieved from <http://0-www.ala.org.catalog.wbilib.org/acrl/sites/ala.org.acrl/files/content/conferences/confsandpreconfsnational/seattle/papers/10.pdf>).
- Cornwall, A., & Jewkes, R. (1995). What is participatory research? *Social Science & Medicine*, 41(12), 1667–1676.
- Cui, C. S. (2005). The practice exploration of student assistants. *Library Tribune*, 25(5), 149–150.
- Daigneault, P.M., & Jacob, S. (2009). Toward accurate measurement of participation rethinking the conceptualization and operationalization of participatory evaluation. *American Journal of Evaluation*, 30(3), 330–348.
- Davenport, T. H., & Beck, J. C. (2001). *The attention economy: Understanding the new currency of business*. Harvard Business Press (Retrieved from <http://lizardewet.com/client-pages/wp-content/uploads/2012/03/Attention-lvey-Journal.pdf>).
- Foley, M. (2004). Managing a new breed of academic library worker: The student computer assistant. *Technical Services Quarterly*, 21(4), 59–69.
- Greer, C. R., & Lei, D. (2012). Collaborative innovation with customers: A review of the literature and suggestions for future research. *International Journal of Management Reviews*, 14(1), 63–84.
- Harder, M. K., Burford, G., & Hoover, E. (2013). What is participation? Design leads the way to a cross-disciplinary framework. *Design Issues*, 29(4), 41–57.
- Hasty, D. F. (2001). Student assistants as library ambassadors: An academic library's public relations initiative. *Technical Services Quarterly*, 18(2), 31–40.
- Jaguszewski, J. M., & Williams, K. (2013). *New roles for new times: Transforming liaison roles in research libraries*. Association of research libraries websites (Retrieved from <http://www.arl.org/storage/documents/publications/NRNT-Liaison-Roles-final.pdf>).
- Jennings, E. (2013). The relevance of academic libraries in the twenty-first century. *College & Undergraduate Libraries*, 20(1), 107–116.
- Kotze, T. G., & Du Plessis, P. J. (2003). Students as “co-producers” of education: A proposed model of student socialization and participation at tertiary institutions. *Quality Assurance in Education*, 11(4), 186–201.
- Lankes, R. D. (2012). *Expect more: Demanding better libraries for today's world*. Lexington, KY: CreateSpace Independent Publishing Platform.
- Lewis, D. (2007). A strategy for academic libraries in the first quarter of the 21st century. *College & Research Libraries*, 68(5), 418–434.
- Luo, L., Wang, Y., & Han, L. (2013). Marketing via social media: A case study. *Library Hi Tech*, 31(3), 455–466.
- Martin, C. M. (2012). One-minute video: Marketing your library to faculty. *Reference Services Review*, 40(4), 589–600.
- Maxey-Harris, C., Cross, J., & McFarland, T. (2010). Student workers: The untapped resource for library professions. *Library Trends*, 59(1), 147–165.
- Nambisan, S. (2002). Designing virtual customer environments for new product development: Toward a theory. *Academy of Management Review*, 27(3), 392–413.
- Nambisan, S., & Baron, R. A. (2007). Interactions in virtual customer environments: Implications for product support and customer relationship management. *Journal of Interactive Marketing*, 21(2), 42–62.
- Nambisan, S., & Baron, R. A. (2009). Virtual customer environments: Testing a model of voluntary participation in value co-creation activities. *Journal of Product Innovation Management*, 26(4), 388–406.
- Naylor, S., Stoffel, B., & Van Der Laan, S. (2008). Why isn't our chat reference used more? *Reference & User Services Quarterly*, 47(4), 342–354.
- Reeg-Steidinger, J., Madland, D., & Hagness, C. (2005). Technology student assistants in academic libraries: We can't survive without 'em! *Technical Services Quarterly*, 22(4), 65–75.
- Richman, H., & Windsor, S. (1999). Faculty services: Librarian-supervised students as research assistants in the law library. *Law Library Journal*, 91(2), 279–291.
- Saines, S. (2011). Circulation — The making of: Library videos and the real world. *The Journal of Academic Librarianship*, 37(6), 532–535.
- Scupola, A., & Nicolajsen, H. W. (2010). Service innovation in academic libraries: Is there a place for the customers? *Library Management*, 31(4/5), 304–318.
- Wagner, E. L., & Piccoli, G. (2007). Moving beyond user participation to achieve successful IS design. *Communications of the ACM*, 50(12), 51–55.
- Wals, & Jickling (2009). A framework for young people's participation in sustainability. In P. Corcoran (Eds.), *Young people, education, and sustainable development: Exploring principles, perspectives, and praxis*. Wageningen Academic Publishers.
- Walton, G. (2010). University libraries and student engagement. *New Review of Academic Librarianship*, 16(2), 117–120.
- White, E. C. (1985). Student assistants in academic libraries: From reluctance to reliance. *Journal of Academic Librarianship*, 11(2), 93–97.