PAARL

Research Journal

Volume 5: 2018

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Editor's Introduction

This fifth issue of the PAARL Research Journal (PRJ) is a product of the continuous effort of the 2018 Board of Directors to help our colleagues in the profession to develop a culture of research and increase the research output of Filipino librarians. With this, we have anchored the 2018 Marina G. Dayrit Lecture Series purely on "research and publication," including topics such as writing research papers, getting your paper accepted for presentation and/or getting your paper published, research methodologies, and ethics in research and publication.

In addition, we have collaborated with the National University - College of Education, Arts and Sciences (NU-CEAS) to establish programs for academic collaboration to promote research. Thru this agreement the NU-CEAS faculty agreed to share their expertise as regards journal publication in various capacities, e.g., reviewers, panel critique. With this, we have changed the procedure and guidelines in the submission, selection, and review of research project proposals. The significant changes include:

- A structured template used for paper proposal submission indicating the required minimum contents;
- A double-blind peer review performed by both the PAARL Editorial Board members and faculty members from NU-CEAS;
- Selected papers presented during the 5th Marina G. Dayrit Lecture Series to a panel of critiques who expressed their observations and gave recommendations to the authors for further improvement of their researches; and
- A cash incentive of P5,000.00 offered to the author(s) whose research paper will be accepted for publication in the PAARL Research Journal, with a chance to be considered for the Best Research Award.

I understand that it will take time before we can realize this vision of producing more librarian-authors or see the impact of our current efforts in promoting the culture of research among librarians in the country. But I am certain that these initiatives have definitely provided new opportunities, guidance, and inspiration for librarians who are aspiring to get their research work accepted for presentation in a national/international conference or published in a refereed journal, and to those who are just about to get started with their research journey.

This issue of the PRJ follows the theme of the 2018 National Summer Conference which was on User Experience (UX). UX is now an emerging discipline and a growing specialty in the library profession. Its application in libraries has become very popular in recent years and have resulted in service developments and improvements, as well as a positive impact on users' learning experience. With researches produced in using one or more methods of UX, library managers will be able to generate large amounts of data that they can analyze and use in strategic decisions. The articles on UX published in this issue are a great addition to the literature on the subject and will serve as reference for future researches on UX and related disciplines.

A total of eight (8) articles were selected for publication in this issue, five (5) of which were presented during the 2018 National Summer Conference in Palawan. Below is a summary of the researches on UX:

1. **When Visitors Turn into Volunteers: Exploring the Connection of User Experience and Volunteerism in a Local University** by *Rochelle S. Silverio*. This study looked into the possible link between the elements of UX and the user's motivation to volunteer and be part of the library team. The study was conducted with volunteers at the Pamantasan ng Lungsod ng Valenzuela Library.

Silverio's paper won PAARL's Best Research Award for 2018.

2. **Improving the Library Space of the Philippine School of Interior Design using Design Charrette** by *Jennifer J. Laluna*. In this study, the author used Design Charrette, a visualizing tool, to gather various stakeholders and experts to have an open communication and exchange viewpoints on how to address the spatial design problem of a special library and come-up with proposed physical plan and layout and technological requirements to address the learning needs of students and improve the teaching methods and strategies of faculty members.

Laluna's paper garnered 2nd Best Research Award for 2018.

3. **Reinventing Academic Libraries in the Metro: The Users' Perspectives** by *Ana Maria B. Fresnido, Vivian C. Soriente,* and *Elizabeth B. Padilla*. This study investigated how selected academic libraries in Metro Manila are evolving and transforming into learning commons. Evidences of how these academic libraries are developing and reinventing themselves in terms of physical commons, virtual commons, and cultural commons have been presented in this study.

This paper of Fresnido, Soriente, and Padilla was recognized as the 3rd Best Research Award for 2018.

4. **The Use of Augmented Reality (AR): Transforming the Way Library Orientation is Conducted in an Academic Library** by *Sharon Maria S. Espos-Betan* and *Jonathan F. Santos*. This study explored the possible applications of Augmented Reality (AR), an emerging technology in libraries. This study aimed to help librarians learn and understand how this technology can be utilized to improve the library services and at the same time assess the possible challenges the implementation of this technology can bring.

5. **Is it Enough to Build?: Users' Awareness and Utilization of AEA-IRC Learning Commons** by *Ludivina A. Cambay, Mary Ann D. Estudillo*, and *Arlene R. Manzo*. This study aimed to determine the current status of the Aklatang

Emilio Aguinaldo-Information Resource Center Learning Commons, and to assess the users' awareness of its purpose, design, available facilities, and its level of utilization.

6. **Above and Beyond: A Look at Library Clients Past Regular Hours** by *Arthur Bryan C. Mariano* and *Rizalyn V. Janio*. This study looked into the extended service hours or midnight service provided by the University of the Philippines Diliman Main Library, particularly on the importance of the service to clients, frequency of use, reasons for availing the service, usual activities during the extended hours, level of satisfaction of users, and areas for improvement.

7. **Purposes in using Tablet (iPad) in University of the Cordilleras Libraries: A Survey Report** by J*ohn Lloyd Canillas, Beverly B. Chapichap, Joven D. Dongga-as* and *Yvonnie C. Guzman*. In this paper, the researchers shared their findings on how and for what purposes students at the University of Cordillera utilize Tablets in the library and how such service can be further improved.

8. **From Book Reader to Booklover: Understanding the Essence of Library Services from the Experiences of Jose Rizal University's Junior High School Students** by *Rosario C. Camarines*. The study explored how the library services provided by the Jose Rizal University influence the book usage and reading habits of junior high school students.

On behalf of the 2018 PAARL Board of Directors, I would like to acknowledge the following for their contributions:

I hope that these researches will contribute to the body of knowledge on UX and librarianship in general, and that through our efforts, we will be able to inspire more librarians in the country to produce quality research.

Mabuhay ang PAARL!

CHITO N. ANGELES
Editor-in-Chief

WHEN VISITORS TURN INTO VOLUNTEERS: EXPLORING THE CONNECTION OF USER EXPERIENCE AND VOLUNTEERISM IN A LOCAL UNIVERSITY

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ABSTRACT

This paper marries two big ideas: user experience (UX) and volunteerism in the academic library. It probes into the possible connection between the elements of UX and the user's motivation to volunteer and be a part of the library team. Through the conduct of focus group discussions and the use of survey questionnaires among 14 past and present volunteers at the Pamantasan ng Lungsod ng Valenzuela (PLV) Library, UX-related themes emerged. Findings revealed that students who become volunteers hold a positive regard towards the library based on their interactions with the department. It was also observed that user experience was further enriched when the students' status moved from being a user to becoming a library volunteer.

This research hopes that the reader will realize the significance of applying user experience thinking in all aspects of the library because it has an influential power that can transform and elevate the user to be a more dynamic part of the academic library.

Keywords: User Experience, User Behavior, Volunteerism, Academic Library

INTRODUCTION

The discussion of User Experience (UX) can be frequently read in tandem with library websites and electronic resources management where it is referred to as strategies for understanding users' needs and behaviors and applying such in designing systems and services (Chapman, Fry, Deschenes & McDonald, 2016). But one must also understand that UX can be found beyond the digitally based. It is a "well-thought-out experience that ensures the community member has a consistently great library experience at every touchpoint" (Bell, 2012 as cited in Pennington, Chapman, Fry, Deschenes & McDonald, 2016). Hence, the library experience should be designed to deliver with totality, embedding UX in all the services that libraries offer.

Taking note of this more encompassing standpoint, it is now more interesting to know how UX is related with the various aspects of the library entity which includes user behavior. Studies on user behavior have been prolific in the field of library science and

have zeroed in on topics like the influences of library design and satisfaction on visitors, information seeking behavior, as well as library use patterns (Campbell & Shlechter, 1979; Pareek & Rana, 2007). OCLC Research (2019) mentions that by arming the library community with behavioral evidences on users, library services can then be designed with the user as its main priority. Indeed, getting a better perspective of the clientele that the library serves will allow the institution to create services and programs which are more meaningful to them and more relevant with the times.

Another equally thought-provoking angle which the researcher sees is how UX may affect user behavior to the point that they become more engaged with the library. Such a notion moves away from having the typical library goals of having higher collection usage statistics or frequency of visits because of good UX. It is more of possibly identifying UX's role on users who in the long run want to be involved in the dynamics of the library and, in this specific case, be volunteers.

REVIEW OF RELATED LITERATURE

More about Volunteerism and User Experience. Many will agree that a community served by any library should be involved in delivering the latter's main purpose to assure its path to growth and development. Rasmussen (2016) mentions that the participation of citizens, including users of libraries, allows them to be more than just mere spectators, gaining more access to cultural production and distribution. Involving users in libraries has its advantages when one looks at it from the institutional, user, and societal angles. In the institutional perspective, the library becomes more than just accessible collections and concrete rooms. Rather, it transforms into a place for active participation. Next, in the user's point-of-view, a shared finding showed that involvement can provide a feeling of belongingness to a community. Lastly, when taking a societal standpoint, participation can take the form of audience development, a catalyst for cultural diversity, and as a competitive resource.

Volunteerism will always be in the short list of possible collaboration and support forms that the library may receive. One well-cited study of a library volunteer program in an academic library showed encouraging outcomes of volunteerism which include the strengthening of the bond between the library and students, as well as giving the volunteers a sense of satisfaction by delivering a vital contribution to their school. Moreover, the student volunteers felt that they became more skilled in utilizing the library databases, more knowledgeable of the resources offered in the library, and more relatable to its staff (Tikam, 2011). On a separate article about recruiting and retaining volunteers, it was emphasized that a vibrant volunteer environment needs to be cultivated for a relationship to develop between the volunteers and the library. This nurtures a climate of research and discovery, sustaining the mission of the university library (Throgmorton, 2016). Despite the positivity that volunteerism may bring to libraries, Forrest (2012) expressed that academic libraries have been particular in the implementation of volunteer programs

and that only a handful of research has been written on it compared to its presence in studies which discuss volunteerism situated in public libraries (Prestney, 2016).

This brief discussion of library volunteerism leads us to the experience of the Pamantasan ng Lungsod ng Valenzuela (PLV) Library with student volunteers. A university library which caters to Valenzuela City residents taking tertiary education, PLV Library has been grateful to have student library volunteers since the early years that it opened its humble door to the PLV community. Students who volunteer must be willing to render at least two hours of their time each week at the library on a day where they also have classes at school. Surprisingly, it is remarkable to observe through time that most volunteers deliver more hours in the library than what is requested of them. Serving around 5,000 college students every academic year, the student volunteers have provided significant support in the accomplishment of the library's daily tasks and major activities. Book borrowing privileges and certificates are awarded to volunteers in the PLV Library which are comparable to the practice of an existing library volunteer program in a Mumbai college library where their volunteers are given attendance credit (Tikam, 2011). The student assistants of the PLV Library are also selected from the pool of volunteers.

Interestingly, one common characteristic among most of the student volunteers is that they are visitors first of the library. Noting this prominent detail, it is but apt to probe if UX has a connection to the students' choice to become library volunteers. After an extensive search for literature, a prominent research gap on the link of UX and volunteerism was observed, which makes the investigation even more significant. To provide structure to the study, the researcher referred to Peter Morville's UX Honeycomb as a guide for enquiry (see Figure 1). The UX Honeycomb is very helpful when looking at libraries and its programs, framing the hexagonal qualities into several questions (Sannwald, 2017; Semantic Studios, 2019). This gives the opportunity to have an overall view of how users perceive the library based on their experiences and also to have a look at its specific details, depending on how it is utilized.

Figure 1. *User Experience Honeycomb*
(Semantic Studios, 2019)

PURPOSE OF THE STUDY

This exploratory study gives emphasis in finding a link between user experience and volunteerism in the academic library. By specifically looking at PLV Library's direct involvement with student users who became volunteers in the department, this paper digs deeper to come up with notions on (1) the characteristics and views of the student users who become volunteers, (2) the vital factors which create that library experience that will make users reach the point where they would like to be involved and be an active part of the library team, and (3) find any possible relations between the concepts of UX and volunteerism.

There is a dearth of literature and studies, a gap, on the close link between UX and library volunteerism thus this paper looks into finding the connection between these two equally interesting concepts and furthering such a study. By doing so, the reader is given another perspective of user experience as it is applied to the library entity. This will also provide an avenue for library heads and managers to think and perhaps come up with new strategies for a better user experience that lead to having more dynamic library users.

METHODOLOGY

This study made use of a qualitative methodology due to the nature of the explored data. The respondents sought to participate in the research included seven university graduates and seven current student volunteers, totaling to 14 individuals. To answer the queries of this paper, the researcher employed two instruments: (1) the conduct of focus group discussions; and (2) the use of survey questionnaires. All instruments employed in this research are pilot tested to a small group of students to further enhance the tools used.

The utilization of ethnographic methods, which include the use of focus group discussions (FGDs), is recommended to be able to uncover what users want, their actual behavior, and their hidden needs (Edwards, 2016). FGD was applied in this study because this method prompts participants' attitudes, feelings, beliefs, experiences, and reactions which may only be revealed in a social gathering where interaction may occur (Gibbs, 1997). Moreover, since this study is exploratory in nature, conducting such also allows one to see patterns across questions (Krueger & Casey, 2015). The guide questions prepared for the FGD revolved around the participants' experiences as library users and as volunteers. Two focus group discussions were performed which lasted for about an hour each. Filipino language was used as the medium of communication. Both FGDs were audio recorded for transcript-based analysis which is described to be useful for researches done in academic settings.

Two sets of questionnaires were provided to the participants. The first questionnaire was given before the FGD to gather basic information about the respondents as well

as details on their length of stay in the library as a user and as a volunteer. The second questionnaire served as a follow-up instrument to further clarify their answers in the FGDs. It made use of sentence completion for the themes and UX factors which emerged in the FGD. Sentence completion allows the production of qualitative data of users' insights in a structured form (Kujala, Walsh, Nurkka & Crisan, 2013).

Adapting the methodology of Krueger and Casey (2015) on the analysis of data derived from FGDs, the researcher first transcribed the discussions. The focus group transcripts are word-for-word written records of the FGD established from the audio recordings. The resulting transcriptions were then subjected to a coding process of sorting and placing similar answers to specific categories per question. In the course of conducting the coding, the researcher took note of the concepts' characteristics such as their frequency, extensiveness, intensity, specificity, and perception of importance (Krueger & Casey, 2015; Stewart, D.W., Shamdasani, P.N., & Rook, D.W., 2007). The results of the FGD analysis were combined with the tabulated answers from the questionnaires to reveal themes and other findings relevant to the objectives of the study.

RESULTS AND DISCUSSION

The research revealed much information from the participants of the study who are composed of 8 females and 6 males residing from the different barangays of Valenzuela City, namely, Malanday, Balangkas, Ugong, Gen. T. De Leon, and Maysan. Observably, they also came from a variety of courses: engineering, secondary education, psychology, and business administration. This gave a general impression that the participants have different backgrounds with a similarity in the geographic location of their residence.

Knowing the participants' length of stay and frequency of visit to the library provided another layer of information regarding their characteristics. The participants reported varying durations of stay as users and volunteers of the library. Looking at Tables 1 and 2, it can be noted that there is an increase in the number of hours spent in the library as well as in the participants' frequency of visit in the Library when they became volunteers.

Table 1. *Hours Spent in the Library*

Number of Hours in the Library	As Library Users		As Student Volunteers	
	Frequency	Percentage	Frequency	Percentage
1-2 hours	2	14.29%	0	0%
3-4 hours	9	64.28%	4	28.58%
5-6 hours	1	7.14%	5	35.71%
7-8 hours	2	14.29%	5	35.71%

Table 2. *Frequency of Visit to the Library*

Visit Frequency	As Library Users		As Student Volunteers	
	Frequency	Percentage	Frequency	Percentage
1-2 times a week	4	28.58%	0	0%
3-4 times a week	8	57.14%	9	64.28%
5-6 times a week	2	14.29%	5	35.71%

*Percentages may not total to 100% due to rounding.

By combining the data from the previous tables, a better view of the participants' stay in the library become more apparent (see Table 3). The first three rows of Table 3 showed a marked increase in the hours and/or visit frequency of the participants, totaling to 9 individuals (64.28%). Four of the participants maintained the same number of hours per visit and frequency of visit per week (28.58%) while only one decreased in the visit frequency (7.14%) due to becoming a working student. This rate of library volunteer stay can be taken as a good sign for Throgmorton (2016) mentions that volunteers leave for many reasons which are unconnected to the library, serving as a challenge to volunteer programs.

Table 3. *Weekly and Hourly Stay of Volunteers at the Library*

Duration Description	Frequency	Percentage
Increased hours per visit, Increased visit frequency per week	2	14.29%
Increased hours per visit, Same visit frequency per week	4	28.58%
Same hours per visit, Increased visit frequency per week	3	21.43%
Same hours per visit, Same visit frequency per week	4	28.58%
Same hours per visit, Decreased visit frequency per week	1	7.14%

*Percentages may not total to 100% due to rounding.

On the other hand, Table 4 showed that a large portion of the participants have spent a year or more in the library as a volunteer, with 1 participant staying for four years now as of this writing. Only one participant volunteered for less than a year. The library accepts volunteers from all year levels and so their duration of stay may also depend on what year level did they enter to volunteer. One must consider as well that half of the participants are still continuing their volunteer work during the time of this study. The respondents' length of stay mostly falls in the 1 to 2 years range.

Table 4. *Total Length of Volunteer Work*

Duration of Stay	Number of Volunteers	Percentage
3 to 4 years	5	35.71%
1 to 2 years	8	57.14%
Less than 1 year	1	7.14%

*Percentages may not total to 100% due to rounding.

The Participants as Library Users.

Morville's User Experience (UX) Honeycomb. The focus group discussions and questionnaires revealed notions which are related to previous studies on library UX. For one, the library can be seen as a product itself, where products do not only refer to tangibles and services. Rather, they can also be the experiences comprising specific memories that occur in the mind of the user (Mathews, 2009). With this standpoint, the library goes beyond just bundles of resources and services and instead looks forward into creating experiences which may have an effect in the library users' lives (Lamb, 2018).

Morville's UX Honeycomb, a valuable guide in assessing the participants' UX in the library (Morville, personal communication, April 16, 2018), may be referred to when one sees the library as a product. The participants of the study have provided the following responses with the guidance of the UX Honeycomb qualities:

- *Useful.* The library was perceived to have purpose based on the participants: (a) their needed information are usually available there: (1)"yung kailangan namin na information ay madalas na nandun"; (2)"may mga references na mapapakinabanagan sa kurso ko"); (b) it is a place where they study: (1) "kada may exam ako, sa library ako tumatakbo para mag-aral"; (2)"nakakatulong ito sa pagre-review ko"); and, (c) that it helps augment the needs of students in terms of resources ("nakakatulong sa mga estudyante na walang pambili po ng libro katulad ko"). Another student stated that the library is among the main reasons why he is doing well in his classes ("Isa ito sa mga main reasons kaya mas nage-excel ako sa klase…").

  The library is useful to them for they conduct the following while inside the library: reading, drawing plates (for engineering), reviewing, searching for books and information not available on the internet, taking breaks after studying, doing assignments, and playing tabletop games available in the library during their free time.

- *Usable.* In terms of effectivity and efficiency, a respondent believed that the library intends to make things easy for visitors ("Ine-aim nitong mas makatulong at mas mapadali ang paghahanap ng kinakailangan ng mga estudyante at guro") which was supported by another respondent by pinpointing the use of the Online Public Access Catalog (OPAC) ("ung OPAC, malaki po ang naitutulong"). Allowing students to utilize the library's facility for their projects was also well-received ("kahit yung shots namin sa projects, pinapagamit sa amin ung facility").

- *Desirable.* The respondents find that the library is desirable because it is comfortable to be in ("maganda ang bagong facility, kumportable ang mga upuan, may aircon, makakapag-aral ka ng mabuti"). A respondent described

the library as having a "world-class" facility. Furthermore, another mentioned that the staff's efforts make it more desirable ("the staff really do their best to promote the library to the university students").

- *Findable.* The participants view this quality in two ways. It is findable in terms of the (1) location of the library ("maganda at madaling hanapin ang lugar nito"; "madali siyang makita"), seeing that it is accessible ("may elevator na magagamit kaya madaling umakyat kahit nasa 4th floor pa ito"), and the (2) location of resources ("maraming paraan para maghanap ng libro"; "madaling mahanap ang resources"). The staff was again mentioned playing their role in making the resources easy to find ("reliable po yung staff"; "the staff is always there to assist you should you find yourself in trouble finding what you need").

- *Credible.* The credibility of the library also majorly lies on the belief of the respondents that books and other resources are reliable bases of information ((1) "ang aklat naman ay gawa sa mapagkakatiwalaang sources"; (2) "ang mga impormasyon ay tama"). A respondent even recounted his experience which makes the library his go-to place for information ("Tama ang nakukuha kong sagot palagi. Kaya kapag may kailangan akong hanapin, dito ako kaagad pumupunta.").

  One respondent also told his good experience in reading the books that he found in the library which resulted to a high quiz score in class ("Ung memorable sa akin sa library noon ay yung day na nag-aral ako, nag-quiz kami, then nakakuha ako ng mataas na grade kasi nabasa ko sa mga libro sa library").

- *Accessible.* The students find the library to be accessible, giving an inviting feel ("lahat ay wine-welcome ng library even if you just need to find a place to rest and relax") and the atmosphere of being open to everyone who wants to learn ("wala naman silang pinipili, basta gustong matuto"). The readiness of the library personnel to assist visitors makes information more accessible to them as well ("kung ikaw ay may katanungan, handa silang tumulong at sumagot sa tanong").

- *Valuable.* All respondents believe that the library is valuable, expressing that: there will be a lack of information providers if the library is not present ("kung walang library, kulang sa pagkukunan ng information"), it serves as a personal space ("ito na ang nagsilbing kwarto ko sa ikalawa kong tahanan"), and its services are indeed helpful to the community ("ang serbisyo nito sa mga mag-aaral, kaguruan, at alumni ay lubos na nakatutulong").

The researcher learned that the participants have a generally positive perception towards the library considering the experiences that they had in the department. Several respondents mentioned that all these UX qualities are important to them in forming the

decision to become volunteers in the library. Moreover, two UX qualities which really stood out were the following: (1) the library being accessible ("walang pinipiling tao"; "tutulungan ka talaga") and (2) the library being useful to them ("kailangan talaga namin ang mga information and books"; "mas nadagdagan ang kaalaman ko sa mga bagay-bagay"; "dahil sa course ko, di ko na mabilang kung ilang beses na akong natulungan ng library sa mga dilemma na kinakaharap ko- paghahanap man yan ng libro or as simple as finding a place to sit and relax"). It can be observed here that UX provides insights into what the user values about the library (Appleton, 2016).

Emerging UX Themes. Three themes surfaced in the course of analyzing the focus group discussion transcriptions: (1) Information Access and Control; (2) Library as a Place; and (3) Service Affect. Interestingly, the evident themes which appeared are also the dimensions in LibQUAL, a tool which measures service quality in libraries and is a common UX method used to gather feedback (MacDonald, 2016). Information Control addresses the library's collection and access tools. On the other hand, Library as Place refers to the user's view of a comfortable space that inspires learning and study. And lastly, Service Affect highlights the courtesy, knowledge, and helpfulness of the library personnel in providing quality service (Marowa, 2015). More specifically, the following were emphasized in each theme:

- *Information Access and Control.* The previous discussion of the UX Honeycomb already provided a glimpse of the library's provision of information through its collection and main access tool using the OPAC, receiving a positive remark from the respondents. Further discussion with the participants revealed that one of them was initially unaware that a system exists in the library. Probing into this, the respondent mentioned that the PLV Library was basically the first library that he visited ("Wala pa akong na-experience na ibang library. Ung eskwelahan namin noon, walang proper library. So technically, ung library sa PLV ang first library na na-visit ko"). The respondent, later on, stated that he eventually got used to the system of borrowing books from the Library through repeated exposure and help from the staff. It can be seen here that the user's prior experience with libraries may also affect information access and control. Since prior experience may intercede on one's judgment (Schrader, 2011), more exploration of this topic may be made.

- *The Library as a Place.* It was mentioned previously that the participants find the library desirable because of the comfort that it brings to them with its facility being spacious ("malawak at maaliwalas ang library") and conducive for study ("tahimik kung saan makakapag-focus ka").

  In its early years, the PLV Library provided a simple facility to its visitors. Its basic ventilation then was described by a respondent ("medyo mainit dati") further saying that the recent developments in the library are very much appreciated ("It's good to see na nade-develop po ung Library natin. Ung

facility natin nag-level up talaga."). One of the respondents commented that it is possible that more students may be attracted to become volunteers with the newly developed facility at the university campus.

- *Service Affect.* The respondents have a number of things to say about how the staff related to them when they were still library users. Here, they declared that both the library personnel and volunteers have interacted with them well ("ung crew sa library, maayos naman po ang pakikisama"; "si Ate [name], nung nanghiram ako ng libro, ang gaan ng feeling"; "well treatment sa borrowers"; "lahat sila accommodating"; "parang kahit estudyante, magaan ang relationship"; "mababait po ang staff"; "I really like the way people interacted with me… they are all approachable…At the same time, they can lend you a hand, actually buong shoulder pa nga."). Interactions between the personnel were also noticeable to them when they were still users ("Tapos nakikita ko po kayo doon, parang at peace, parang family ang turingan"; "Masaya kasi ang turingan talaga"). They also described that the library team is both knowledgeable of the library collection ("may author kaming binigay at hindi makita ang exact book kaya related books ang binigay") and research techniques ("One thing that I will never forget as a user. Mam [name] taught me how to research the exact way. Until now I am using it in my career as a teacher and it is really easy for me to find those topics that I am looking for because of that skill. It was never taught to me by my previous teachers na na-encounter ko…").

The respondents believe that the mentioned themes are vital in their decision to become volunteers in the library. Ranking these in the second online survey conducted, it can be seen that Service Affect matters highly to them, followed by Information Access and Control and Library as a Place, respectively. Using weighted mean, the weights are applied in reverse where the most desired choice has the largest weight to better see which option is highly favored (see Table 5). Asking how Service Affect has encouraged their decision to become volunteers, the respondents answered that it makes:

- Volunteering interesting and engaging ("Mas naging interesado ako to be a part of them [the library]. Hindi lang sa pakikitungo nila sa isa't-isa kundi pati sa mga estudyante."; "…nakakahikayat pong magvolunteer kasi nakikita namin na masaya at maganda ang mag-serve sa kapwa estudyante."; "Nakaka-engganyo sumama sa kanila kasi mabait sila at masarap kasama…")
- One want to do the same for the PLV community ("…nais ko ring maglingkod sa kapwa ko mga estudyante katulad ng pag-aasikaso nila.")
- One stay as a volunteer ("Hindi siya yung reason kung bakit ako nag-start but they [library team] are the reason why I stayed. All of them are hidden treasures of the libraries [PLV Library and Valenzuela City Library] that the users really need to meet.")

It was established here that UX indeed goes beyond offering resources, providing technology, and having a better facility. Accomplishing a task with very few steps is not an assurance that the user will have a good library experience. Intangibles, such as service affect, should also be given equal focus when it comes to UX. Indeed, high touch is indispensable in "a world based on high tech" (McCune, 1993).

Table 5. *User Experience-Related Dimensions (n=12)*

Theme	WM	Rank
Information access and control	0.33	2
Library as place	0.23	3
Service affect	0.43	1

Other than the identified themes, the activities and programs for users that the Library provide were evidently memorable to them as well. The following were mentioned during the course of the discussion: (1) *LSS (Library Seminar Series): Na-LSS ka na ba?* (A series of seminars for students which started from sharing the niches of the staff then proceeded to feature authors and significant people in the community) (see Figure 2); (2) *Harana sa Silid-Aklatan* (Library users were annually serenaded with songs and were given sweets on Valentine's season. It serves as a way of showing the Library's warmth towards the library users.); (3) *Pick-A-Book* (Donated books which are not deemed suitable for the library collection are given a second life. Here, students may get books for personal use.); and the most recent, (4) *Reading Icon Book Sharing Program* (It features books from the personal collection of known personalities every month. Library users get the chance to read what they read.)

The Participants as Library Volunteers. Reitz (2018) describes volunteers as individuals who work for a library or other organization without material recompense. Many of the respondents' statement about volunteerism goes along the same line ((1) "It is taking responsibility without expecting rewards"; (2) "Para sa akin, selfless act siya"; (3) "Paggawa ng bagay na walang kapalit. Bukal sa puso."). Some also related it to being a process ("It's a process po."), making initiatives ("Ung practice na ikaw mismo ang magi-initiate ng isang bagay"), and a happy experience ("Na-enjoy ko ang pagla-library. Volunteering is enjoying.").

Other than considering the mentioned UX factors while they were still library users, the participants stated that they also volunteered to make better use of their free time ((1) "May mga oras po na wala akong ginagawa. Ang nangyayari po sa library na po ako nagsstay po para makatulong na rin po sa school."; (2) "Nasasayangan po ko sa oras… Mas kapaki-pakinabang po ang mga gawain kapag nasa library.") and help others ("Yung tumulong sa iba"). Such answers can also be found in a similar study which stated that people may also be motivated to volunteer by what makes them feel good such as giving back to the society and feeling compassionate to others (Stein, 2011). One participant still answered that the reason why she volunteered was because of the library personnel

("Ako talaga, the people behind the library kaya ako nag-volunteer.") which turns back once again to service affect.

Figure 2. *LSS (Library Seminar Series): Na-LSS ka na ba? (February 2018)*

For a better perspective, the following are significant themes on library volunteerism which emerged from the focus group discussions:

Advantages of being a Library Volunteer. One respondent mentioned that though volunteers do not have explicit material benefits, there are definitely unconscious gains in becoming one ("Yung sa tingin mo nagbibigay ka but in reality, ikaw yung nakatatanggap nung much more. Kasi nage-exert ka ng effort mo na hindi naghahangad ng kapalit pero may mga perks ka pa ring nakukuha. May mga bago kang nakikilala, mga taong nae-encounter. Ikaw mismo, nadedevelop.").

Personal development has been repeatedly emphasized by the participants. This includes developing their organization skills ("…kumikilos ka ng organized"), communication skills ("Mahiyain po talaga ako eh. Dito ko po na-develop ung kakayanan kong makipag-usap sa iba."), and social skills ("Bago po ako nag-volunteer, ang mga kasama ko lang po noon sina … Nung nag-volunteer po ako, na-challenge po ako. Lalabas ka sa comfort zone. May makikilala kang iba."). Similarly, such outcomes are also noted in the study by Tikam (2011) where the experience has helped volunteers gain new skills and colleagues. Additionally, a respondent stated that being a volunteer helped him alleviate the strain that he gets from studying ("Stress reliever din po from [course].") while another revealed that the personnel helped her regain self-confidence ("Dati, sobrang baba ng self-esteem ko. Pero noong nakilala ko sila, unti-unti, little by little. Personnel ang nag-motivate sa akin.").

Library Involvements of Student Volunteers. As library volunteers, the participants have their share of responsibilities in the Library. These tasks include: welcoming and assisting library users, promoting and assisting in the events and activities of the library, shelving, arranging the tables and chairs in the reading areas, clipping newspaper articles, delivering documents to different departments, assisting in the processing of newly acquired materials, and general cleaning. Two respondents expressed that covering books is pleasurable ((1) "Ung pagbabalot ng libro, nakakatanggal ng stress."; (2) "Hanggang sa bahay parang gusto kong balutan lahat ng libro. Skill kasi siya na mae-enjoy mo.") while one mentioned that he does not like clipping newspapers because of its solitary nature ("…kasi mag-isa ka lang.").

Figure 3. *Teambuilding with Student Library Volunteers*

UX as Library Volunteers. When asked on how was their user experience (UX) as library volunteers, the participants remarked that UX was better when they became part of the team. They have cited the following points: they (1) acquired and developed more skills ("nadagdagan ako ng skills lalo na sa pakikitungo at pagharap sa tao"; "mas naging aware ako sa paghahanap ng libro na nagagamit ko pa sa ibang silid-aklatan"); (2) learned how to access and maximize the resources in the library ("mas madali na sa akin ang paghahanap ng mga librong kailangan"; "mas naintindihan ko na kung paano mag-research ng tama"; "mas nauunawaan at naiintindihan ko na ngayon kung paano gamitin ang mga tools sa library at kung paano maghanap ng resources"); (3) became more familiar with library work ("natutunan ko yung konsepto ng cataloging";

"na-experience ko yung ako mismo ang naghahanap ng books sa shelves"); (4) personal development ("mas umangat yung confidence ko po"; "staff taught me to become a holistic individual"); (5) liked activities done by volunteers ("…masaya ang mga activities na ginagawa namin.") and that (6) they have found a family ("…naging mas makabuluhan ang pagbo-volunteer dahil nakahanap ako ng pamilya over all the stresses sa academics"; "Nagkaroon [ako] ng family sa PLV Library. Binigyan nila ng timpla yung pag-stay ko ng 4 years sa PLV"; "…naging pamilya ko na sila."). The warm statement of a respondent regarding his user experience as a volunteer is worth mentioning:

> …dahil sa pagvo-volunteer ko, yung maliit na kwarto sa Annex [Annex Library] na yun became less of a library and more like a home. Everyone welcomed me and I cannot even imagine how much impact they have made in my PLV experience. I stepped in that room as a student trying to find a book, [yet] I stepped out a member of a family that gave me a home.

CONCLUSIONS AND RECOMMENDATIONS

A number of insights can be gleaned from this study on user experience and volunteerism in the library. Firstly, looking at the characteristics and views of the participants, it can be seen that student users who become volunteers hold a positive regard towards the library which are based on their personal library experiences. Moreover, one may also consider student library volunteers as super users. Other than the quantity and variety of resources that they may utilize in the library, Bell (2014) suggests that super users may be characterized as having emotional attachments to the library and having built relationships with the library personnel. Volunteers are also super users for a large amount of their motivation is leisure-like (Holmes in Rasmussen, 2016). Such were found in the present research. This interesting observation opens prospects to further investigation on user experience and student behavior.

Moving on, this study showed that there are indeed factors which are vital for the participants to decide and become volunteers in the library. For one, service affect was highly rated as a factor that led users to act and be in tune with the Library's mission. With this, one should bear in mind that when designing programs and activities or when infusing technology, the library experience should move from being simply transactional and become more relational. This will create more value to users and is an important core quality in user experience.

Next, it can be realized that UX is continuous even if the status of the user shifts to becoming volunteers (see Figure 4). With them now a part of the library, the department gains the unique position and opportunity to further enrich their user experience by involving them in the library operations and providing a different set of engaging activities. Finding this very pertinent, the PLV Library intends to continuously enhance the library users' experiences and continuously invest on its student volunteers by

designing a volunteer program framework that will be made more meaningful to them than before. Viewing it on a larger scale, it is also a means of investing in Valenzuelanos who become professionals in their field that appreciate, understand, and support the works and wonders of libraries.

USER	VOLUNTEER

USER EXPERIENCE →
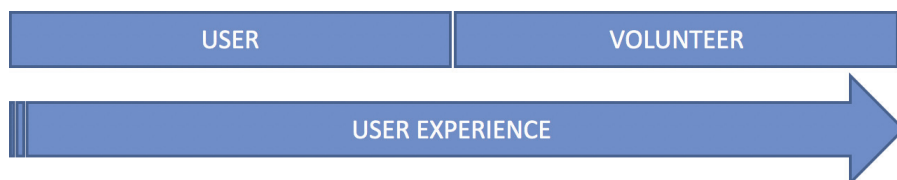
Figure 4. *UX Continuum of Library Users Turned Volunteers*

Lastly, this study further supports Schmidt's (2011) claim that UX thinking should be done in every facet of a library. UX-conscious library professionals should indeed delve deeper into what users feel about their experiences with the staff, services, collections, and products (Schrader, 2011). By doing such, librarians can then maximize the power that it holds which commonly go unnoticed. UX can be harnessed as a potent instrument to make the community that the library serves not just mere end-users of its resources and services. Rather, a well-received UX can make them want to be a part of the library, hence, take action and be a dynamic contributor in community building.

The author would like to extend her warmest gratitude to the Pamantasan ng Lungsod ng Valenzuela and the student library volunteers who participated in this study. May this research serve as a lasting account of all the efforts that each library member, both staff and students, has given to the development and progress of the PLV Library.

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IMPROVING THE LIBRARY SPACE OF THE PHILIPPINE SCHOOL OF INTERIOR DESIGN USING DESIGN CHARRETTE

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ABSTRACT

Purpose/Objective. The purpose of this paper is to explore how the physical library can be structured, arranged and improved by the important school stakeholders through the use of Design Charrette activity to meet the rapidly changing student learning needs and faculty teaching patterns of the Philippine School of Interior Design (PSID).

Significance of the Study. Design charrette as a visualizing activity will give the readers an insight on how school stakeholders who gather to have open communication, and exchange viewpoints will address the library spatial design problem and contribute to the development of planning the physical library layout. Furthermore, it is hoped that the result of this study will contribute to the LIS literature collection, which offers a promising approach for stakeholders to arrive at a shared and unified decision making for the successful implementation of the space design project.

Design, methodology, approach. The research is qualitative in nature, engaging stakeholders in Design Charrette activity to capture students, librarians, designers, architects and administrators' perceptions and views in terms of improving the design of the library. The desired outcome of the study is a design plan for the library that incorporates the needs of the users and a space that complies with the standards as well. Due to participatory focus, two groups utilized the Design Charrette method to analyze the data gathered from the semi-structured interviews, group discussions, and group reporting. Content and thematic analyses were done to describe and interpret the participants' views in the stages of the activity.

Findings. It is determined that a design charrette process offers a fruitful activity-model in visualizing the library's physical lay-out design solution that provide in-depth understanding on how the physical library can be structured, arranged and designed, achieving the full educational potential of academic library physical space facilities responsive to the current needs of any institution.

Research implications. Design Charrette activities yield sustained interaction among the participants which offers participants shared and unified decision making for the successful implementation of the space design project. Thus, the outcome of the activity demonstrates how the proposed library's social study space would advance the institution's mission, which served as the basis of demonstrating the value of the library in the academic curricula.

Originality of the paper. This paper could be useful to the librarians who plan to renovate available space, this study may help them consider Design Charrette as helpful activity for involving the school's important key stakeholders in inclusive, highly interactive design activities to ensure an aesthetically, socially, and financially successful outcome.

Keywords: Design Charrette, Charrette, Library space, Layout Design Plan, Library Layout Plan, Library Facility Plan

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INTRODUCTION

With the drastic change in the Philippine School of Interior Design (PSID) came the changing student learning behavior - from individual learning styles to collaborative academic study groups; and the faculty teaching style -from curriculum-centered to learner-centered. Such drastic changes in educational curricula prompted a need for the PSID library to be redesigned as a place of study that would address the students' learning needs, thus enabling the researcher and the librarians to think of a library as serving a greater educational role, including appropriate provision of spaces for learning and teaching. It is essential to understand what library users want and use knowledge as an integral part of a professional approach to library service and space planning (Houlihan,2005). The space planners in institutions nowadays, according to Temple (2008), give a lot of attention to planning and imagining the library physical layout plan.

With the above-mentioned motivation, the research problem is formulated as such: "How should the PSID library formulate a layout plan to cater to the needs of the students and academic learning environments?" Furthermore, this paper provides information on the need for functional spaces along with the technological and environmental elements that would result in addressing the needs and expectations of the end-users while inside the library premises. Finally, the proposed layout plan to improve the library space was the highlight of the paper, in turn, the researcher surmised that a Design Charrette would be a useful tool to this end. The word "design charrette" is a design plan activity workshop in which designers and important stakeholders worked intensively on a space problem and resulted in the successful implementation of library project proposals (Lutzenhiser & Lennertz, 2003; Condon, 2008). Rogemma (2014), identified Design Charrette method as an act of making and drafting a space plan which comprises: 1) proper zoning of spaces conducive to user needs; 2) determining space allocation for users and equipment accommodation; 3) and identifying the activities that will occur within the existing space (Rogemma, 2014). Howard and Somerville (2014) conducted a study of the Auraria Library utilizing a series of charrette activities. Thus, the stakeholders developed a library master plan and generated refinements which resulted in a final approved design and implementation.

The Library Space in the Philippine School of Interior Design

Muller (2015), emphasized that the 21st - century school, college, and university should recognize the critical need for developing 21st–century learning skills focusing on the Outcomes-Based Education (OBE) (Philippine Higher Education Presidents' Summit, 2015). The OBE was mandated by the Commission on Higher Education (CHED) for implementation of all higher education programs and was stated explicitly in CMO No. 46 s.2012 Policy Standard to Enhance Quality Assurance (QA) in Philippine Higher Education through an Outcomes Based and Typology-Based QA. The Policies, Standards, and Guidelines (PSGs) should implement the "shift to learning competency-based standard or outcomes-based education." The OBE will prepare the students with enough opportunities and activities to exercise creativity and self-expression. The idea of the OBE concept mirrors a sentiment on the circulated PSID Faculty Bulletin vol. 6. s.3, 2016 requiring fortifications and enhancement of school facilities (Philippine School of Interior Design website, n.d).

Although the PSID institutional budget was limited, this was a great time to plan. The researcher and librarians assumed that departments which have gathered evidence and developed plans would be the first in line when the funds become available. Initially, students' preferences of the study location were assessed, before the utilization of the Design Charrette activity. Based on the preliminary investigation, the PSID had created other areas in compliance with the CHED requirements. The additional library spaces had been a solution to any perceived need in compliance with the standard requirements from regulatory bodies. However, this traditional reason was overshadowed due to the rapidly changing student learning and teaching style needed. The academic administrator from higher education can now respond to other strong library re-design motivators (Brown-Sica and Sommerville, 2011). The need to support students learning and faculty style prompted the researcher to determine the layout plan solution along with the functional areas needed for the proposed space improvement of the library.

METHOD

The paper is qualitative in nature thereby engaging stakeholders in design charrette activity to capture their perceptions and views concerning the layout plan of the PSID Library. The desired outcome of the study is a design plan for the PSID Library that incorporates the needs of the users and a design that complies with the standards as well.

The Design Charrette method was used to analyze the data gathered from the semi-structured interview, group discussions, and group reporting. Content and thematic analyses were done to describe and interpret the participants' views. Interviews were also conducted with some participants to validate and check the consistency of participants' views during group discussion. The researcher recorded and took down the interviews and charrette group discussion. Using audio recordings, transcripts, and notes, the researcher

familiarized herself with the group discussion and group reports by re-listening to the recordings and re-reading the transcripts. Relevant words, phrases, and statements were labeled and then later grouped into themes.

The items used from the instrument to gather data were taken from several concepts and research literature reviewed by the researcher. This three-part self-made questionnaire in the form of activity worksheet was composed of Part I. Mind Exploring Activity 2) Visioning activity workshop, 3) Kicking off the design charrette activity.

Preliminary Charrette Process

The literature of the mark of a good charrette activity by Condon, P. M. (2008) guided the researcher to the preliminary Design Charrette Activity. The researcher obtained permission to conduct the focus group discussion with the important school stakeholders from the Office of the Vice-President for Academics (OVPAA) and Office of the Vice-President for Finance (OVPF).

To gain an in-depth understanding of layout plan, a group of ten (10) participants who can influence the Board of Directors and promote the project were chosen by the OVPAA's administrator. There were five participants in two groups, and in each group had one librarian, one architect, one interior designer, one student, and one administrator. Letters of informed consent and data privacy forms were distributed. The ownership of data, control of the overall Design Charrette process, role and responsibility were discussed during the preliminary meeting. When it came to confidentiality, the Design Charrette groups agreed to apply an ethical principal enabling the group to balance the issues and agreed-upon goals in an atmosphere of trust and reciprocity.

Design Charrette Methods

The Design Charrette activity was held at the PSID 2nd floor of room 201, which was attended in by ten (10) invited participants and two other visitors who wanted to know what the design charrette was all about. There were three (3) Design Charrette activities: 1) Mind exploring action; 2) Visioning activity workshop; and 3) Kicking off the design charrette activity which was modified and patterned after the process done by Howard, Z. & Sommerville, (2014).

Mind Exploring Activity

All the participants invited were gathered at exactly 9:00 in the morning of October 4, 2017. The opening prayer of the charrette activity was led by one of the participants, thus encouraging all participants to put their hearts and minds in the project. The researcher assumed the role of facilitator and started the presentation of what Design Charrette was all about, enabling the participants to understand why they were gathered in one place. The researcher presented the general objective of the charrette activity which was

to determine the library layout plan design solution to be agreed on by the participants. Some significant findings of the preliminary assessment of students' preferences of the study location were presented to give other students an opportunity to be heard and to provide inputs, which may be considered in the layout plan. The following were recommended: First, a multifunctional drafting table; Second, additional lighting and natural light for doing plates and studying; Third, a place to relax and regroup on campus; and Fourth, a library coffee cart.

To create a seamless flow of intellectual inquiry and exploration through the facility was a target goal. The results of the library staff observation and interviews from the students' library experiences were presented, and the following were the spaces perceived as lacking: 1) rendering space; 2) art display space where the students can display their art projects; 3) bigger workspace, and 4) printing service space. Other library issues such as an inadequate number of personal computers for the students with computer carrels were also mentioned. After dissemination of the information of the library spatial design status, the series of activities were executed:

> **Activity 1.** *Prioritization.* Given the first objective of the needs of the functional space of the academic and administrators learning environment, the researcher presented the different trends of the library layout design enabling the participants to get a glimpse of how the physical library can be structured, arranged and improved. The participants listed down the top ten (10) priority library spaces that they wanted to incorporate into the layout plan.

> **Activity 2.** *Detailing Activity Workshop.* Given the second objective of determining the technological and environmental considerations, the researcher presented some significant findings from the preliminary assessment. Internet connection was determined to be the most essential technological preference of students with 4.72 weighted mean. This was followed by the provision for a charging station for electronic devices with 4.66. The availability of photocopying machines and printers for student use were considered important for students with a weighted mean of 4.63. When it comes to the distribution of responses on the environmental factors' level of importance, the highest weighted mean of 4.95, described as most important, was the temperature or air-conditioning (AC) system, followed by lighting with 4.55 weighted mean for the furniture and spread of the materials, room size with 4.52 weighted mean. Ninety-one (91) students participated in the preliminary study utilizing the mixed method research design. The participants listed down the furniture, equipment or any important elements of design needed to make the library space functional.

Visioning Activity Workshop

On the second day of charrette visioning activity, the participants were gathered in the same place at exactly 9:00 in the morning on the 5th day of October 2017. The

participants visited the location site, thus aided the group to visualize the proposed library space to be renovated.

> **Activity 3.** *Zoning the library space.* To illustrate the layout of the library space based on the user-centered design concept was the given objective. The participants utilized available resources which comprised of cut-out sticker papers, pentel pens, masking tape, two tarpaulins, pencils and rulers. The drafting and zoning activity known for the architectural terms as drawing lines and shapes on paper encouraged open communication to explore ideas and exchange viewpoints (Smith, 2012). The Participants utilized the worksheets enabling them to identify functional library spaces preferred by the group. The information captured was used to facilitate a group discussion that clarified and synthesized ideas. The individual participants placed the sticker paper where they thought each area with the best functional space of the library.

Kicking off the Design Charrette Activity

Given the objective of determining the final layout design solution, both group representatives reported the layout plan design solution with space and sections functionality descriptions. The final functional space list came up thru numbers of a vote from the participants. The number of votes meant a specific functional area was preferred and considered in the new layout of the library space. Clarifications of terms and elements with the help of the design practitioners were also highlighted.

RESULT AND ANALYSIS

The paper was divided into four sections that addressed the research questions in the introduction. The first section analyzed the participants' functional space preferences. The second section determined the physical environment and technological considerations. The third section covered the participant's knowledge contribution during the kick-off activity. The last section was the proposed master layout design solution based on the user design concept.

Section I: Library Functional Spaces

The first section of the paper analyzed the participants' preferences for the library's functional spaces. Voting was a method used by two groups to generate the final list of functional spaces for the proposed new library layout design. Table 2 shows the distribution of the participants' preferences according to specific functional space they considered in the new layout of the library space.

Findings revealed that the library's functional spaces of the kick-off activity outcomes addressed the currently known library layout spatial problem.

First Priority

1. *Space café* considered as one of the priority spaces. The convenience of library users was prioritized, and the proposed space would provide relaxing "downtime" for students. Charrette groups gave responses that cut across the following ideas: a) "opportunity to enjoy a beverage while relaxing with some reading material is highly desirable for interior design people"; b) "opportunity for personal growth that can take place while relaxing with a book or magazine"; and c) "library with casual reading spaces, along with food and beverages". Another top library functional space preferred by the participants was the merging of the proposed *Rendering and Discussion Space* for group academic work and discussion. It was determined that rendering space and discussion space should be enclosed and apart from other spaces to avoid any interruption during students' collaborative brainstorming activities. Furthermore, the *Periodicals and Verticals Space* listed priority functional space considered by the participants due to the availability of the ephemeral and brochures needed by the interior designers' discipline.

Table 1. *Distribution of the Participants' Votes on the Preferred Functional Space*

Library Space	Function/s	Frequency	Percentage
Blue Print Archives	Space for students or teachers' previous plates display	3	30
Property Counter	Space for depositing personal belongings	3	30
Space Café	Space for group socialization "meet up space" or relaxing space during long hours of students' academic work	10	100
Electronic Information Space	Space for students' academic work via the internet with charging station space	9	90
Group Discussion Space and Rendering Space	Space for academic work	3	100
Individual Drawing Space	Space for doing plates individually	3	90
Exhibition Space	Space for exemplary artwork project display of students	10	60
Loan Space	Space for charging and discharging of library resource	9	50
OPAC	OPAC terminal space for searching library resources	9	90
Printing Service	Space for academic work	6	60
Silent Reading Space	Individual reading/study space	5	50
Periodicals and Vertical Space	Space for Interior design brochures and ephemerals materials	10	100
Social Reading Space	Space for group studying in an open area	9	90

Second Priority

2. *Electronic Information Space* was established as the second topmost listed functional space due to the expected availability of the paid journals' subscription, printing services,

and architectural 3D software found in the students' computer workstation hub. Another second top library functional space was the *Individual Drawing Space* and *Silent Reading Space*, which were allocated for students' academic projects and a quiet place to read and study. *Social Reading Space* was an allocated space for the group of students who want to relax while reading and browsing books from circular shelves and found the same level of preferences with that of Silent Reading space. Moreover, the *OPAC stations* were found to be the second crucial useful preference which would aid the students to locate books and resources available in the library.

Third Priority

3. *Proposed Exhibition Space*, the third most preferred library functional space of the participants, will become a potential attraction of the library due to the showcasing of the artwork display of the students. *Loan Space* was found as close fourth top library functional space which is intended for transactions, such as, loans, renewals, returns, and payment of fines, that are mostly done in the loan space table. Both *Blue Print Archives* and *Property Counter Spaces* landed as fifth priority listed functional library spaces considered by the majority of the participants.

Section II: Physical Environment and Technological Preferences

The second section presents the highly important physical environment characteristics and technologies that mattered to the charrette participants:

1. Physical environment characteristics, such as natural lighting from the huge UV-filtered windows, wall finishing colors, ceiling, and floor tiles interior design were found highly important by the participants. However, as agreed by the participants, these will remain untouched due to budget constraints.

2. Spacious, multifunctional drafting tables considered highly essential preferences. The counter furniture and the librarian's working table were given the same level of consideration as the drafting tables. The majority of the participants also deemed it highly necessary to have the customized circular shelf placed in the social reading space.

3. Relaxing ambiance for a socialization atmosphere, wherein students can experience the company of fellow students, was regarded as a highly important physical characteristic of the library.

4. Quiet atmosphere in the proposed silent reading area, where noise must be kept to a minimum, was considered a highly important physical characteristic of the library space.

5. On technology preferences, architectural computer software such as SketchUp, AutoCAD, CorelDraw, and Photoshop among others, peripherals such as printers, internet connection, and additional personal computers, were

considered as highly essential technology provisions that should be included in the proposed layout design solution.

Section III: The Participants knowledge contribution during Design Charrette Activity

The third section presents the extent of the participants' engagement or knowledge contribution with regard to the lay-out plan and the findings during the kick-off activity:

1. It was established that the current layout of the library was based on the librarians' own interpretation of the local needs. However, the student participants felt the need for their involvement and inputs in arriving at the most intuitive and responsive design based on actual student and faculty needs. Moreover, the greatest extent of student-participant involvement was observed in the proposed space café near the internet workstation space facility that signified the blending of formal and informal learning. Student-participants were the ones who marked the floor plan layout of the silent mode area, space café, and rendering area with relaxing atmosphere during the kick-off meeting of the design charrette activity. Student-participants pro-actively shared insight about the space functionality:

   "The previous layout done by the librarians was inadequate in addressing our needs. We [Interior Designer Students] have different [academic] needs from the other students. This is the reason why most of us do not visit the library. Don't forget that the library should also cater to other students who want to do the academic task alone, contemplate, think, read and sleep without the distraction from the outside. So, the first phase of the layout plan should be the silent reading area. This area [existing library] should be the first phase because it's easy to renovate. We think that the merging of spaces is good because multitasking is a way of life here [PSID]. Studying while drafting alone in a quiet ambiance can be relaxing."

2. Findings revealed that when it comes to zoning the librarians' workplace, the librarians were very vocal. Two of them were very particular to the CHED requirements concerning the number of chairs and tables, storage and sizes of shelves, library furniture, and equipment. Librarian –Participant elaborated: "We need the partition for the chief librarian and technical section. We need to consider also the property counter and information desk for the Reference Librarian. If we want to consider merging spaces, we need to separate the professional books from general education books. The silent reading section should be exclusive for Professional and Reference books only. Perhaps we can transfer the General Education books to the proposed Exhibition Space near Space café, but we need another librarian here [counter table]."

3. Greatest extent of involvement was found on the part of administrator-participants when it came to the interior design of the library detailing activity. The same degree of involvement discovered when it came to institutional budgeting policy. Even though resistance to change was manifested in defense of procedural and budget restrictions, administrators still managed to establish common understanding to achieve specific goals. This is expressed in the statement below:

"We understand that you want our library to be conducive to learning but because of the limited budget we have [for the library facility] we suggest, or the right word is insist, that we have to keep the floor tiles design, ceiling, and the wall color design untouched. So, we can accommodate other spaces you want for this library. Let us utilize the resources we have here. (Administrator-Participant) And another thing, we cannot purchase the multifunctional tables that you [pointing to students and interior designer faculty] described because it is very costly on our part, let us maximize the use of our in-house carpentry just provide us with the materials [specification of the materials] and we can make our own. (Other Administrator-Participant)"

4. Greatest extent was found on the part of interior designers in every small detail of the charrette activity specifically when it came to furniture and interior accessories design. However, when it comes to the proposed exhibition space layout greatest extent of involvement rested on the interior designer-participants. This is expressed in the statement below:

"The big monobloc tables and chairs in the library [existing library] should be replaced by the customized tables with a partition that can easily be produced in a short time. The customized circular shelf should be placed in the social reading space for the general education books. We will just submit the specifications of the tables, circular shelves and drafting tables for the proposed Silent Reading Section, Rendering and Social Reading Sections. (Interior Designer-Participants)"

5. Greatest extent of involvement was seen on the part of architect-participants in every facet of charrette activity. Architects took a leadership role, educating the non-designers to architectural terms, assisting the facilitator, and doing a lot of instructional talks while drafting. The statement below presents this idea:

"The verticals and periodicals shelves should be placed at the center. Let us put the coffee tables to the huge windows. This arrangement will cater to a more relaxed ambiance for the students who wish to have a view outside the building. (Architect –Participant)"

Section IV: The Final Design Charrette Illustrations Outcomes

The fourth section is the final layout illustration outcomes agreed upon by the two groups that will address the library spatial layout design solution. The researcher as a facilitator utilized CorelDraw and Sketch-up software to interpret the illustration agreed upon of the groups and the following findings were consensus of Charente library layout design solution:

- Phase 1: Library Reading Space Layout Design Solution
  Php150,000.00 was the allocated budget to re-layout and refurbish the main library to provide a silent reading space with the integration of individual drafting space to give way to the students who wanted to do academic tasks alone, daydream, contemplate, think, read and sleep and enjoy private moments.

- Phase 2: Library Rendering Space Layout Design Solution
  Php 60,000.00 was the allocated budget for the proposed rendering space with the signed agreement of the integration of discussion space exclusive from other library spaces. The proposed space was a design layout solution for the students who want to finish collaborative academic work in school.

- Phase 3: Library Space Café Layout Design Solution
  The Merging of Space Café and Internet Space layout design solution to provide for relaxing or "down-time" for students was proposed with an estimated budget of Php285,000.00. The two interconnected spaces will foster end-users' personalized learning and support digital literacy.

- Phase 4: Library Social Reading Space Design Solution
  With an estimated budget of Php105,000.00 provided that no partition will be created among other spaces such as café, internet and exhibition spaces. The purpose was to accommodate a flexible environment of learning with lively group discussions or intense conversations over coffee—while reading and internet searching.

- Phase 5: Library exhibition space layout design solution
  Significant agreement was made to include exhibition space provided that the budget will not be at the expense of the school. Instead, the yearly winner will shoulder the costs since the winning design will be the one featured in the allocated space. Exhibition space in the library is a showcase of artwork display of the young designers that would become a prime venue for an exhibit, highlighting issues they wish to bring for discussion.

- Phase 6: Vertical and periodicals space design solution
  The new library layout design solution for vertical adjacent to periodicals space can contribute to the growing needs of the students' learning experience.

Participants postulated that the modern library should be an active place that would support student discovery. From this perspective, the inclusion of the vertical and periodicals spaces was allocated an estimated budget of Php150,000.00.

DISCUSSION

Within the forceful changes in educational curricula in a PSID context, and an escalating call for facility improvement expectations, a Design Charrette process produced a library layout plan with fortified project phases which included the estimated cost in the realization of the vision. *Library Reading Space* was first phase of the proposed project, which revealed to be the place aspired for by other students who wish to be away from distractions of computer keyboards, printer sounds, and cell phones. Customized design for the huge table of individual drafting was proposed with the inclusion of appropriate lighting. This is in line with findings of Howard and Katzev (2004), that the lighting to be effective, it must be automatically controlled using a computer simulation of light effusion into interior spaces. Design Charrette activity reflect an appreciation of the wide range of layout plan with the inclusion of interior and furniture design preferences. Outcome from the stakeholders provided information to create a sense of space and design for furniture and functionality as well (Sommerville and Brown –Sica 2010).

The *Rendering and Discussion Space* was deemed important and placed as the second phase on the layout plan. Many students visit the library not only to utilize the traditional library service, but they are also looking for space where they can talk and meet with other students, work and discuss group projects, seek out opportunities for interacting with fellow students while learning. The library of the 21st century need not implement full silence in all areas because the library has become a social environment, a place to be, and a destination where students can experience the company of fellow students (Waxman, Clemons, Banning, & Mckelfresh, 2007).

Space café with relaxing leisure and reading opportunities in close proximity to the internet workstation was the third phase on the layout plan. Participants derived other best practices from industry standards set by Starbucks coffee houses and Barnes and Noble bookstores which seamlessly blended the proposed free WiFi access and proposed self-service printing station with food and drink. *Social Reading Space* without participation adjacent to space café, computer workstation and exhibition spaces would provide flexibility and future space possibility. The improved layout plan would address the academic and learning environment needs. Such perspective is in line with Freeman (2005), that the library must be owned by learners, not by teachers, whether faculty or librarians. The library layout spaces were arranged accordingly to be easily reconfigured in the near future in response to new technologies and pedagogies. With the final layout plan the participants create library spaces that are both functional and aesthetically pleasing which is in line with the goals and mission of the institutions. Utilizing design

charrette aided the essential school stakeholders to engage in developing design goals and solutions thru collaborative layout or drafting. It is determined that a design charrette process may be used as an activity-model in visualizing the library's physical layout design solution that provides an in-depth understanding of how the physical library can be structured, arranged and designed, achieving the full educational potential of an academic library with physical space facilities responsive to the current needs of any institution. Institutional budget allocation should not be a reason to impede the preferred library aesthetic space design outcomes and its expanded services outlined by the groups during and after the charrette. Furthermore, merging spaces into one is a key for the library to accommodate future space flexibilities. Other institutions can apply what was accomplished from this research project to address a library's spatial problem. To generate a more comprehensive picture, may this study be replicated by other researchers using other frameworks aside from PAR situated outside of the design discipline.

Figure 1 shows the whole phases of the proposed library social learning space design solution.
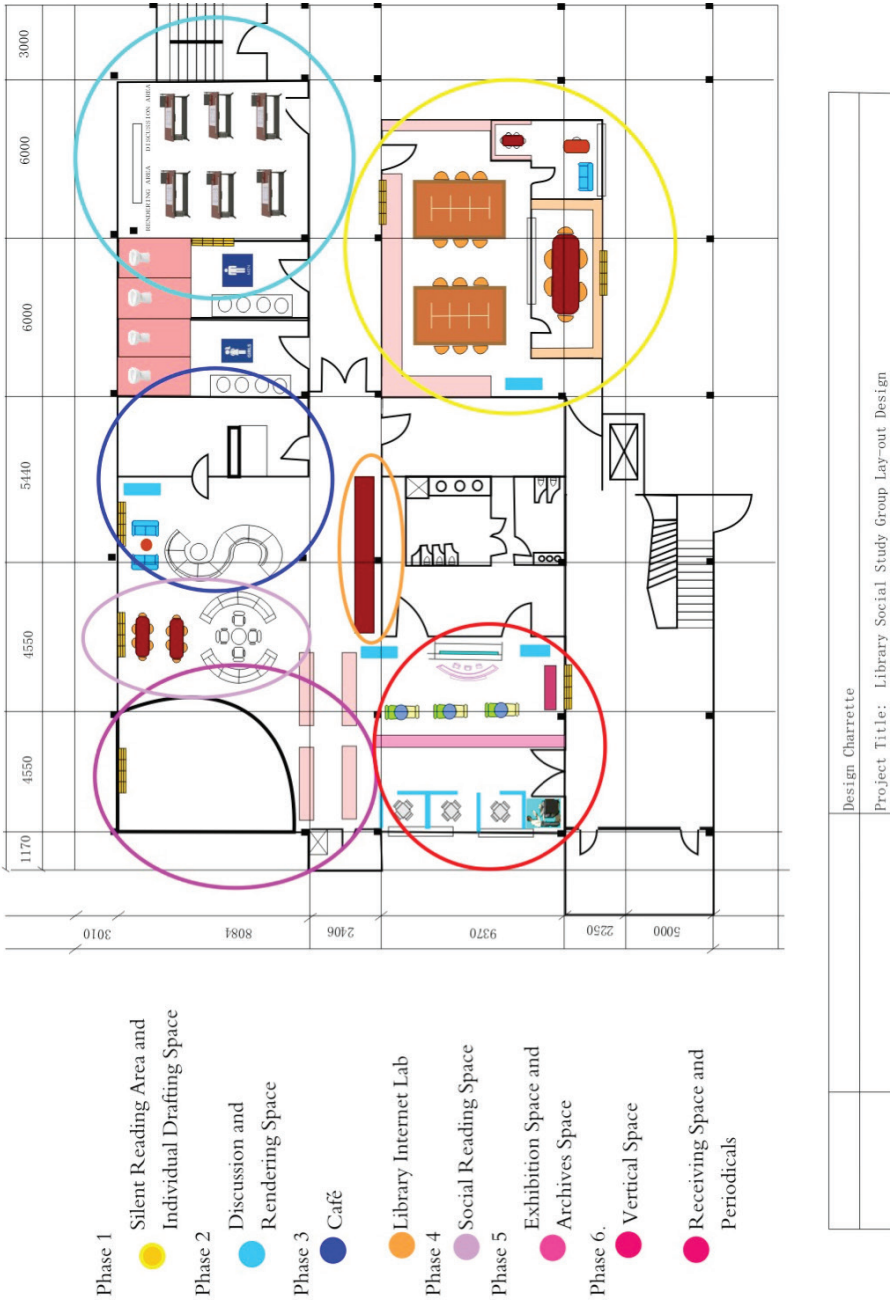
Figure 1. *Final Design Charrette Space Problem Design Solution*
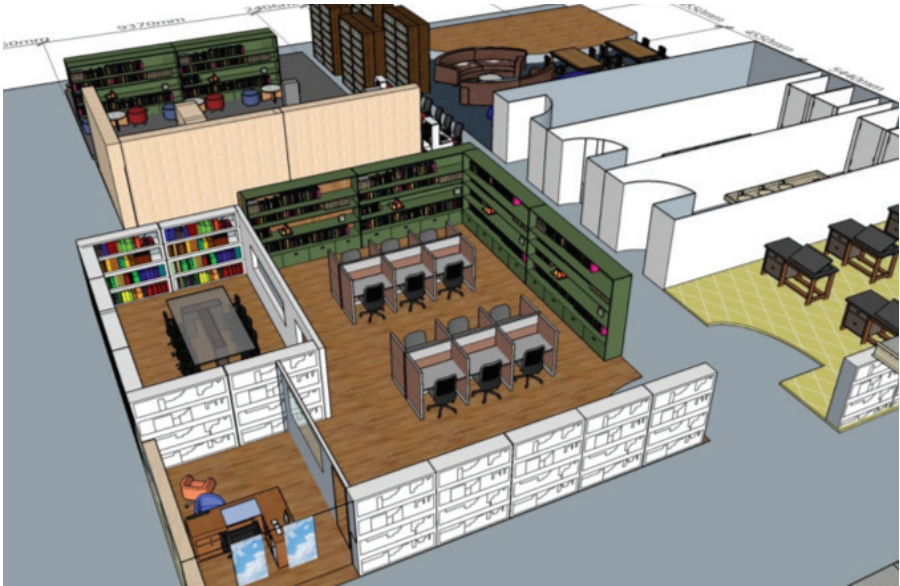
Figure 2. *Perspective 3D View: Silent Reading Space*

Figure 3. *Phase 1: Implementation from Design Charrette - Library Reading Space Layout Design Solution*

Figure 4. *Phase 1: Implementation from Design Charrette – Customized huge table with partition for individual drafting*

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REINVENTING ACADEMIC LIBRARIES IN THE METRO:
THE USERS' PERSPECTIVES

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ABSTRACT

This study sought to find out how academic libraries in Metro-Manila are transforming into learning commons. Feedback from library users as to what they do and what their wishes and expectations are regarding areas for improvement particularly in terms of facilities (physical and virtual commons) and programs (cultural commons) were likewise gathered. Results of the study will help stir consciousness among academic libraries/library administrators on the needs/requirements of their patrons so they can be better aided in advancing/reinventing academic libraries in the country. This is the first user study that ascertained how much academic libraries in Metro Manila have transformed into learning commons.

Descriptive quantitative design was employed making use of a 33-item questionnaire inquiring about library facilities, services and programs, as well as the activities that patrons are allowed/not allowed to do while inside the library. The patrons' wish lists were also gathered. In addition, the extent to which the libraries are adapting to selected features of what a learning commons should be, were also appraised. The sample was selected using convenience sampling, which included nine selected academic libraries in Metro Manila.

There is evidence that Philippine academic libraries are undergoing reinvention and that they are gradually transforming into learning commons. The development in general (i.e. in terms of physical commons, virtual commons and cultural commons), though, seemed to be quite limited and slow.

Keywords: Learning commons; Library transformation; Constructivist learning theory; Third place

INTRODUCTION

Libraries are transforming into learning commons in support of constructivist learning theory, focusing on learning and not on teaching (Brown & Long, 2014) and to cope with new technologies (Heitsch & Holley, 2011). The evolving concept of the library as a third place and the growing interest on space utilization have likewise urged libraries to transition in order for them to remain relevant.

The learning commons concept was introduced in the 1990s and has since been recognized as the *most successful services model all over the world* (Sheikh, 2015). There are three levels to a learning commons: (a) the physical commons, (b) the virtual commons, and (c) the cultural commons. Making up the physical commons are computer hardware, furniture, various types of spaces, and collections traditionally found in libraries like books, periodicals, maps, multimedia materials, etc. Digital/electronic resources online (i.e. eBooks, eJournals, online tools, etc.) and the library's website, on the other hand, comprise the virtual commons. Lastly, the cultural commons consist of the different programs established as an offshoot of the learning commons environment (Heitsch & Holley, 2011).

The learning commons usually observe five design principles—open, free, comfortable, inspiring and practical. To be open means that the space should be seamless, allowing people from the different disciplines to exchange ideas and share spaces. The use of glass walls, instead of solid walls, to separate spaces is favored to help maintain an open atmosphere. Being free allows library users to move around and explore the commons. Wireless technology, flexible workstations, and movable pieces of furniture make this possible. Comfort manifests in the way learning spaces are designed, taking into consideration the different types of learners and learning styles. A mixed of furniture in different shapes and sizes, both modern and traditional, can help achieve this. To provide an inspiring space means to combine functionality, sophistication and creativity. Artworks and colorful furnishings beautifully laid out can help attain this look. A learning commons should be practical, thus be able to serve its purpose, that is, for real work and learning to take place. The design and layout therefore is grounded on the constructivist learning theory; that is, it promotes social interaction and offers practical services and facilities (Sinclair, 2007).

Since its inception, the concept of the learning commons has evolved considerably, and libraries, especially in first world countries, have greatly advanced. However, in the Philippines, only a handful of libraries are assumed to have adopted this model. As it remains unknown as to how much Philippine libraries have transformed into the learning commons, an investigation is deemed necessary.

REVIEW OF RELATED LITERATURE

Conceptual Literature

The constructivist learning theory has significantly influenced the way learning spaces are designed. As learning is believed to take place anywhere and anytime, informal learning spaces are now considered vital for learning. Since the theory focuses on learning, the learner becomes the primary consideration. With this, learning spaces are designed to provide *environments for people* that take into account human factors such as the need to eat and drink, relax, socialize, and undertake different learning activities. Hence, the trend is for learning space design to be human-centered. This trend typifies that of a learning commons, where learning becomes the emphasis rather than information (Brown & Long, 2014). All these have brought about the need for libraries to transition and to reposition themselves.

Technology has changed the way libraries collect information sources and consequently how clients access information (Huwe, 2015). Static computer labs have become a thing of the past as wireless communication has provided clients the freedom to move around (Sinclair, 2007). With students bringing in their own devices in school, investing on modern technology infrastructure is no longer considered sensible. Spending on institutionally licensed applications, instead, offer a more practical solution (Brown & Long, 2011). From being consumer of information, users now create and share information digitally (Sinclair, 2007). Digital media labs in libraries offering tools and equipment that users can manipulate and use to create digital content is likewise gaining popularity. With the rapid developments in the field of information and communication technology, the need for libraries to keep pace with these changes is apparent.

For an individual to stay emotionally healthy, a set of three places should be maintained where different needs are fulfilled. Home as the first place should provide for safety and comfort; work (or courses and departments in the case of students), as the second place, should provide for consistency and satisfaction (Glosiene, Padagaite, & Petuchovaite, 2006); the third place, on the other hand, should serve as a venue where people can socialize. The third place is a public place that hosts gatherings which are "*regular, voluntary, informal*" and happy, thus enriching public social experiences and creating a sense of community. Examples of these are places where people usually hangout like cafes, bookstores, etc. (Kim, 2016). Recent studies have identified the library as a third place. As such, it is imperative that libraries maintain the characteristics of what is expected of a third place—inclusive, stress free, open for long hours, interactive, and has a "loose structure" (Glosiene et al., 2006).

One of the most valuable assets of a library is its building. However, not much attention is given in determining how library spaces are being used as compared to the value placed on assessing how collections are being utilized and/or how well they are meeting the needs/demands of the clients (Griffey, 2018). This is despite the fact that

libraries are spending a fortune for renovation/construction of additional spaces (Huwe, 2015). The investment that the library puts into its spaces does not actually match with the attention given to its utilization. Measuring how spaces are being utilized will provide insights on the opportunities the different spaces offer, what has and should be done and how libraries should move forward (Griffey, 2018), as far as library spaces are concerned.

Related Studies and Synthesis

Libraries exist because of its users (Chauhan & Bhatt, 2017). As such, knowing the needs of the users so these can be appropriately addressed is crucial for every library. There probably is no better way to determine what the users need or want, than by asking the users themselves. Widely used in the field of library and information science (LIS) (Rhee, 2015), user studies or "*user-oriented approach*" is considered as the most effective way of measuring library effectiveness (Majid, Anwar, & Eisenschitz, 2001). This approach is also popularly used to identify the need of the users specifically in terms of library spaces.

Through the conduct of a survey, Aliaa, Latfi, and Izhar (2017) looked into the satisfaction of users on the different library spaces available to them based on four variables, such as collaboration, individual, interaction, and community. Results showed that different types of spaces draw clients to visit the library and contribute significantly to learning. To help facilitate effective space planning and design of the Eindhoven University of Technology in the Netherlands, Cha and Kim (2015) conducted a paper-based survey to 252 students, specifically investigating on what influences their spatial choices (i.e. the act of deciding which among two or more alternative space for a particular activity). Amount of space, noise level, crowdedness, comfort of furnishings, and cleanliness showed to be the most important factors for spatial choices. The Olin Library in Winter Park, Florida surveyed it users learning behaviors in a specific space before and after it embarked on renovation, to see if was a change in the students' perception of a particular space as far as learning behavior is concerned. The results showed that the spaces were primarily being used for social learning and continued to be used for such even after the renovation (Montgomery, 2014). Mixed-methods (seating sweep, student-led focus group, and campus survey) were used to determine how spaces in the Lavery Library of St. John Fisher College in Rochester, New York, were being utilized to aid in decision-making (renovation, space improvement, user needs, etc.). The study found out that users are comfortable using the spaces in the library and that these spaces correspond to their needs. Said library also functions as a third place for the students. However, some of the spaces proved to be under-utilized. Crowdedness, noise levels and temperature also appeared to be concerns that need to be addressed (Hillman, Blackburn, Shamp, & Nunez, 2017). To identify the dimensions of a library as a place, students of a state university in the eastern region of the United States were surveyed using a 160-item questionnaire. Pointed out as major components of the academic library as a place are information and services, reading and study, and relaxation (Kim, 2016). An analysis of how academic libraries in Pakistan are developing into information commons

was also carried out using an online survey. Findings revealed that information commons with advanced ICT facilities were very few in the country. However, libraries are either planning to or are in the process of becoming information commons (Sheikh, 2015).

Considering the trends and all the exciting transformations happening in libraries in most parts of the world, it would be interesting to know how Philippine libraries, particularly how academic libraries are coping with the trends and responding to the evolving needs of its users. This study sought to find out how academic libraries in Metro-Manila are transforming into learning commons. Feedback from library users as to what they actually do, what they would want to do, as well as their wishes and expectations regarding areas for improvement, particularly in terms of facilities (physical and virtual commons) and programs (cultural commons), were likewise gathered. Results of the study will help stir consciousness among academic libraries/library administrators on the needs/requirements of their patrons so they can be better aided in advancing/ reinventing academic libraries in the country.

METHODOLOGY

Research Design

This study employed descriptive quantitative design.

Context and Participants

The sample was selected using convenience sampling, which included nine selected academic libraries in Metro Manila specifically those whose librarians have agreed to participate and support the survey. A total of 145 library patrons accomplished the online survey, mostly coming from six academic libraries located in Manila and Quezon City. Other respondents who did not specify their affiliations were lumped together to form a seventh group. Throughout the discussion, the respondents were considered to be coming from seven groups/entities. Since most of the libraries requested that the identities of their respective institutions be kept in confidence, gathered data are either presented in aggregate or with the names of the institutions concealed.

Undergraduate students made up majority (82.76%) of the respondents, with 92.41% of the population aged between 15 to 24, or those considered to be millennials. There were more female respondents than male. Tables 1 to 3 present the respondents' profile.

Instrument

A thorough literature review was conducted to determine facilities, programs, services and other features typical of a learning commons to aid in coming up with

a checklist of essentials and ideals. Said checklist served as the basis for drafting the instrument.

Table 1. *Breakdown of Respondents by Patron Type*

Patron Type	Count	%
Undergraduate students	120	82.76
Graduate students	15	10.34
Faculty	1	0.69
Other	9	6.21
Total	145	100.00

Table 2. *Breakdown of Respondents by Age*

Age Bracket	Count	%
15-24	134	92.41
25-34	9	6.21
35-44	2	1.38
Total	145	100.00

Table 3. *Breakdown of Respondents by Gender*

Age Bracket	Count	%
Male	60	41.38
Female	85	58.62
Total	145	100.00

The questionnaire consisted of 33 items asking participants to tick on facilities, services and programs available in their respective libraries as well as the activities that they are allowed/not allowed to do while inside the library. The patrons' wish lists were also gathered using the same checklist, although framed differently. This would allow for comparison and determine gaps between what are currently existing and what the patrons desire or wish for. The extent to which the libraries are adapting selected features of what a learning commons should be were also appraised.

The instrument was pilot tested with the help of librarians in one of the surveyed libraries who were asked to accomplish the form and give feedback on its usability. Initial responses gathered during the pilot testing were collated to see how well they respond to the objectives of the study. Revisions to the questionnaire were incorporated based on identified flaws.

Procedures

Google Forms was used to launch the online survey questionnaire. Requests to participate in the survey was sent to selected librarians in Metro-Manila. Those who agreed were then asked to forward the form to their respective students.

Data Analysis

Measures of central tendencies, specifically percentages and mode, were used to analyze and interpret the gathered data.

To ensure accuracy of the responses provided by the patrons, specifically those pertaining to what facilities, programs and services are available to them, as well as the different activities that they are allowed to engage in while inside the library, librarians from the concerned libraries were asked to validate the lists drawn out from the patrons' responses since the names used for some of the facilities vary and/or overlap from library to library. Some facilities also served multiple functions, hence inaccuracies were noted in some of the responses, thus the need to validate.

DISCUSSION

Common Activities Patrons Engage in While Inside

Traditionally, patrons go to the library to study, read, and borrow/return books. Survey showed that studying/working remains to be the most common activities that patrons engage in when inside the library. Borrowing/returning books as well as reading also appeared to be common drivers for patrons to visit the library.

Accessing online resources also showed to be widespread suggesting patrons' preference for online resources. Corollary to this, making use of computer facilities and availing of WiFi connection presented to be prevalent among patrons.

Activities like passing time, meeting with classmates/friends/colleagues, relaxing, sleeping, chilling and even playing, which in the past were forbidden in libraries, are activities that patrons now enjoy while inside the library (see Table 4).

Existing Facilities vs. Patrons Needs

Matching the common activities that patrons engage in while inside the library against the facilities available to them showed that the libraries are very well responding to the needs of their clients. The availability of individual study areas in all the libraries provides for the patrons' needs to study/work and read. Some (42.86%) even provide flexible study spaces to support the different learning styles of their patrons. Similarly, all libraries offer computer workstations and wireless internet access, allowing them to access online resources, which according to the survey is popular among patrons. Laptop stations, as well as self-service facilities like self-check machines, are also made available in more than half (57.14%) of the surveyed libraries. These show that there is extensive support for learning in all of the surveyed libraries.

Table 4. *Common Activities Patrons Engage In While Inside the Library*

Reasons	Frequency
Study/Work	118
Access online resources	106
Borrow/return books and other library materials	94
Avail of library services	88
Make use of the facilities (space/computers/equipment)	87
Pass time	83
Meet with classmates/friends/colleagues	81
Read	78
Avail of wifi access	73
Relax	65
Sleep	64
Chill	62
Photocopy/print	58
Play	27
Attend library orientation/information literacy sessions	25
View exhibits	23
Watch movies	21
Attend events	15
Eat/Drink	3

The list of facilities in the surveyed libraries revealed that only two (28.57%) libraries have cafes to offer patrons food and a place to eat. Similarly, only one (14.29%) has a napping station where patrons may go to sleep. Facilities that support collaboration and socialization, on the other hand, like lounge areas, discussion rooms/collaborative learning spaces, exhibit areas, meeting/conference rooms are available in most of the libraries.

The constructivist learning theory highlights the need for libraries to focus on the learners. Focusing on the learners means providing "*environments for people*" (Brown & Long, 2014). With this, attention to the learners' basic human needs like food and designated space to rest/sleep and socialize (meeting with classmates/friends/colleagues, playing, attending events) are vital. Obviously, most of the surveyed libraries have failed to consider the most basic needs of its learners, which is to eat and sleep.

None of the surveyed libraries currently has a gaming station. This is despite the fact that it has been more than three decades when discussions about gaming in libraries appeared in the literature (Ferguson, 2016). Gaming stations seem to remain unpopular among libraries in the country most likely because of the challenges it poses.

The table below enumerates the facilities currently available to the respondents.

Table 5. *Existing Facilities*

Facilities	Total	%
Computer workstations	7	100.00
Exhibit area	7	100.00
Individual study area	7	100.00
Photocopying facility	7	100.00
Wireless internet access	7	100.00
Audio visual room	6	85.71
Drinking fountains	6	85.71
Faculty area	6	85.71
Graduate study area	6	85.71
Meeting/conference room	6	85.71
Multi-purpose room	6	85.71
Viewing room	6	85.71
Lounge area	5	71.43
Printing facility	5	71.43
Discussion room/Collaborative learning space	4	57.14
Laptop station	4	57.14
Multimedia/Presentation support centre	4	57.14
Self-service facility (e.g. self-checkin, self-service printing, etc.)	4	57.14
Academic support unit (e.g. Academic Advisement, Tutoring and Service Learning, etc.)	3	42.86
Flexible study space	3	42.86
Open/Outdoor reading area	3	42.86
Scanning facility	3	42.86
Café	2	28.57
Computing centre	2	28.57
Makerspace	2	28.57
Quiet room	2	28.57
Napping station	1	14.29
Pocket garden	1	14.29
Research hub	1	14.29
Auditorium	0	0.00
Electronic classroom	0	0.00
Gaming stations	0	0.00
GPS stations	0	0.00

Table 5. *Existing Facilities (continued)*

Facilities	Total	%
Innovation labs	0	0.00
Instructional technology centre for faculty development	0	0.00
Sound-proof multi-purpose room	0	0.00
Tutoring and Service Learning	0	0.00
Writing centre	0	0.00

Activities that Patrons are Allowed to do while Inside the Library

Aside from the typical activities observed in libraries like studying, reading, writing, etc., patrons were asked to identify non-conventional activities that they are allowed to do while inside the library. Survey showed that all the libraries now allow patrons to discuss with classmates/colleagues, hold meetings, and shoot photo documentation indicating that all of them support collaboration and social interaction among learners. Accessing Facebook and other social media accounts, rearranging tables and chairs to fit the need/learning style of a client, shooting video documentation, and sleeping, which in the past were not permissible in Philippine libraries, are now common in 85.71% of the libraries. Slowly gaining popularity in the surveyed libraries are, allowing patrons to watch movies, play board games, and even eat and drink. Playing cards, however, remains to be an unusual activity allowed only in one of the libraries (see Table 6).

Table 6. *Activities that Patrons are Allowed to do While Inside the Library*

Activities	Total	%
Discuss with classmates/colleagues	7	100
Hold meetings	7	100
Shoot photo documentation	7	100
Access Facebook and other social media accounts	6	85.71
Rearrange tables and chairs to fit our need/learning style	6	85.71
Shoot video documentation	6	85.71
Sleep	6	85.71
Watch movies	5	71.43
Play board games	4	57.14
Eat and drink	3	42.86
Play cards	1	14.29
Other. Access facebook and other social media accounts if very important to student to access his or her account.	1	14.29
Other. Charge our gadgets	1	14.29

Activities Patrons Wish they could be Allowed to do while Inside the Library

Patrons would want to be able to fulfill their basic need to eat, drink, and sleep without having to leave the library, implying the need for most of the libraries to consider putting up cafes and napping stations. They also would want to be allowed to access their Facebook and other social media accounts using computers in the library. Currently, 6 out of 7 (85.71%) libraries already allow patrons access to their Facebook and other social media accounts using public computer terminals. Rearranging tables and chairs to fit their needs/learning styles is something that patrons also wished they would have the freedom to do. The remaining wishes list of activities that patrons would want to do while inside the library emphasized the need for entertainment (watching movies, playing board games, playing cards, shooting video and photo documentation, and playing the guitar and/or other musical instruments) and socialization (hold meetings and discuss with classmate/colleagues) (see Table 7).

Table 7. *Activities that Patrons Wish they could do while Inside the Library*

Activity	Frequency
Eat and drink	76
Sleep	71
Access Facebook and other social media accounts	63
Rearrange tables and chairs to fit our need/learning style	60
Watch movies	46
Play board games	46
Shoot video documentation	40
Play cards	39
Shoot photo documentation	36
Play the guitar and/or other musical instruments	29
Hold meetings	31
Discuss with classmates/colleagues	32
Other. Bringing our bags inside the library	1
Other. Halos we do everything naman	1
Other. I'm okay with our library	1
Other. Like a cafeteria	1
Other. not too loud or quiet.	1

Looking at the list of activities that patrons wish they could be allowed to do while inside the library suggests that libraries nowadays need to be less restricting and more human-centered (Brown & Long, 2011). Heavy wooden chairs and tables may likewise need to be replaced with comfortable, upholstered furniture or even furniture on wheels (McMullen, 2008) to allow more flexibility.

Facilities that Library Patrons Wish they Have

Library patrons desire for facilities that they either badly need or those that are currently not available to them. Based on the data gathered, the top five facilities that patrons wish for are napping station, café, laptop stations, soundproof multi-purpose room, and tutoring and service learning. Table 8 presents the complete list.

Note that the napping station and café perfectly respond to what the patrons strongly desire to do while inside the library, which is to eat/drink and sleep. Currently, these facilities are available in only one or two of the libraries. Soundproof multi-purpose rooms, which are currently not available in the surveyed libraries would respond to their need to discuss and collaborate with each other while respecting other clients who prefer to work in a quiet environment. Tutoring and service learning (which can be both a service and a space) is currently not available in the surveyed libraries. This is expected to help students with their coursework.

Conversely, laptop stations despite being available in 57.14% of the libraries still made it to the top of the list which may be an indication of how important it is for libraries to offer this facility or add more stations for those that already have.

Table 8. *Facilities that Library Patrons Wish they have*

Facilities	Frequency
Napping station	100
Café	73
Laptop station	60
Sound-proof multi-purpose room	53
Tutoring and Service Learning	53
Gaming stations	52
Self-service facility (e.g. self-check)	50
Academic support unit (e.g. Academic Advisement)	48
Innovation labs	47
Lounge area	46
Auditorium	43
Quiet room	42
Open/Outdoor reading area	39
Electronic classroom	39
Scanning facility	37
GPS stations	36
Pocket garden	36
Audio visual room	35

Table 8. *Facilities that Library Patrons Wish they have (continued)*

Facilities	Frequency
Research hub	35
Drinking fountains	32
Flexible study space	32
Wireless internet access	29
Exhibit area	29
Printing facility	28
Computing centre	28
Viewing room	27
Multi-purpose room	27
Instructional technology centre for faculty development	24
Makerspace	24
Meeting/conference room	23
Writing centre	22
Multimedia/Presentation support centre	20
Computer workstations	19
Discussion room/Collaborative learning space	18
Individual study area	18
Photocopying facility	13
Graduate study area	10
Faculty area	9
Other. Access to all the social media because some of our professors use it as a learning and disseminating platform	1
Other. Good employees of the library.	1
Other. bidet	1
Other. Curtains in the 12th Floor of Henry Sy because the sun gets hot at around 4:30 PM.	1
Other. decent individual charging station	1
Other. E - Books.	1
Other. Fast and accessible wireless internet access	1
Other. Fastest internet connection	1
Other. free access to computers	1
Other. I.d access before entering and leaving the library	1
Other. Lockers (For Students)	1

In a learning commons environment, digital and conventional library materials continue to form as vital components of the collection (Sheikh, 2015).

Designated Spaces. Data gathered from the survey showed that the types of learning spaces provided by 28.57% of the libraries vary to a great extent; 57.14% moderately vary; while 14.29% vary only to some extent. These only show that the kind of spaces available in most of the libraries are quite limited, which, based on the list identified by patrons as existing facilities (refer to Table 5) are spaces common in traditional libraries. As such, spaces that support quiet/independent study, shared reading, and class sessions showed to be only moderately available in most of the libraries.

Engaging learners to actively participate in the learning process by taking on multiple roles (not only as a listener like what we have been accustomed to do in the past) and allowing them to interact socially with peers, usually through group work/ discussions, have proven to help improve learning (Brown & Long, 2011). Libraries being classroom extensions, therefore, are called to provide spaces that support not only formal learning but informal learning as well (Thomas, Van Horne, Jacobson, & Anson, 2015). Spaces that allow for collaborative learning and social interaction like discussion rooms, computer pods, lounge areas, innovation labs and makerspaces, to name a few are now considered essentials in libraries.
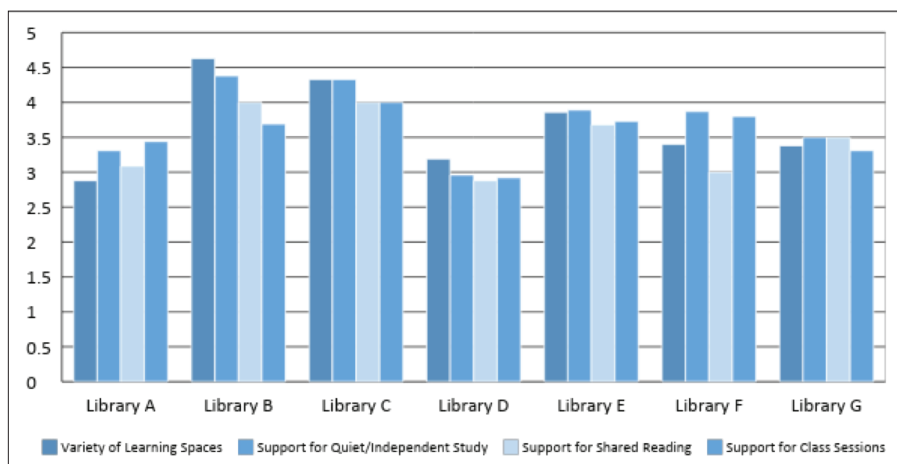
Figure 2. *Designated Spaces*

Computer Hardware/Electric Outlets. Computers in the surveyed libraries were fairly sufficient but electrical outlets proved to be quite deficient. If the libraries would want to encourage students to bring their own device to supplement the number of available computers, they should be able to provide not only a strong Internet/WiFi connection, but enough number of power outlets as well.

Considering how technology has changed the library landscape, providing sufficient and reliable computing facilities is a must in the commons environment.
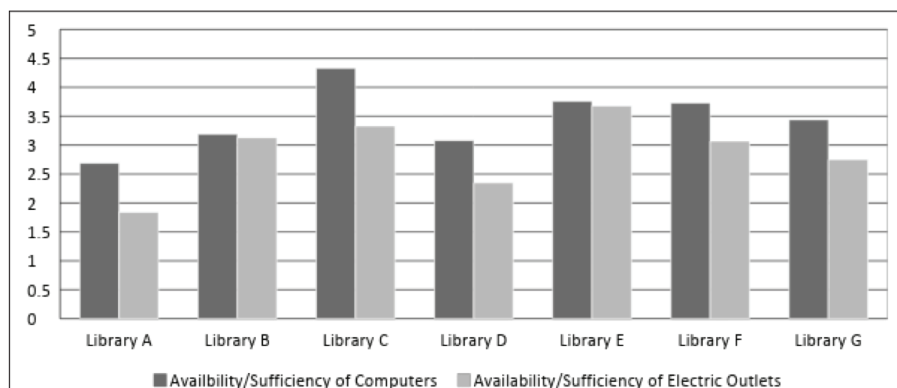
Figure 3. *Availability and Sufficiency of Computers and Electric Outlets*

Functionality and Comfort of Furnishings. The average score for mobility and flexibility of furnishings for all libraries is 3.67 and 3.60 for comfort, which is construed as moderate mobility/flexibility and comfort. Moderately comfortable and flexible furnishings in reality, however, means that the furnishings may not be very stiff or hard but neither are they relaxing.

Comfort (Sinclair, 2007) and flexibility (Thomas et al., 2015) are major considerations in designing learning commons. These principles may be applied when choosing pieces of furniture for the library. As comfort is relative and subjective, different types of furnishings in various configurations that respond to different learning styles should be made available.
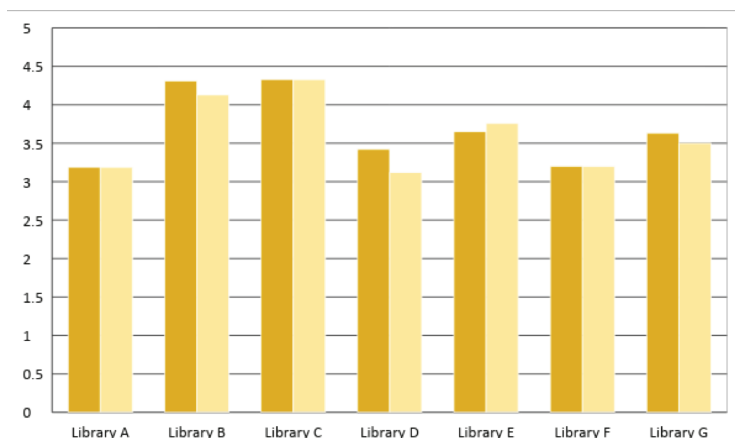
Figure 4. *Mobility/Flexibility and Comfort of Furnishings*

Other Features of the Physical Commons. The use of glass walls among the libraries confirmed to be unusual with only 28.57% of the libraries using it to a great extent. Lighting and ventilation, which can be regarded as measures of comfortability, however, rated quite high at 4.21 and 4.0, respectively. Overall score of all libraries for aesthetics is 3.53, denoting a not so stimulating environment.

Aside from being flexible/free and comfortable, the learning commons should also be open, inspiring, and practical (Sinclair, 2007). Being open means being inclusive and welcoming. Glass walls instead of solid walls are preferred to separate spaces thus offering a seamless and spacious look while providing a view of the outside and likewise taking advantage of natural light. To be inspiring is to be aesthetically pleasing without having to sacrifice functionality. Art works may be added to stir the patrons' creativeness coupled with stylish and colorful furnishings.
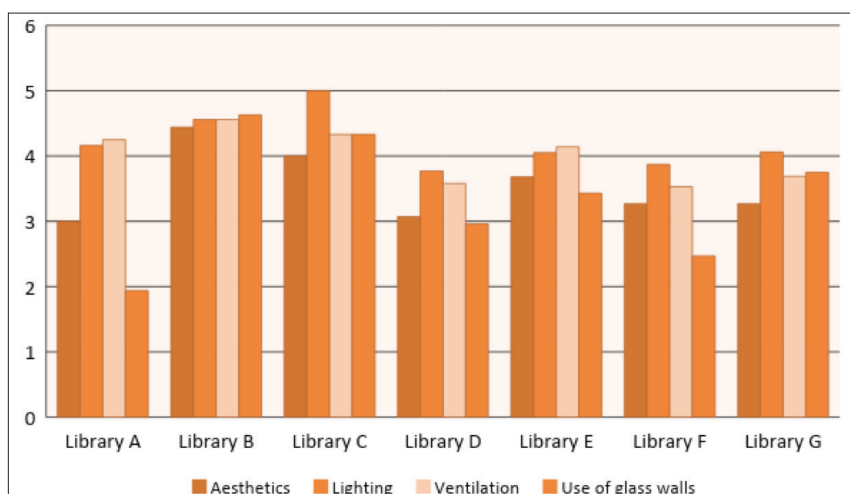
Figure 5. *Other Features of the Physical Commons*

Virtual Commons

ICT Facilities. While all the libraries provide access to the Internet, on the average, library patrons are only able to gain access to a moderate extent. This is most likely because Internet speed in the country is slower than what the clients actually need/want (Flat Planet Pty Ltd (Organization), 2014).

The average rating for all the libraries in terms of web presence is 3.62 and 3.49 for the online help service implying that both facilities are made available to a moderate extent, meaning they exist but cannot be considered as remarkable. The accessibility of online resources, on the other hand, received an average of 3.88, although, the individual scores of the libraries show that 57.14% of them were able to provide online resources to a great extent (see Figures 6 and 7).
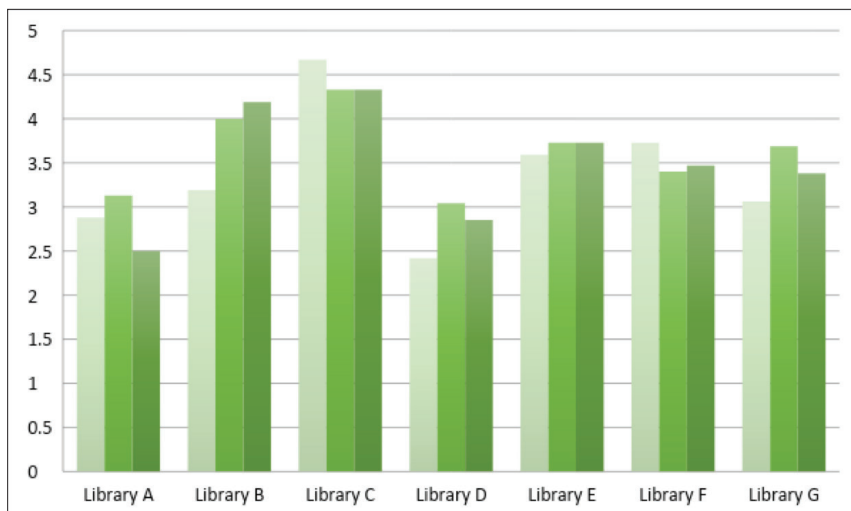
Figure 6. *ICT Facilities*
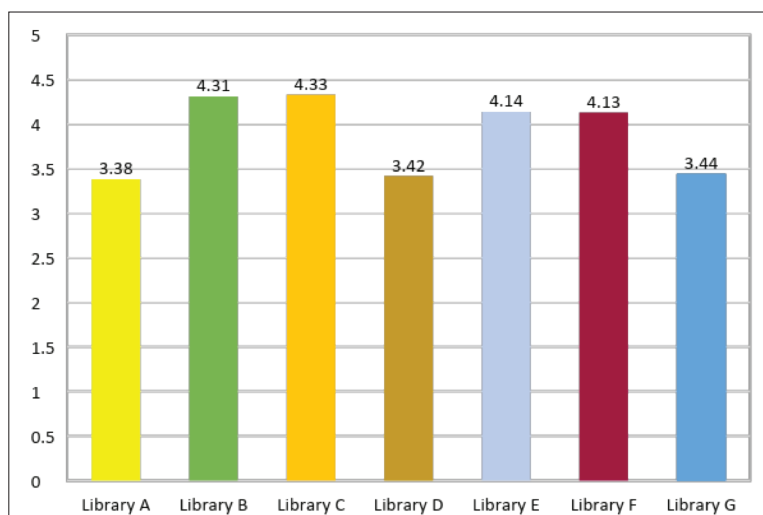
Figure 7. *Accessibility of Online Resources*

For a library to keep connected with their clients who are always online, it should likewise be virtually available. Websites, social media accounts, online public access catalogs, online help services/virtual reference service, online databases and eBooks constitute the library's web presence.

Staying connected has become a way of life for students nowadays. Everything they would want to know and do are expected to be instantly available to them online (Loertscher & Koechlin, 2014). For libraries to be able to respond to this digital culture,

a strong ICT facility is warranted. Internet access should likewise be made available at the fastest speed as much as possible.

Cultural Commons

Survey showed that all the libraries offer different kinds of programs ranging from the very basic ones to the most creative and technical ones. The most common programs are information literacy programs and instructional services. Basic technology assistance, book fairs, and research consultations, are also quite common. The rests appeared to be offered only in limited number of the surveyed libraries like research collaborations, human library, special assistance on more complicated technologies, learning lunches, slam poetry, workshops, and writing assistance (see Table 9).

Table 9. *Existing Programs*

Programs	Total	%
Information literacy program	7	100
Instructional services	7	100
Basic technology assistance	5	71.43
Book fairs	5	71.43
Research consultations	5	71.43
Dialogues	4	57.14
Peer and professional tutoring	4	57.14
Virtual reference service	4	57.14
Research collaborations	3	42.86
Human Library	2	28.57
Special assistance on more complicated technology projects	2	28.57
Learning lunches	1	14.29
Slam poetry	1	14.29
Workshops	1	14.29
Writing assistance	1	14.29

Respondents were asked to identify what programs they would want their respective libraries to offer. Workshops appeared to be the most demanded of all the programs, which actually embrace a lot of different things. This could be writing or research workshops, citation workshops, basic technology workshops, or even workshops (e.g. wood workshops) for makerspaces and a lot more.

The top three programs (workshops, peer and professional tutoring, and research consultations) identified by the respondents suggest an ardent need for them to build on their research capabilities. Unfortunately, workshops, which topped the list, are currently being offered only in one of the libraries.

Table 10. *Programs that Patrons Wished their Library would Offer*

Programs	Count	%
Workshops	81	55.86
Peer and professional tutoring	63	43.45
Research consultations	61	42.07
Book fairs	60	41.38
Slam poetry	58	40
Writing assistance	58	40
Special assistance on more complicated technology projects	54	37.24
Learning lunches	52	35.86
Research collaborations	51	35.17
Virtual reference service	41	28.28
Information literacy program	37	25.52
Instructional services	35	24.14
Basic technology assistance	31	21.38
Dialogues	31	21.38
Other. Everything that a library must have to improve the skills of the students academically and socially.	1	0.69
Other. more book fair	1	0.69

"*Cultural Commons refer to cultures located in time and space – either physical or virtual - and shared and expressed by a community*" (Santagata, Bertacchini, Bravo, & Marrelli, 2011). It consists of the "*activities, knowledge, skills, and patterns, which sustain daily life by encouraging local decision making that benefits the whole of a community rather than promoting self-interest, competition, and profit*" (Burke, 2017). Applied to libraries, they refer to the programs regularly offered for clients to participate and take part in, usually held in designated spaces (e.g. makerspaces, innovation labs, writing centers, etc.) inside the library or online. These programs keep the community participative and interactive, making the library inclusive for all, while at the same time enhancing learning and promoting exchange of ideas.

Staff Sufficiency and Competencies

Staffing plays a crucial role in effecting transformation and ensuring that adequate and efficient support is accorded to library clients. Staff qualifications received an average of 4.04, meaning patrons regard library staff as being qualified to a great extent. Similarly, staff sufficiency got an average rating of 3.99 indicating that the number of staff is adequate to support the needs of the clients (see Figure 8).
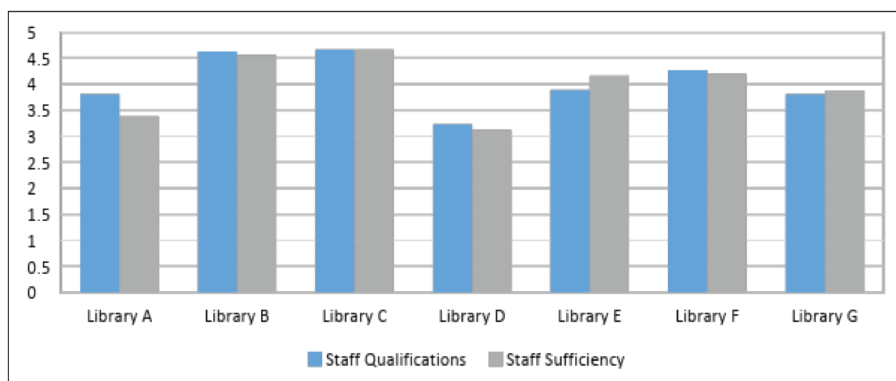
Figure 8. *Staff Qualifications and Sufficiency*

Service Efficiency/Adequacy of Service Hours

Overall service efficiency which is indicative of how satisfied customers are with the services offered by their libraries showed that 3 (42.86%) out of 7 libraries are able to provide efficient service to a great extent while the remaining 4 (57.14%) are only able to afford efficient service to a moderate extent.

The operating hours of the surveyed libraries vary with 7:00 a.m. as the earliest opening time and 12:00 midnight as the latest closing time. The length of time the library is open to clients, however, does not necessarily equate with the patrons' perception of what an adequate service hours should be. Patrons in Library B, which opens from 7:00 a.m. to 8:00 p.m. (a total of 13 hours) for example, received a rating of 3.63 (moderately adequate) while Library B which is open from 8:00 a.m. to 7:00 p.m. (11 hours) received a rating of 4.33 (adequate to a great extent). In the end, it is always the patrons' needs/demands that will matter in determining the length of service hours that will work best for them.
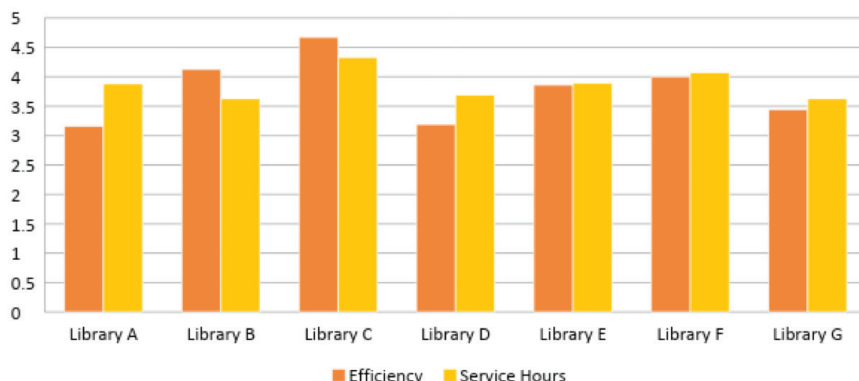
Figure 9. *Service Efficiency/Adequacy of Service Hours*

FINDINGS

Based on the data gathered and analyzed, the following findings are presented:

1. Studying/working remains to be the most common activities that patrons engage in while inside the library.
2. Accessing online resources showed to be prevalent, implying user preference on the use of e-resources.
3. Other non-conventional activities that patrons now enjoy inside the library are passing time, meeting with classmates/friends/colleagues, relaxing, chilling, playing, accessing Facebook and other social media accounts, rearranging tables and chairs, shooting video documentation, and sleeping.
4. Facilities that respond to the most common activities that patrons do while inside the library are made available.
5. ICT facilities such as computer workstations, laptop stations, and wireless internet access are available in all the libraries.
6. Cafes and napping stations are uncommon in the surveyed libraries.
7. Spaces for socialization/collaboration such as lounges, discussion rooms/ collaborative learning spaces, exhibit areas, and meeting/conference rooms proved to be common.
8. Gaming stations are currently not available in the surveyed libraries. Likewise, playing cards remain to be an unusual activity in the library.
9. Topping the list of activities that patrons wish they could be allowed to do while inside the library are eating/drinking, sleeping, accessing Facebook and other social media accounts, and rearranging tables and furniture to fit their needs/ learning styles.
10. Corollary to what the patrons wish they could be allowed to do, they want the following to be made available in the library: napping station, café, laptop stations, sound-proof multipurpose room, and tutoring and learning service.
11. The extent to which the libraries are adopting to the concept of a learning commons in terms of the following levels are as follows:
    a. The physical commons are responding to a moderate extent. Resources in various formats are moderately available; the kinds of spaces available to users are very traditional; personal computers proved to be sufficient but electrical outlets are deficient. Furnishings are only moderately comfortable and flexible; use of glass wall is very limited but ventilation and lighting are excellent. Aesthetics is average.
    b. The virtual commons is likewise moderately adopting to the learning commons concept as Web presence and online help service are made available but not remarkable. Online resources are likewise available and extensive in some of the libraries.
    c. The cultural commons is made evident in the different kinds of programs available ranging from the very basic ones to the most creative and technical

ones. The most common programs are information literacy programs and instructional services.

12. Workshops appeared to be the most demanded of all the programs.
13. Patrons regard library staff as being qualified to a great extent.
14. The surveyed libraries are able to afford efficient services to a moderate extent.
15. The patrons perception in terms of adequacy of service hours varies from library to library.

CONCLUSIONS

There is evidence that Philippine academic libraries are undergoing reinvention and that they are gradually transforming into learning commons. The development in general (i.e. in terms of physical commons, virtual commons and cultural commons), though, seemed to be quite limited and slow.

While patrons continue to regard libraries as a place to study, read and work, it has become apparent that it has evolved into a third place where they can satisfy their needs (academic, personal, and social) in a stress-free environment and where everybody is treated equally (Glosiene, Padagaite, & Petuchovaite, 2006).

The fact that libraries/librarians have relaxed their policies particularly on food and drinks, sleeping, talking or discussing while inside the library, and playing, only proves to show that they are now more sensitive and considerate of the needs of their clients. While relaxing these policies is indeed a welcome change, making available appropriate spaces (such as café, napping stations, discussion rooms and gaming stations) to support patrons' needs would be desirable.

Preference for e-resources over the traditional print collection is evidently increasing. The good news is that librarians appear to be well aware of the trend, as demonstrated by the way they are investing on building their e-collections. As the trend is expected to continue in the coming years, a more sensible budget planning/allocation is recommended.

Although the surveyed libraries confirmed to be responding well to the learning needs of the clients, they fell short in attending to the basic needs of the learners. As such, the libraries are strongly urged to be more human-centered. This could be accomplished by offering designated spaces that would allow the learners to eat/drink, rest/sleep, socialize and even play/be entertained. A review of the existing policies concerning these activities that are usually restricted in libraries should likewise be undertaken.

Computing facilities in most of the surveyed libraries showed to be quite deficient. Slow Internet connection and poor online help services all add up to the inadequacy of ICT facilities. While Internet connection is a national concern, and thus beyond

their control, the libraries should bear in mind that the means to improve/upgrade the computing facilities and enhance the IT capabilities of patrons are concerns that they have control over.

Staff efficiency showed to be an asset in most of the libraries. However, as technology and other trends continue to emerge, capability building should be regarded as a continuing process.

There is a need to fast track transformation. Initially, it would be good to examine what improvements/developments could be easily implemented and accommodated given the limited budget.

Given the above conclusions, this study has its own limitations. Considering that only library users from seven entities based in Manila and Quezon City were surveyed, generalizations as far as the country is concerned, may be limited. It is therefore recommended that further research covering academic libraries in major cities of the country be conducted to find out how these libraries are transforming into learning commons and likewise determine what Filipino library users need and wish for.

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THE USE OF AUGMENTED REALITY (AR): TRANSFORMING THE WAY LIBRARY ORIENTATION IS CONDUCTED IN ACADEMIC LIBRARY

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ABSTRACT

With the vast number of emerging technologies that are currently being introduced to the library world, it is essential for academic librarians to fully utilize these technologies to their advantage. However, it is also of equal importance for them to first make careful analysis and research before deciding whether to adopt a certain technology or not. Augmented reality (AR) offers a strategic medium through which librarians can attach digital information to real-world objects and simply let patrons interact with them. It is a channel that librarians can utilize in order to disseminate information and guide patrons in their studies or researches. And while it is expected for AR to grow tremendously in the next few years, it becomes more inevitable for academic librarians to acquire related IT skills in order to further improve the services they offer in their respective colleges and universities.

The main objective of the study is to discover the advantages of using AR based on how it is currently being used in libraries, as well as to identify the challenges of implementing AR in library orientation programs. It employs the pragmatic approach to research, conducting an extensive review of available literature on AR as used in academic libraries, designing a prototype to illustrate how AR can be integrated to an existing library orientation program, and performing surveys and interviews on patrons and librarians who used it. Findings show that using AR in library orientation is advantageous in terms of (1) cost of implementation, (2) ease of learning, (3) functionality, (4) interactivity, and (5) fun to implement and use, while the challenges are (1) most AR platforms are proprietary, (2) lack of interoperability, (3) cost of mobile devices and internet connection, and (4) it is still emerging. The study concludes that by using the information gathered in this study, academic and research librarians should assess whether implementing AR in their libraries will be appropriate, in accordance to their respective vision and mission.

Keywords: Augmented reality, emerging technologies, library orientation program, academic/research libraries, user experience

INTRODUCTION

Given that librarianship is considered as one of the oldest professions proves that librarians have successfully survived numerous wars, plagues, economic depressions, and varying social values and conditions (Lahiri, 1999). Librarians have always been known for their resourcefulness and adaptability. When the Internet became available to the general public, even though many believed that libraries will eventually vanish, librarians were able to learn how to incorporate it to the services they offer and turn the situation to their advantage. Currently, technology has transformed libraries in terms of collection makeup, services, operations, and functions (Rendon, 2014). In this age where a vast number of emerging technologies are being introduced to the library world, it is essential for librarians to learn how to wield these tools effectively and use this opportunity to further improve their service.

Rotolo, Hicks and Martin (2015, p.4) defined an emerging technology as "a radically novel and relatively fast-growing technology characterized by a certain degree of coherence persisting over time and with the potential to exert a considerable impact on the socio-economic domain(s)". The New Media Consortium (NMC) annually publishes the NMC Horizon Report which charts the five-year horizon for the impact of emerging technologies in colleges and universities worldwide (Johnson, Adams Becker, Cummins, Estrada & Hall, 2016). The NMC Horizon Report: 2016 Higher Education Edition included augmented reality (together with virtual reality) in the mid-term classification with time-to-adoption of 2 to 3 years.

The concept of augmenting the reality has been around even as early as mid-1900s. However, the term augmented reality (AR) was first used in 1990 by Tom Caudell, a Boeing researcher who devised a head-mounted digital display to guide electricians through assembling electrical cables in aircrafts using blended virtual graphics onto a physical reality. He coined the term augmented reality to refer to this system and it was used since then to refer to the intersection between virtual and physical reality (Chen, 2009; Cassella, 2009). AR is defined as "a medium in which digital information is overlaid in the physical world that is in both spatial and temporal registration with the physical world and that is interactive in real time" (Craig, 2013, p. 20). It is worth noting that according to Craig (2013) and Azuma (1994), AR should not be considered as a technology per se but more as a medium.

The recent boost of popularity in using AR is tied to the developments that took place in mobile technology. When smartphones and tablets went mainstream in 2010, AR also became more publicly available. Akçayır and Akçayır (2017) also discovered that AR research has increased dramatically since 2011 and has intensified from 2012 onwards. However, most of the available research literature about AR in libraries either evaluate the current state of technology through review of literature and commentaries about the subject, or propose newly developed AR applications to improve current methods of doing library work. There exists few studies that offer detailed, practical information

in integrating AR into library services that will help other librarians in deciding whether to adopt the technology in their own libraries or not. Especially in academic libraries which have tendencies to utilize new technologies in order to gain the interest of their tech-savvy users, it is very important to first assess whether a particular technology will be useful in achieving their set goals and purposes before completely integrating these to their services. In addition, research studies regarding this field that were published locally are very small in number and are difficult to find. This paper not only aims to contribute to the growing number of literature about AR in libraries but also to help academic librarians make informed decisions in relation to implementing AR services in their respective libraries.

The purpose of this study is to make an inquiry regarding the advantages and challenges of integrating AR into the library orientation programs of academic/ research libraries. Libraries have been an important resource for scholars for at least half a millennium and have been one of the cornerstones of academic establishments for at least 200 years (Heterick, 1991). But as a present-day service institution, the value of libraries is being determined by how much their resources and facilities are being utilized. AR offers a strategic medium through which librarians can attach additional digital information to real-world objects and simply let patrons interact with them. In relation to librarianship, AR is not simply a technology but a channel librarians can use to disseminate information and guide patrons in their studies or researches. If properly implemented, AR can be a powerful tool to provide better access to information for library patrons.

Hence, this study aimed to discover the proven advantages of using AR based on how it is currently being used in the library community as analyzed from the available publications regarding the topic. It also aimed to identify the challenges of implementing AR in the orientation programs of academic/research libraries by doing a prototype implementation and conducting surveys. There is a big opportunity for AR technology to grow tremendously in the next few years, given the interest that big technology companies are currently giving to this field. If AR is to go mainstream in the next couple of years, then it becomes even more inevitable for academic librarians to at least have basic AR knowledge and skills and use such an opportunity to further improve the services they offer in their respective colleges and universities. Ultimately, the end goal of this study is to gather sufficient data that shall be useful in the decision-making of academic/research librarians regarding AR implementation.

LITERATURE REVIEW

Rotolo, Hicks and Martin identified that emerging technologies lack key foundational elements since there is no consensus on what classifies a technology as 'emergent'. Another issue is the problem of evidence – the perceived lack of available research material regarding the impact of such technologies since they are new and still

developing. Hence, Hayman and Smith (2015) suggested about acknowledging both formal and informal evidence in studies involving emerging technologies. The current study was conducted in such way – using formal evidence that resulted from research studies and published in reputable journals, as well as informal evidence gathered from the experiences of library professionals as narrated in blogs and other websites.

Since the term augmented reality was coined, AR researches and project implementations also grew in number. Research studies published in the 1990s laid the foundation for AR research. Paul Milgram introduced the concept of Reality-Virtuality (RV) continuum (Figure 1). This illustrates that AR lies between the extrema of the completely real environment and the completely virtual environment, but with more proximity to the real environment (Milgram, Takemura, Utsumi, & Kishino, 1994). Ronald Azuma also conducted an important research in 1997 which surveyed the state of AR at that time, identified potential AR applications, discussed issues in AR systems, and suggested areas for further research. He also identified the characteristics of AR systems, namely (1) combines real and virtual, (2) interactive in real time, and (3) registered in 3D.
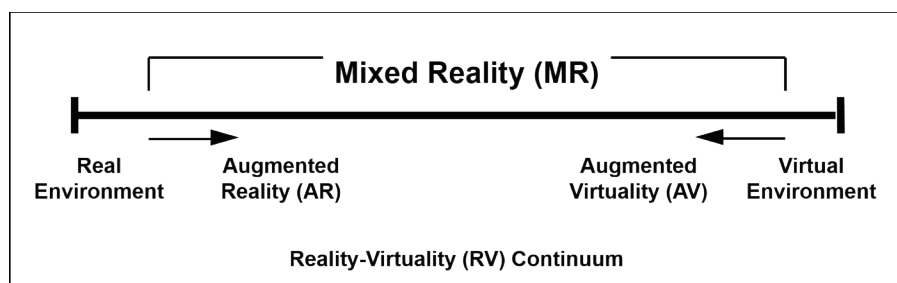
Figure 1. *Paul Milgram's Reality-Virtuality Continuum*

The recent public interest in AR mobile games is unprecedented in the history of the field. However, based on Gartner's 2016 Hype Cycle for Emerging Technologies (Figure 2), AR has already arrived in the phase called "Trough of Disillusionment". This is the phase in a technology's life cycle when general interest starts to wane as experiments and implementations fail to deliver, with many producers of the technology either shaking out or failing (Gartner, 2017).

Meanwhile, librarians have also noticed the potential advantages AR can possibly bring to the profession and have also conducted researches to examine current state of AR, evaluate library-related AR applications, and analyze how AR may affect librarianship (Massis, 2015; Oyelude, 2017; Zak, 2014). A closer look on recent publications and online articles reveal how AR was being applied to library work:

- Bookshelf reading and browsing (e.g., ShelvAR mobile application) (Spina, n.d.; Hahn, 2012)
- Library instruction / orientation (Spina; Chen & Tsai, 2012)

- Library tours (Boyadijan, 2014)
- Instructional guides (Humphries, 2012)
- Augmenting photo collections (Hawkins, 2013)
- Promotional games (e.g., The Mythical Maze app, Stiktu app) (McGettigan, 2014; Barnes & Brammer, 2013)
- Awareness campaign (Cameron, 2015)
- Library navigation (Hahn; Huang, Shu, Yeh, & Zeng, 2014)
- Reader's Advisory (Hahn; Meredith, 2014)

Figure 2. *Gartner's 2016 Hype Cycle for Emerging Technologies*

Augmented reality can be integrated into information literacy instructions such as the conduct of library orientation to improve the overall experience and enhance the way students learn and acquire information. A review of several researches on the practical application of AR by academic libraries and the reasons they choose to integrate it in the conduct of library orientation are summarized and served as a springboard to this study. Aquino and Parry (2017) confirmed in their study on augmented reality in academic libraries that the real world application of the augmented reality educational tools resulted in a higher level of engagement and enthusiasm than past orientations. Some applications focused on: 1. showing a publisher-created book trailer connected to a book; 2. showing a video created by a student describing the bibliography section; and 3. engaging the students by letting them loose around the library to locate targets or "trigger images" that then provided videos for the particular object or book title.

At the Kenneth Dike Library in the University of Ibadan, Nigeria, the principal librarian analyzed the issues of some institutions that make use of augmented reality (AR) and virtual reality (VR) and took notice of its many advantages. Libraries, archives and museums are progressively using AR/VR technologies in their service delivery because they are trending. This may be because of innovations in industries such as gaming, social media and entertainment. Libraries, accordingly, can provide space and services in which the creation of AR can be optimized. One good example is playing host or venue to hackathon or programming sessions in the development of AR/VR projects (Oyelude, 2018).

Avila (2017) provided some examples of how librarians can use AR to promote their library services and provide assistance to users. It also described how AR apps function, what steps are necessary to create augmented reality advertisements and flyers, and how users should be instructed to interact with AR-enhanced materials if they see them. Among the practical uses of AR in libraries are enhancement of library tour pamphlets, advertisements located outside of the library, message boards throughout the campus to inspire students to visit the library, scavenger hunt, marketing the different sections of the library via physical signages, announcements of special events and closing of the library, and promoting special collections such as archive materials. All these can be done by using an AR app installed in mobile devices and by simply pointing the camera in the direction of the augmented material.

Library tours are one strategy to familiarize users with the different collections, services, and facilities available in the library. Another study detailed how one library developed an augmented reality library tour and shared insights into participant responses to the new augmented reality format. The development of the AR tour involved selecting the proper App to be used, creating the content, identifying the tour stops, communicating with library stakeholders to implementing the unmediated library tour. After a semester of implementation, the team conducted an assessment using Gamar Analytics. Based on the feedback, it received both positive and negative response and low rating from the students. While participants commented that the AR tour was a great learning adventure, others said that there was too much walking back and forth (LeMire, Graves, Hawkins & Kailani, 2018).

AR, being a state-of-the-art technology that changed the way we interact with information, gives library users a whole new experience. User experience or UX has been recognized as a major factor of effective interactive service, such involvement is the conduct of library orientation. Irshad and Rambli (2014) conducted a review of user experience studies in selected research publications and identified research gaps. In their findings, it became evident that there is a need to address UX related issues like user experience evaluation and promotion of UX as a field of study to further improve the quality of user experience using mobile augmented reality technology.

METHODOLOGY

The study employed the pragmatic approach to research, also called as mixed methods, in order to gather appropriate information about the subject, demonstrate what AR can do, and gather both quantitative and qualitative data. Mixed methods research advances the systematic mixing of quantitative and qualitative data within a single investigation since it permits a more complete utilization of data than doing separate studies. This methodology is usually used to compare findings from quantitative and qualitative data sources and to use qualitative data to explore quantitative findings (Wisdom & Creswell, 2013). The authors opted to use this method due to the nature of his study and for the better understanding of the research problem -- the need for quantitative data in gathering the opinions of participants on the use of AR in libraries through survey, and for qualitative data as well in measuring user experience of AR and explaining the reactions of participants. First, an extensive review of available literature on AR was conducted, focusing on the foundations of AR and how it is currently being used in academic/research libraries. As previously mentioned, articles that provide both formal and informal evidence were considered since information from published research studies may still be limited. Then, a prototype implementation was designed and demonstrated to library staff and users of the University of the Philippines (UP) College of Engineering (COE) Library in order to illustrate how AR can be integrated to existing library orientation materials. And lastly, survey forms were distributed and short, on the spot interviews, were conducted with those who participated in the demonstration.

For the prototype implementation of the AR library service, the Aurasma mobile application was selected and used. Aurasma is an augmented reality platform developed by HP Autonomy that uses a mobile device's camera to recognize real world images and, by using Aurasma Studio, add various forms of media as overlay (Wikipedia, 2016), as shown in Figures 3 and 4. Since this paper aims to serve as a sample and guide for academic librarians in assessing the value of AR, Aurasma was selected because it is free to download in any Apple or Android device, most of its services are also free, it is easy to use and has a user-friendly interface, and many tutorials are available online.
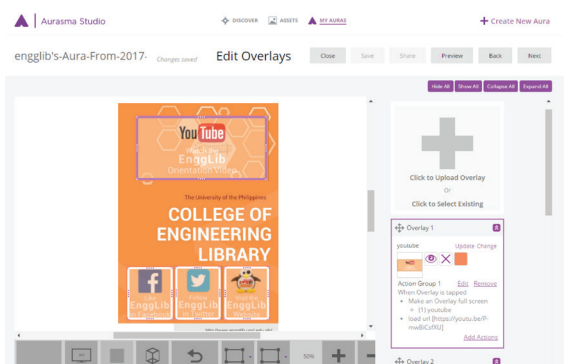
Figure 3. *The Aurasma Studio*

Figure 4. *Using the Aurasma mobile application*

The short survey form was designed for this specific study in order to measure the perception of library staff and users regarding the integration of AR into the Library's orientation materials. It consists of five statements that require respondents to express whether they agree or disagree using the five-point Likert scale, and two open ended questions that ask for comments and suggestions. The survey instrument was designed after reading the instructions provided by the Library Research Service in their website ("Library User Survey Templates & How-Tos", n.d.) and checking other questionnaires for AR as used in other fields (Marto, n.d.). The survey items are short and simple in order to clearly measure AR's functionality, speed, user friendliness, effectiveness, and suitability to be applied in library orientation programs. Likert scales are widely used in questionnaires and survey research to collect opinion data. Five scales were used for better comprehension and response rate ("The Likert Scale Debate", n.d.).

The target population for this study are mainly the library staff of the UP COE Library since they will be the ones who will facilitate the library orientation and guide users on using the AR application. Still, students were asked to participate in order to gather their views about the new possible implementation of this new service. At least one faculty member knowledgeable in the field was also included to solicit informed opinion and feedback. Since this study is like a pilot test to check the viability of the project and does not aim to gather the general opinion of the entire library or UP COE population, a non-probability sampling procedure called convenience sampling was used. The AR application was demonstrated and the survey instrument was distributed to the library staff and users who are available during the time the study was conducted.

RESULTS AND DISCUSSION

A total of 71 respondents filled out the survey forms. These respondents are composed of 49 students, 21 library staff, and 1 faculty member. The study was conducted in the UP COE Library during the mid-year term – the term between regular semesters

when only few students enroll to either catch up with their curriculum or take subjects in advance. Hence, there were only few students who entered the library and participated in the study. Tables 1 and 2 show more details on the profiles of respondents:

Table 1. *Age Group of Respondents*

Age Group	Number of Respondents
15 - 20	38
21 - 25	15
26 - 30	6
31 - 35	6
> 40	2
> 50	2
Not Specified	2

Table 2. *Gender of Respondents*

Gender	Number of Respondents
Male	34
Female	36
Not Specified	1

More than half of the respondents (53%) are within the range of 15-20 years old, the generation that is often described as 'digital natives'. Only a total of 4 respondents were aged more than 40. When the demonstration was being conducted, the feeling of astonishment is clearly visible in most of the respondents' faces whenever they see the digital overlays come out, no matter what their age is. This shows that AR can be appreciated by everyone of any generation. Regarding gender, the number of male and female respondents is almost equal, which means that results are also equally represented.

For the first statement "AR service will allow me to know more about the Library's services and resources", responses are shown in Table 3. Sixty-two percent (62%) strongly agreed and 35% agreed on this statement which means that AR can be an effective channel to disseminate information, as perceived by the respondents.

Table 3. *Responses on Statement #1 "AR service will allow me to know more about the Library's services and resources"*

Scale	Number of Respondents
Strongly Agree	44
Agree	25
No Opinion	2
Disagree	0
Strongly Disagree	0

For the second statement "AR service will enable me faster access to the information I need", Table 4 shows the responses. With almost similar results with the first, this means that respondents also believe that it is easier and faster to get information using AR than traditional means.

Table 4. *Responses on Statement #2 "AR service will enable me faster access to the information I need"*

Scale	Number of Respondents
Strongly Agree	45
Agree	22
No Opinion	4
Disagree	0
Strongly Disagree	0

The third statement says "The AR app is hard to operate and requires technical knowledge". This is the only statement that is not expressed in the affirmative so there is a possibility that some respondents might have been confused. Still, 48% disagreed and 27% strongly disagreed on this statement which means they found it relatively easy to use the Aurasma mobile application. The table below shows the responses.

Table 5. *Responses on Statement #3 "The AR app is hard to operate and requires technical knowledge"*

Scale	Number of Respondents
Strongly Agree	2
Agree	8
No Opinion	8
Disagree	34
Strongly Disagree	19

For the fourth statement "AR service will be effective in reaching out to more students", the responses show slight difference in opinions like in the third, with 1 respondent who strongly disagreed, 2 who disagreed, and 8 who expressed no opinion. Nevertheless, 48% agreed and 37% strongly agreed which still proves that respondents believe that an AR service will connect more students to the library. Table 6 shows the responses.

Table 6. *Responses on Statement #4 "AR service will be effective in reaching out to more students"*

Scale	Number of Respondents
Strongly Agree	26
Agree	34
No Opinion	8
Disagree	2
Strongly Disagree	1

For the fifth statement "The Library should pursue this service and implement this in a bigger scale", responses are shown in Table 7. Almost similar with the first 2 statements, this is a strong evidence that, at least for those who answered the survey, full implementation of the AR service is a worthy endeavor for the library.

Table 7. *Responses on Statement No. #5 "The Library should pursue this service and implement this in a bigger scale"*

Scale	Number of Respondents
Strongly Agree	45
Agree	22
No Opinion	4
Disagree	0
Strongly Disagree	0

Item no. 6 in the survey form asks "Anything you want to say about this service?" The responses were encoded manually, analyzed to check common words or concepts, and then tallied. Responses that have resemblance were grouped together, as shown in Table 8. Some of the written comments are actually suggestions so they were included in the Table 9 instead. Most of the comments are positive in nature, with some expressing their perceived limitations of an AR library service.

Table 8. *Comments of Respondents about the Augmented Reality Service*

Impression on AR Experience
Cool stuff/idea (8)
Awesome; Amazing; Very Nice (4)
Good; Great idea (3)
Innovative (3)
Interesting (2)
Highly advanced; Looks like a luxury tech (2)
Enjoyable (1)
Something new (1)
Functionality
Helpful; Useful (5)
Ease of access to links/services (3)
Interactive (3)
Great opportunity to promote resources/library use (2)
Informative (2)
Will change perception on libraries (2)
Practical (1)
Will enhance library service (1)
Perceived Limitations
Hard to implement (1)
Dependent on internet speed (1)
Might be for young users only (1)
Can't be accessed without device (1)

Lastly, item no. 7 asks respondents for further suggestions. Like in item no. 6, answers that resemble others were grouped together as shown in Table 9. Some suggested different ways on how the service can be better implemented but some suggestions are beyond the objectives of the AR service and of this study.

Table 9. *Suggestions of Respondents about the Augmented Reality Service*

Suggestions about the AR Service
More options for scanning/documents/videos/relevant content (4)
Promote more; Introduce to more students; Inform users (3)
Integrate with books/books with e-book counterpart (2)
Better design (1)
Use for orientation (1)
Use for games (1)
Let AR service be updated regularly (1)
Suggestions for the Library
Play room with AR and VR (1)
Faster internet (1)
Things to Consider
Consider device specs of target users (1)
Alternative for offline use (1)
App needs to be optimized (1)
Future Direction
Add notes/annotations from professors and students as overlay (1)
Coordinate with teachers to use in their lessons (1)
AR app developed by UP students (1)

CONCLUSION

The findings of the study clearly show that using augmented reality is advantageous to academic/research libraries. It is true that the hype an emerging technology brings is volatile and should never be the basis for any decision-making, especially for academic/ research libraries that can spend their resources in many other endeavors. However, when the effectiveness of using augmented reality in certain library activities, such as orientation programs, is supported by hard evidence, it means that its implementation will be worthwhile. For librarians, AR should not be viewed as a technology only but as a medium to relay information. Librarians should use various methods or technologies in order to help users find the information they need. Based on the literature reviewed and the results of the survey conducted, the following are the advantages of using augmented reality in academic/research libraries, especially for library orientation programs:

1. AR can be implemented at virtually no cost, at least for the software. It will be useful especially for libraries that lend mobile devices as additional library service. Since many students nowadays are mobile device users, the library can also take advantage of it by letting them download the mobile application on their own devices.

2. Implementing an AR service is easy to learn, depending on the platform to be used. Various instructional videos are also available online. On the part of the user, using an AR mobile application is also easy. By giving simple instructions, it is expected that library users will already be able to view digital overlays.

3. Librarians can overlay additional information to physical objects through AR. By using it in various library brochures, manuals, posters, etc., users can look further to things that interest them by viewing additional digital content. Librarians can use it in many other programs also.

4. AR can make the library more interactive – a characteristic that is highly valued in today's concept of library spaces and commons.

5. Augmented reality is fun to both implement and use. However, as with any other technology, implementing an AR service also comes with certain challenges on the part of the librarian. The following are some of the limitations of an AR library service:
   • Most AR platforms are owned by proprietary companies which means that subscription rules can change anytime. Many companies also offer free accounts but with certain limitations. Acquiring a paid account to develop a customized AR application may be costly.
   • Unlike QR codes, there is no single AR application that can read all AR digital overlays. Since the features of an AR service will be dependent on what is being offered by the platform, it is very important to choose the platform that shall be used.
   • Aside from the platform, AR implementation minimally requires a mobile device with good camera, and internet connection since it is being run in the cloud. These two requirements are as equally important as the platform.
   • As an emerging technology, many things may still happen in the field of AR. Although its current direction is highly favorable, there is still a slight possibility for it to fail.

This paper aims to provide enough information to help academic/research librarians decide whether to implement an AR service in their respective libraries or not. Since published literature regarding the topic is still lacking, many aspects of AR are yet to be studied. However, since every library has its own vision and mission, every decision must still be based mainly on these. AR can offer a number of things, but its implementation must still be in accordance with what goals the library is pursuing to achieve.

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IS IT ENOUGH TO BUILD? : USERS' AWARENESS AND UTILIZATION OF AEA-IRC LEARNING COMMONS

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ABSTRACT

Purpose/objective. The library's Learning Common (LC) is created to promote active and collaborative student learning engagement. In spite of the good intention of providing an additional learning space, the library has received a number of unfavorable comments from the academic community as to the real purpose of the LC. Thus, this study was conceived. The study aimed to find out the current status of the Aklatang Emilio Aguinaldo-Information Resource Center LC, and to assess the users' awareness on its purpose, design, available facilities, and its level of utilization.

Significance of the study. The findings of the study may serve as reference in creating a program of activities to be conducted at the LC, and in improving the facility and design to better serve the needs of its users. Likewise, this paper hoped to contribute to AEA-IRC's research output and to the existing studies and literature on the importance of the learning commons as a learning space.

Design, methodology, approach. This paper used the descriptive survey type of research. A researcher-made survey questionnaire was used as data gathering instrument to determine the level of awareness of the users with regard to the LC's purpose, facilities and design, and the level of utilization by the respondents. The respondents were Senior High School and undergraduate students of DLSU-D who were enrolled during the school year 2017-2018. The number of respondents is computed using the sample size calculator with 5% margin of error and 95% confidence level. The data were tabulated, analyzed and interpreted using the following statistical treatment of data: mean and percentages and Pearson's Correlation Coefficient.

Findings. In this study, the value of AEA-IRC LC to teaching and learning has been strengthened. It has realized that it is not enough to build a space. Its intended purpose must be known to all and its design and facilities must be aligned with the educational needs of those who will use the learning space.

Research limitation and implications. The study focused solely on determining the user's awareness and utilization of AEA-IRC LC. Its target population were limited to senior high school and undergraduate students who are constant users of the space per statistical record.

Originality of the paper. This paper affirmed other studies conducted on the learning commons as evolving learning space on campus. The instrument made can be duplicated alongside other methods of measuring the impact and value of the learning commons in teaching, learning and research.

Keywords: learning commons, collaborative space, social utility model, library space, space planning

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INTRODUCTION

Libraries are among the most visited and most welcoming learning spaces (Demas, 2005) in the university. These spaces are intended to welcome everyone to engage in both individual study and collaborative activity. As defined by Paton (2014) learning commons (LC) is designed to facilitate learning, to enable students to organize their own learning, to participate in shared learning and to participate in the production of knowledge. Embracing these ideas, the Aklatang Emilio Aguinaldo – Information Resource Center (AEA-IRC) opened the LC to its users during the second semester of SY 2015-2016. The LC is also an answer to the demand for more learning spaces in the library due to increasing number of users.

The AEA-IRC LC is strategically located at the second floor of the main library building near the printed book collections and the reading area. It occupies an area of 144 sq. m. and can accommodate 180 users at a time. It is a learning area with furniture, air-condition, internet access, and a security system. Since the start of its operation, the LC has accommodated an average of 7,756 users every semester and continuously increasing every year. Based on the given statistics, majority of LC users are students.

The LC of the AEA-IRC supports a learner-centered approach of the learning commons model which focuses on active and collaborative engagement (Faber, 2012). The user engagement is the main consideration of the space. Also, its design is made to encourage more group work activities.

Webb, et al. (2008, p.420) pointed out that if "we want to engage students in library spaces, it is imperative we discard traditional views of library space and furniture." In relation to this, the design of the LC is attuned with the current trends in interior design as reflected in the available furniture which invokes encouragement to library patrons. Moreover, the choice of colors for the sofas, bean bags, and chairs were made conducive for collaboration among students.

In 2014, Wong mentioned that the "LC was not just another quiet study space in the campus" (in Chang and Wong, 2013, p. 434). The LC's appearance sends an atmosphere where our millennial users would be more encouraged to come because of the vibrant learning space where they could collaborate ideas with fellow students. The value of LC as facilitator of learning should become an important part of students' life in the campus, hence, it should respond to users' needs in a learning space that encourage and promote shared learning.

Library users are utilizing the LC of AEA-IRC as a learning space for various purposes and activities. Since its conception, the LC has been accommodating many library users. In spite of the good intention for creating it as additional learning space, the library has received unfavorable reactions from faculty, alumni and students as to the real purpose of the LC. Thus, this study was conceived.

It aimed to find out the current status of the LC and assessed user's awareness, utilization and LC's facilities and design. The findings of the study served as reference in creating a program of activities for the improvement on the use of the AEA-IRC Learning Commons for the school year 2018-2019. Likewise, this paper hoped to contribute to AEA-IRC's research outputs and to the existing studies and literature on the importance of the learning commons as a learning space.

CONCEPTUAL FRAMEWORK

This study is guided by the concept of social utility model which was defined by McIntyre and Miller (1992, p. 1) "as those benefits of a product or service that satisfy interpersonal needs" and beneficial "to the majority of population of any given society (Gupta, 2018; Sinha; 2018)." Lippincott and Greenwell, (2011) adopted this philosophy in their concept of the modern learning commons which according to them "is a flexible environment built to accommodate multiple learning activities" based on the users' needs and the nature of their learning activities. According to them, there are seven questions that must be answered in developing a modern learning commons. These questions are:

a) What is it?
b) How does it work?
c) Who is doing it?
d) Why is it significant?

e) What are the downsides?
f) Where is it going?
g) What are its implications for teaching and learning?

Using these questions as a guide, the researchers developed the following indicators in assessing the users' awareness on the purpose of the LC and how the facilities were being utilized.

a) Knowledge on the purpose of the space
b) Suitability of the LC to user's needs
c) User's engagement on the LC
d) Implication to teaching and learning

PURPOSE OF THE STUDY

Based on the indicators given, the aims of the study were: 1) to determine the awareness on the purpose of the LC; 2) to assess the LC's facilities and design; and 3) to identify the level of utilization of AEA-IRC LC by the Senior High School and undergraduate students of De La Salle University – Dasmariñas (DLSU-D) SY 2017-2018. It also aimed to utilize the responses of the respondents as bases to develop a program of activities for the improvement on the use of the AEA-IRC Learning Commons for the school year 2018-2019.

Specifically, it sought to answer the following questions:
1. What is the level of awareness of users of AEA-IRC LC with regard to its purpose?
2. How do users assess the AEA-IRC LC with regard to facilities and design?
3. What is the level of utilization of AEA-IRC LC by the users?
4. Is there a significant relationship with the level of awareness and level of utilization of the users of AEA-IRC LC when they are grouped according to:
   4.1. College?
   4.2. Year level?
5. Based on the results of the study, what improvements for AEA-IRC LC can be proposed?

METHODOLOGY

This paper used the descriptive survey type of research. A researcher-made survey questionnaire was used as data gathering instrument to determine the level of awareness of the users with regard to the LC's purpose, facilities and design, and the level of utilization by the respondents. The questionnaire was divided into four parts: 1) respondent's profile; 2) awareness of LC's purpose, facilities and design; 3) utilization of LC; and 4) recommendations for improvement. Under awareness of purpose, the

researchers identified five LC purposes and the respondents rated their knowledge about each purpose using a Likert scale (1=not aware, 2=aware to a little extent, 3=aware to a moderate extent, 4=aware to a high extent, and 5=fully aware). Under facilities and design, the researchers identified nine (9) items to be rated using the scale (1=strongly disagree, 2=disagree, 3=neither agree or disagree, 4=agree, and 5=strongly agree). Under utilization of LC, fifteen (15) activities were provided to be rated using the scale (1=never, 2=rarely, 3=sometimes, 4=often, and 5=always).

In determining the validity of the research instrument, a pilot study was conducted to 45 respondents. To measure reliability of the test items, the researcher performed Cronbach Alpha test. Result indicated .916 internal consistency of all items and interpreted as excellent. Mean and percentages and Pearson's Correlation Coefficient were the statistical treatment used in the analysis of data.

As for the sample distribution, a non-probability purposive sampling method was used wherein members of particular group of undergraduate college students and Senior High School students from different levels and tracks, respectively were purposefully chosen to answer the survey questionnaire from the months of November to December 2017. The number of respondents is computed using Raosoft sample size calculator with 5% margin of error and 95% confidence level.

LIMITATIONS OF THE STUDY

This study focused solely on determining the user's awareness and utilization of AEA-IRC LC for school year 2017-2018. Alumni, graduate students, and faculty members are excluded in the study because based on the previous statistics, undergraduate and SHS students were the frequent users of the LC. Also, the graduate students and faculty members have a separate learning space.

FINDINGS AND DISCUSSION

A. Knowledge on the purpose of the space

According to Schultz of Starbucks there is a need to define the core purpose for being (Williams, 2018). In the case of the Learning Commons, its rai·son d'ê·tre must be clearly defined and the library patrons should have knowledge about it. Otherwise, it will defeat its real purpose as "powerful venues to support student learning" and will result to what William Badke called "foundational flaws". According to Lippincott and Greenwell (2011), in designing or redesigning a commons, there is a need to assess students' needs and the nature of their school works to determine the alignment of the space to its intended purpose and function. This view of Lippincott and Greenwell on the importance of conducting assessment to determine the value of the learning commons to its users as basis for its improvement is supported by Wong (2014).

In this study, as disclosed in Table 1, the results revealed that the respondents are highly aware of the purpose of AEA-IRC LC. They were aware that this university facility could serve not only as venue for group learning and non-traditional learning activities of the students but also in developing teamwork and promoting culture of exploration and collaboration among students. Majority of them were cognizant that this space can also be used by individual learner. The LC's characteristic of providing multiple needs of students was also highlighted in the study conducted by Wong in 2014 as "most loved" by the students of Hong Kong University of Science and Technology.

Table 1. *Level of Users' Awareness of AEA-IRC LC Purpose*

Awareness of Purpose	Mean	Std. Deviation	Verbal Interpretation
1. serves as venue for group learning	4.16	0.988	Aware to a high extent
2. serves as venue for non-traditional activities of learning	4.12	0.892	Aware to a high extent
3. provides venue in developing teamwork	4.07	0.928	Aware to a high extent
4. promotes culture of exploration and collaboration	3.95	0.931	Aware to a high extent
5. encourages individual learning	3.75	1.018	Aware to a high extent
Overall	**4.01**	**0.9514**	**Aware to a high extent**

B. Suitability of the LC to user's needs

To meet the needs of the 21st century students and pedagogies, today's library should be able to support knowledge economy, collaborative learning, and outcomes-based pedagogy (Jones and Grote, 2018). It should serve as a learning-focused place for individuals and teams, and where creative technologies, library resources and educational activities interact and merge seamlessly together. "A revitalized library will be a "preferred destination," an active participant in supporting knowledge creation—a "want to space for the diverse disciplines it serves" (2018, p. 56). These features must be considered when planning to (re)design the library which is now called a learning commons. Another basic element that must be included in the design process is the partnership, collaboration, and team integration (Jones and Grote, 2018; Sommerville and Collins, 2008). Studies have shown that user participation in the planning process is essential for the following reasons: 1) to generate baseline data; and 2) encourage engagement among stakeholders. The result would be a user-centered design space suitable to the needs of its intended users.

Table 2 divulged the user's assessment of AEA-IRC LC that determine the suitability of facilities and design to their needs. The lighting design, comfortable seats, existence of CCTV cameras and well-regulated room temperature got the highest mean and described as strongly agree. These results may be interpreted that the respondents are highly satisfied and approved with these features of the facilities of the LC. On the

other hand, the Wi-fi connection and the number of electrical outlets got the lowest ratings which the researchers believed is associated with the existing bandwidth at the LC and the uneven proportion of available electrical sockets against the number of users. Whereas, the ratings given to design and arrangement of furniture and the flexibility of the space to cater various user's activities may be attributed to the size of the space, absence of other furniture such as movable type of tables and the overall interior design of the space. These findings were also confirmed in the study of Webb., et al. (2008) which stated that "the type of learning environments that students prefer are spaces that are comfortable, facilitate interpersonal communication, spaces that they can control, and areas that promote the integration of basic human needs and desire along with learning activities" (p.419). Also, these results were braced with the idea advocated by Choy & Goh (2016) on the importance of maintaining vibrancy and space variety of the library interior to serve the diverse learning needs of its users.

Table 2. *Assessment of AEA-IRC LC's Facilities and Design*

Facilities and Design	Mean	Std. Deviation	Verbal Interpretation
1. has a well-lighted area	4.49	0.687	Strongly Agree
2. has a very comfortable seat	4.39	0.793	Strongly Agree
3. has CCTV for security and safety of the user	4.38	0.763	Strongly Agree
4. has a well-regulated room temperture	4.31	0.817	Strongly Agree
5. has wi-fi connection	4.06	0.941	Agree
6. has a well design furniture suited to the users	4.03	0.919	Agree
7. has a well-planned arrangement of furniture	3.88	0.964	Agree
8. has more electrical outlet for user's gadget	3.65	1.127	Agree
9. has enough space to cater different student activities	3.44	1.107	Neutral
Overall	**4.07**	**0.902**	**Agree**

C. User's engagement on the LC

Library users utilized the learning commons for variety of reasons. Table 3 shows various activities that our students are engaged in when inside the learning commons. Most of the time, they used the space to access internet using their laptop/mobile phones and to relax during their vacant period. This result implies that most of the respondents preferred LC to engage in these kinds of activities probably because of the accessibility of Wi-Fi in the area and of comforting ambiance. This finding is also comparable with the report of University of Iowa Libraries Learning Commons (2015) which affirmed that "the more that students believed they could use their laptops in the Learning Commons and the more they believed they could concentrate, the more satisfied they were with the overall Learning Common" (p.1).

Meanwhile, activities rated "Often" by the respondents include listening to music, socializing with friends, doing assignments, group study, film viewing using personal gadget, individual study, accessing online resources of AEA-IRC and watching movies. The activities wherein the students have least engagement inside the LC include creative writing, playing educational card games and doing drawing/art and tutorial session. It maybe associated again with the overall design of the space , the absence of board/card games for circulation, and lack of drawing table to be used. These user activities were expounded by Banguert (2017) when she said that learning commons demands flexibility in order to meet the evolving needs of students, allowing them to meet, talk, study, create, and use technology and other resources" (p.1).

The forgoing results provide an overview that different simultaneous activities are happening in the LC and each user has his/her own preferred type of activity to engage in. This notion of the "the learning commons as a dynamic, student-centric space designed to accommodate multiple learning activities and facilitate both quiet, individual study and collaborative conversations." is cited by Banguert (2017, p.1). Wall (2016) also highlighted the need for making the learning spaces versatile and flexible "to support different teaching and learning activities" (p.8).

Table 3. *Level of utilization of AEA-IRC Learning Commons by the users*

Utilization of AEA-IRC LC	Mean	Std. Deviation	Verbal Interpretation
1. Using laptop/mobile phone	4.32	0.890	Always
2. Relaxing between classes	4.21	0.992	Always
3. Socializing with friends	4.19	0.994	Often
4. Listening to music	4.19	0.994	Often
5. Doing assignments	3.83	0.997	Often
6. Group Study	3.79	1.053	Often
7. Film viewing / using personal gadget	3.78	1.067	Often
8. Individual Study	3.73	1.181	Often
9. Reading for pleasure	3.72	1.158	Often
10. Accessing online resources of AEA-IRC	3.65	1.051	Often
11. Watching movies	3.56	1.339	Often
12. Tutoring session	3.26	1.179	Sometimes
13. Drawing/Art Activity	3.11	1.272	Sometimes
14. Playing educational card games	3.06	1.392	Sometimes
15. Writing literary pieces	3.05	1.238	Sometimes
Overall	**3.70**	**1.119**	**Often**

Relationship between the Level of Awareness and level of Utilization of the users of AEA IRC Learning Commons

In terms of relationship between the level of awareness of purpose and level of utilization of the users of AEA-IRC LC when they are grouped by college, the respondents from the Senior High School Department has the highest mean rating of 4.08 in terms of awareness of purpose and has the highest mean rating of 3.95 in terms of utilization. The computed π is .454 with a p-value of <0.000 described as moderately small positive correlation. This finding means that the two variables are significantly related.

Findings show that all colleges get the same result wherein the two variables (awareness of purpose and utilization) are significantly related except for COE which has a p-value of .080 (not significant). This could be accounted to having the least number of respondents and to the same scores of the respondents. The data shows that the users' awareness of the purpose of LC is significantly related with their utilization of the space. These findings signify that as the level of awareness of purpose increases, the level of utilization also increases and vice versa, which is highly evident in the College of Liberal Arts and Communication and College of Tourism and Hospitality Management, respectively. The reason could be their proximity to the library as they are all located in the East side of the campus. This finding corroborated with the study conducted in the University of Iowa Libraries (2018) where majority of students from the College of Liberal Arts and Sciences are users of the Learning Commons compared with business and engineering students. It also implies that the purpose of LC should be known to all particularly those colleges located in the farthest side of the campus to encourage more student's collaboration and engagement.

With regard to the relationship between the level of awareness of purpose and level of utilization of the users of AEA-IRC LC when they are grouped according to year level, the respondents from the 5th year level has the highest mean rating of 4.30 in terms of awareness of purpose and has the mean rating of 3.78 in terms of utilization. The computed π is .438 with a p-value of <0.037 described as moderately small positive correlation. These findings indicate that the two variables are significantly related. The data reveals that all year level get the same result wherein the two variables (awareness of purpose and utilization) are significantly related except for 2nd year level which has a p-value of .774 (very small positive correlation and not significant). Possibly this could be attributed to having the least number of respondents during the survey due to the number of students enrolled as they are affected by the K to 12 transition programs. As for the Senior High School, between grades 11 and 12, the grade 12 has the highest mean rating of 4.03 in terms of awareness of purpose and has the mean rating of 3.95 in terms of utilization. The computed π is .487 with a p-value of <0.000 described as having moderately small positive correlation This result revealed that as student level gets higher, their awareness of purpose and utilization of the LC increases. These results

somewhat deviate from the report made by the University of Libraries of IOWA where the majority of the learning commons users are newer students.

D. Implications to teaching and learning

This study verified the purpose of the LC to its users as noted by Lippincott (2011) who said that "while the name of the facility can be important in conveying its functions to potential users, it is far more important to develop a clear mission for the space and to configure it to support learning" (p.96). As such, the researchers proposed areas for improvement of AEA-IRC LC and a program of activities in support of teaching and learning. The proposed indicators for the improvement of design and facilities and in designing the program is patterned after the Moreillon Model (Loertscher, Koechlin, & Zwaan, 2011) . The model stated that "Facilitating a program based on the Learning commons (LC) model is a whole school approach that fosters deep learning for all library stakeholders." (See Appendices)

CONCLUSION AND RECOMMENDATIONS

Findings of the study revealed that though the users of the LC are very much aware of its purpose, utilization is still on the average level. It only means that there is still a need to market the AEA-IRC LC to the users wherein its intended purpose will be highlighted and activities which users could engage in are known. With regard to suitability of the LC to user's needs, it was highly suggested that there is a need to redesign the space based on user's preferences and educational demand. As for user's engagement with the space, this study asserted that the LC serves as multipurpose learning space catering to variety of students' activities including social engagement. However, different types of activities being performed by and engaged in by the students and other library users must be considered when redesigning the space.

The study also established that the users' awareness of the purpose of LC is significantly related with their utilization of the space when grouped according to college, except for COED and year levels except for second year. This means that as student level gets higher, their awareness of purpose and utilization of the LC increases.

Moreover, through this study, the value of AEA-IRC LC to teaching and learning has been strengthened. And it has been proven that it is not enough to build a space. Its intended purpose must be known to all and its design and facilities must be aligned with the educational needs of those who will use the learning space.

Based on these findings, it is recommended that results of this study be utilized in the promotion and improvement of the space, highlighting its intended purpose particularly with the freshman students. Implementation of winning entry in the LC interior design competition must be done considering the results of this study and the

written suggestions of the participants such as improvement of furniture, food vendo machine, faster internet connection, and additional electrical sockets. Regular cleaning of the beanbags and sofas must be carried out regularly to maintain cleanliness and sustain the comfortable environment. There should also be a regular personnel who will consistently monitor the area and solicit advice from the LC users. Finally, for full realization of the purpose and maximum utilization of the LC, an annual program of engaging activities embedded in their courses/subjects must be created giving priority to the development of their creative, critical and artistic skills.

It is further recommended that a follow-up research be conducted after the program has been implemented based on the actual LC users as sample population utilizing mixed-method research design approach. The aim is to determine the success of the program and to assess the evolving needs of the LC users. Likewise, the library management may consider adopting the learning commons model in transforming the AEA-IRC.

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APPENDIX A

Suggested Areas for Improvement in the Interior Design and Facilities of the LC*

Features	Proposed Improvement
1. Physical space	
Accommodating space	Re-design/re-arrange the space with a welcoming atmosphere. The space design should encourage more academic purpose activities for the users and not solely for relaxation.
Shared environment	Create an environment wherein users (in group or individual) can perform different activities simultaneously without an effect with one another.
Variable and movable furniture to answer user's needs	Additional furniture be added so that users can make other activities aside from those identified in the survey
Up-to-date technology	Consider an area for the gadgets; strengthening the Wi-fi connection.
Extension of the classroom	Enable the students and faculty members to launch their activities at the AEA-IRC LC in partnership with the Library.
Basic human needs (Food and Drinks Vendo machine)	Consider for future expansion of the LC
2. Virtual space	
Users can access to online resources	Strengthening the Wi-fi connection.

* Adapted from Moreillon Model (*Loertscher, Koechlin, & Zwaan, 2011*).

APPENDIX B

PROPOSED AEA-IRC LC PROGRAM FOR SY 2018-2019

Objectives:

This program aims to :
1) Enhance the learning experiences/engagement of the students who are using the AEA-IRC LC
2) Establish strong collaboration and linkages between library and different student organizations, departments and colleges
3) Promote library resources and services
4) Guide the library personnel in preparing activities for the plans and programs of AEA-IRC LC

Objective/s	Program of Activities	Description	Target Audience	Date	Budget	Person-in-charge
Promote EMS collection	Cine sa LC	Cine sa LC, once a week Film showing activity featuring selected movies and documentaries from the EMS collection.	CBAA CEAT CCJE CLAC COED CSCS CTHM SHS	Every Friday		EMS & College Rep
Promote the Filipiniana Collection	Oral History Relive (Focus on Emilio Aguinaldo's 150TH Birth Anniversary)	is dedicated to preserving the stories and memories of Caviteno as well as Filipinos in general not just the famous and prominent among us, but of people from all walks of life.	COED- BSE Social Science and Filipino Majors	Student Week/ LIS month and March 21, 2019		RSU - Circulation Section COED College Council; CSC
Provide as alternative learning engagement; Promote career options to SHS	Life Chat! Live Chat: Q & A about life and career of selected successful DLSU-D Alumni	Inspired by the concept of Human Library except that this event is done in panel discussion	SHS- Grade 12; Other feeder schools upon the invitation of SADO	Student Week – SHS		SHS Library Rep and Coordinator SHS – Grade 12; Student Admission Office

Objective/s	Program of Activities	Description	Target Audience	Date	Budget	Person-in-charge
Promote library resources and facilities as well as Lasallian education and core values including historical facts about DLSU-D; Promote collaboration and teamwork	Kahoot Hour	An online game-based activity to be held every Wednesday. It can be done in partnership with e-learning classes or by the library independently.	LC users or REED E-Learning classes	Monthly (Second Wednesday of the Month) Lasallian Week	Token or giveaways (ball pens, notepad, etc.)	College Representatives /Coordinators
Promote art collection; Promote LC as creative/ maker space	Art Buffet	Fun-filled day of art and craft making in partnership with Cavite artists and WriteTech (Sponsor for the art materials)	Heraldo Filipino & La Estrella Graphic Artists; Visual and Production Group of Performing Arts Group (PAG) Architecture & BGM Students;	Student Week/ LIS month	2,000 (Food and Token of the invited artists)	LIS Month Committee
Promote LC in different marketing platforms of the Library	Video making contest on Teaser ads about LC	A 5-minute video on the importance and purposes of the LC	Open to MKA, BGM and COM classes	First Semester SY2018-2019	7,500.00 Prizes for first 3,000; second 2,000 and third 1,000 Plus, token for the judges 500x3 = 1500	Office of the Director & Marketing Committee
Promote literature collection (poetry) Promote LC as creative/ maker space	Poetry Writing and Criticism Workshop	An afternoon of poetry writing and criticism workshop with Cavite Young Writers Association	Heraldo Filipino & La Estrella Literary Writers and Broadcast Journalism students (early submission of poem is required)	April 2019 (National Literature Month)	1,250 (Food for 25 pax) 1,500 (Token for 3 facilitators)	Office of the Director & Marketing Committee in partnership with National Bookstore and Cavite Studies Center

Objective/s	Program of Activities	Description	Target Audience	Date	Budget	Person-in-charge
Promote LC as alternative learning engagement; Promote collaborative and teamwork	#BYOBG (Bring Your Own Board Games)	Is a monthly activity requiring a group to bring their own board games and let them play in the Learning Commons	LC Users	Every ___ of the Month (except during exams week)		
Promote Airwaves Research	Listening Hour or Airwaves Research FB Live	Live streaming or Podcasting of the Interactive Airwaves Research Episode	LC Users	Every AR hour		EMS

Note: *ACTIVITIES will be coordinated with student services and colleges through call for partnership)*

ABOVE AND BEYOND: A LOOK AT LIBRARY CLIENTS
PAST REGULAR HOURS

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ABSTRACT

Extending library service hours has been implemented to respond to the changing needs of library clients. This goes in line with the libraries obligation to provide educational, recreational, economic, and informational needs of their users. Extended library hours were originally started in the 1970s by an Association of Research Libraries (ARL) member library while the rest adopted the practice from 1996 to 2001. Unfortunately, there is little information about extended library service hours in the Philippines.

The study seeks to understand the importance of extended library hours to library clients and the dynamics of extending library service hours. The study seeks to justify the current extended library service and improve on this by gauging the preferences, habits, and perception of library clients by surveying clients who regularly use the midnight service; by looking at historical data; and observations made by librarians who have been assigned to extended library service hours.

The study has found that the primary reason for being at the library during extended library hours is related to the clients' lack of time during the day. Night time is their most convenient time for research work. The study found that most library clients prefer to do their research work at night; perceived efficiency and conduciveness of night-time atmosphere are common among respondents. An overwhelming majority of the library clients indicated that the extended library service hours are significantly important to them and not one respondent indicated that it is not important. The study was not able to substantiate the repeated requests for 24-7 service.

This study provides a reliable point of reference for possible improvement and/ or expansion of extended library hours services providing insight on various aspects of extended library service hours which in turn may be used in the planning and implementation of similar services to other libraries.

INTRODUCTION

Since libraries entered the modern era, libraries had to adjust to the changing demands of library clients. Clients who used to be active during regular library hours are, with the help of technology, active almost any time of the day and most especially at night. The traditional library service hours have been replaced with library service extending past regular working hours.

Extended library hours were initially offered in the 1970s by an Association of Research Libraries (ARL) member library while the rest adopted the practice from 1996 to 2001. A recent survey of the members of the (ARL) indicated that some 52 out of their 124 member libraries offer some form of extended hours due to the overwhelming request of library clients.

Typically, libraries provide study space, stack access and computer laboratories to library clients, mainly students, during extended library service hours (Steele & Walters, 2001). While library clients' common activities were: studying as an individual or group; working on a research project or paper; doing research by consulting available resources in the library; using the computer laboratories; borrowing or returning books; printing; scanning or photocopying documents and other materials; and socializing (Curry, 2003; Engel et al., 2002; Dimarco & Damn, 1998; and Saka, 2011). Library clients seek out these spaces during extended hours to study and interact with each other (Adeyemi, et al., 2013). Libraries provide refuge from places which are usually noisy and not conducive to study. Extending library service hours also helps in the retention of information since information is better retained during the night (Saka, 2011). Information also tends to isolate people which can be avoided since extending library service hours provides spaces where library clients can both study and interact with others (MacWhinne, 2003).

Unfortunately, there is little to no information about extended library service hours in the Philippines. A cursory look revealed that most institutions that offer extended library service hours only extend up to 8:00 or 9:00 in the evening or have only began their extended library hours recently, as with the case of the Cebu City Public Library which only began offering their 24-7 service in March 2018. Fortunately, the study was able to identify the Information Services and Instruction Section of the UP Diliman University Library which began to offer extended library service hours on January 10, 2000. Their extended library hours service is from 5:00 PM to 12:00 MN, which, at the time of its first implementation, was the longest extended library hours offered by any library in the country. Additionally, they had accessible historical data and personnel who were willing to be interviewed.

The study focused on library clients present during library service hours past 5:00 PM. The study aimed to gather and examine library clients' usage, frequent activities, preferences, and expectations of extended library service hours.

This study sought to gauge the merits of extending library services past traditional working hours by determining the actual utility and effects of the program to library clients. Specifically, the study aimed to identify the following:

• Demographics of users;
• Duration and frequency of use;
• Reasons for using the extended library service hours;
• Usual activities during extended library service hours;
• Importance of extended library service hours to clients;
• Level of satisfaction with extended library service hours; and,
• Areas for improvement as perceived by clients and librarians.

METHODOLOGY

A survey methodology was implemented in this study. Librarians and personnel who have rendered service during extended library hours were identified and informally interviewed. Their observations and narratives were listed and summarized and was later used as a guide in creating the survey questionnaire. The questionnaire was composed of questions falling under three categories:

(1) patron demographics (age, gender, patron type, residence, educational level);
(2) patron behavior (duration of use, frequency of use, activities); and
(3) patron perspective (perceived importance, level of satisfaction, perceived areas for improvement)

Purposive sampling of library users was used to ensure that data would only come from clients who regularly make use of the extended library hours service. Using historical data, the average number of library clients was identified. A typical week was randomly selected from the month with least events, activities, or other external factors that might affect the number of library clients. The survey questionnaire was deployed during this week during extended library hours.

Accomplished survey questionnaires were collected and examined for authenticity, errors, and completeness. Survey questionnaires that were found to be incomplete and/or unreadable were discarded. The respondents' answers were then encoded in a spreadsheet where findings were organized and averaged to facilitate analyses.

It is important to note that the researchers interviewed librarians and library personnel informally, over separate periods of time to avoid influencing the answers of the librarians. Common activities, feedback, and other observations regarding student behavior and general use of the extended library service hours were listed. Perceived pros and cons of extended library service hours were also listed only to evaluate the experience of librarians and personnel with extended library hours.

The identity and other identifiable information of the respondents were depersonalized to protect their privacy. This was also done to limit the biases of the researchers.

FINDINGS

According to annual reports and academic calendars published by the University, February is the most ideal month since it is far from most examinations and has the least student activity. Statistical data revealed that, on the average, it also has the most number of library clients of all the months.

The average number of library clients per day which is 118 which was computed using the average number of clients per year (18,005 clients) and the average number of days in an academic year (153 days). This was then used to compute for the sample size of 91 (Population Size: 118, Confidence level 95%, Margin of error 5%). The researchers gave out survey questionnaires until the sample size was exceeded resulting in a total of 92 accomplished questionnaires. A total of 157 respondents were given questionnaires. However, the response rate was only 58.9%.

Out of the 92 respondents, 56 were aged 16-20 years old (60.9%); 29 were aged 21-25 years old (31.5%); while 7 respondents were aged 26 and above (7.6%). Forty-seven (47) respondents specified their gender as Female (51.1%), 43 as Male (46.7%), while 2 respondents specified their gender as Gender Fluid / Unspecified (2.2%). Eighty-nine (89) respondents were UP students (96.74%) while the remaining 3 respondents (3.26%) were faculty members. No respondent indicated that they belonged to the patron type non-UP student / non-UP faculty.
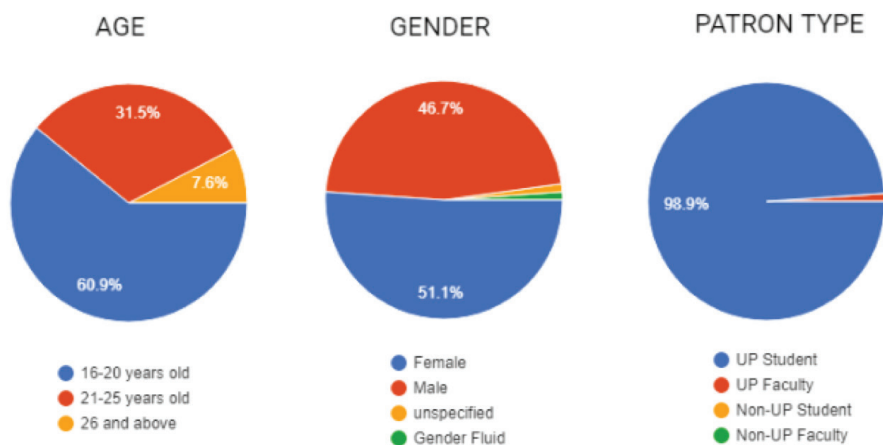

Figure 1. *Demographics of the Respondents*

Forty-two (42) respondents indicated that they live within the UP campus (45.7%); 36 respondents indicated that they live near the campus (39.1%); while 14 respondents indicated that they live more than 20 mins away (15.2%), indicating the great influence the limited transportation options during extended library hours have on the number of library clients. Jeepney service stops at 10:00 PM while most other forms of public transport are limited due to the closing of most of the entry gates on campus.
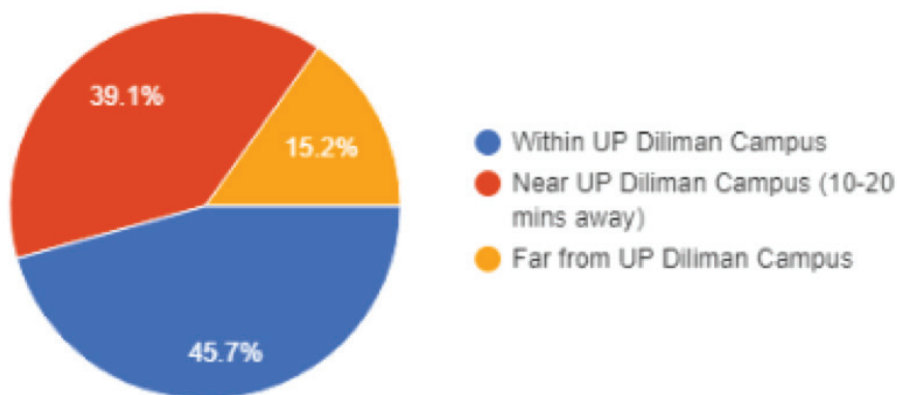
Figure 2. *Location of Residence*

Out of the 89, respondents who identified themselves as UP students, 78 indicated they were undergraduate students (87.6%) while 11 indicated they were graduate students (12.4%).

Figure 3. *Student Respondents*

Out of the 78 Undergraduate students, 3 indicated they were first year students (3.85%); 17 indicated they were second year students (21.79%); 24 indicated they were third year students (30.77%); while 34 indicated they were fourth year students (43.59%).

This would indicate a greater demand for the service when in the advanced stages of undergraduate study.
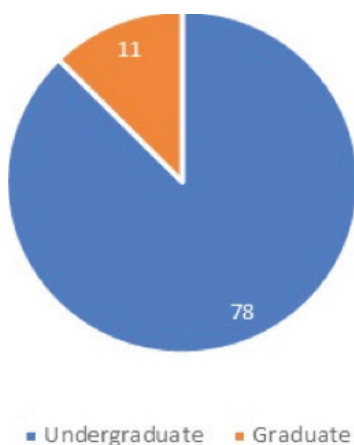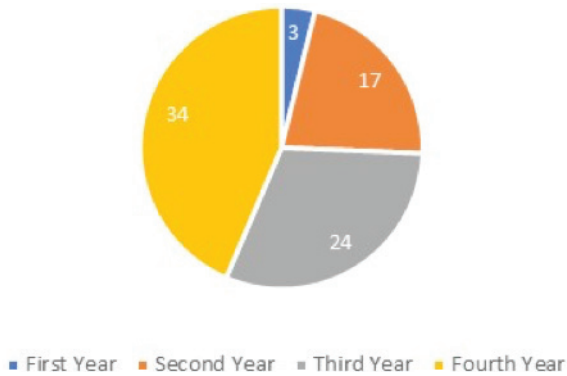

Figure 4. *Undergraduate Students*

Out of the 92 respondents, 4 respondents indicated they made use of the service daily (4.35%); 40 respondents indicated they make use of the service once a week but not daily (43.48%); 24 respondents indicated they make use of the service more than once a month but not weekly (26.09%); while 24 respondents indicated they make use of the service less than once a month (26.09%)
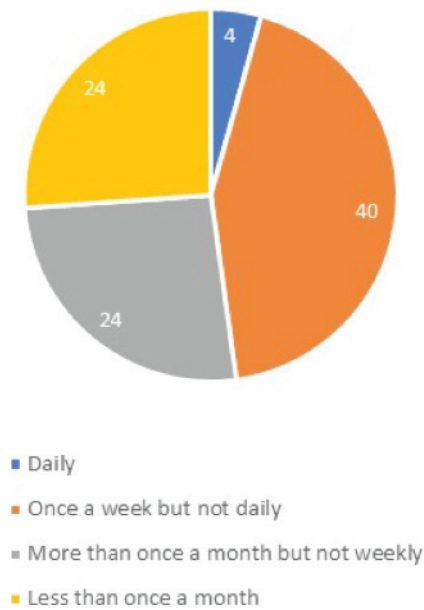
Figure 5. *Frequency of Use*

Out of the 92 respondents, 54 respondents indicated they made use of the service during Mondays (58.90%); 65 respondents indicated they made use of the service during Tuesday (71.00%); 52 respondents indicated they made use of the service during Wednesdays (56.70%); 52 respondents indicated they made use of the service during Thursdays (56.70%); while 28 respondents indicated they made use of the service during Fridays (30.00%).

Figure 6. *Distribution of Use*

Out of the 92, respondents 74 respondents indicated that the service is significantly important (80.4%); 17 respondents indicated that the service is moderately important (18.5%); while 1 respondent indicated that the service is minimally important (1.1%); and no nobody from the respondents answered that the service was not important at all.

Figure 7. *Significance to Respondents*

Out of the 92 respondents, 30 respondents indicated that they stay for 3-4 hours (32.6%); 27 respondents indicated that they stay for more than 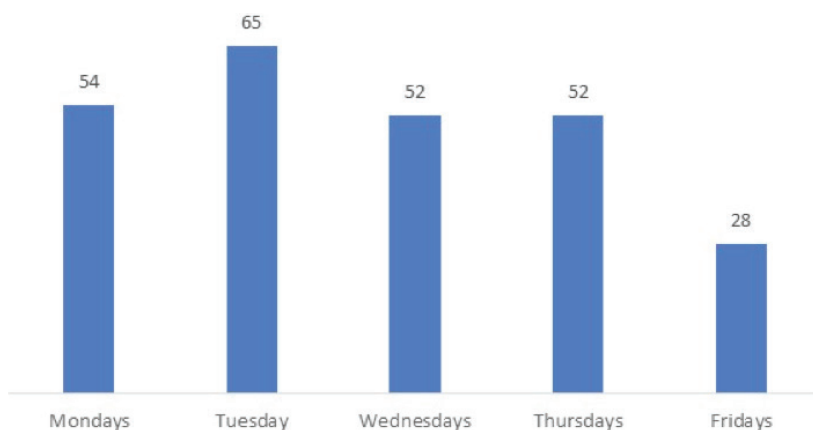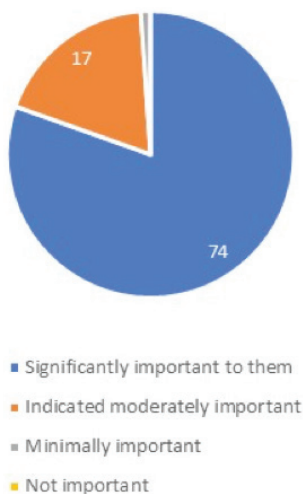4 hours (29.3%); 23 respondents indicated that they stay for 2-3 hours 25%); 8 respondents indicated that they stay for 1-2 hours (8.7%); while 4 respondents indicated that they stay for less than 1 hour (4.4%).

■ more than 4 hours ■ 3-4 hours ■ 2-3 hours ■ 1-2 hours ■ less than 1 hour
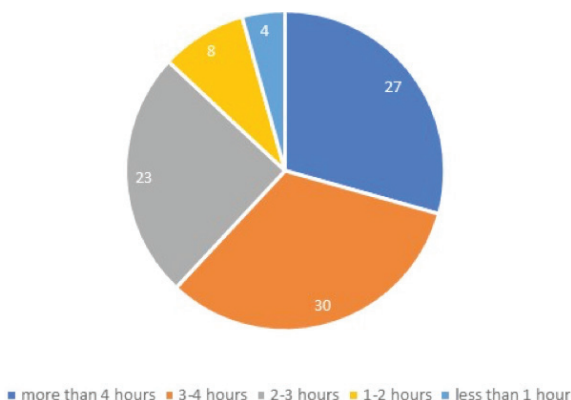
Figure 8. *Duration of Use*

The respondents indicated the following reasons for their stay during extended library service hours:

64.1%	Have classes during the day
58.7%	Able to study better at night
54.3%	This is my most convenient time
51.1%	The library is quiet late at night
40.2%	This is my only free time
19.6%	This is the only time that group mates could meet each other
13%	Working all day
4.4%	It is a better alternative to dormitory or coffee houses (practical and convenient)
2.2%	To avoid traffic
1.1%	Fast Wi-Fi

The respondents indicated the following activities they frequently do during extended library service hours:

97.8%	Use the library as study space
76.1%	Browse the Internet
59.8%	Use electronic resources
57.6%	Meet with classmates for class work / projects
43.5%	Read / send correspondences via email
33.7%	Socialize with friends

25%   Use the library for recreation
21.7%   Use library materials
21.7%   Use print resources
8.7%   Borrow or return books
4.3%   Consult with library staff
1.1%   Use the library to charge my gadgets

The respondents suggested the following improvements:

- Further extend the library service hours to 24 hours, 7 days a week.
- Allow food and drinks into the library
- Need for air condition or better ventilation
- Add RFID for security
- Cheaper rates / Free
- Free coffee
- More electricity sockets
- Larger and/or more discussion area
- Addition of quiet study area
- Improve aesthetics
- Open other sections of the library
- Add a small store
- Additional space

Observations and Narratives by Librarians:

Commonly observed activities:

- Reading print materials (books or readings they brought with them)
- Surfing the internet (typically social media websites)
- Reading and download academic electronic resources
- Talking with other clients (discussing everything from politics, religion, current events, etc.)
- Watching videos (usually online streaming of documentaries, movies, tv shows, etc.)
- Sleeping (sometimes they even bring pillows)
- Tutorial sessions (usually one on one)
- Creating projects (model of bridges, clay animals, dioramas, etc.)
- Creating presentations (short video clips, slide presentations, etc.)
- Practice performances (dance, plays, speeches, etc.)
- Charging their gadgets / devices
- Have earphones on (playing music or listening to whatever if playing on their laptops)
- Playing games (mobile games, computer games, etc.)
- Eating / Drinking (this is done outside the library or in secret)

Other observations:

- Library clients prefer using their own laptops / gadgets
- Library clients usually bring their own study materials
- Library clients makes use of the library's free Wi-Fi
- Library clients prefer air conditioned and highly ventilated areas
- Library clients tend to stick to their group and do not interact with others
- Library clients who are alone prefer silence, often moving away from others
- Library clients tend to have a favorite spot in the library
- Library clients always finds a way to sneak food and drinks into the library
- Library clients often stay for the entire night

Common Feedback by Clients:

Library clients who go home after 10:00 PM generally have a difficult time going home since the University limits the entry of vehicles by that time. Jeepney service also stop around that time. They would either need to call a taxi, get picked up, or walk to the nearest transportation hub outside of the campus.

Library clients often ask for extension to the extended library service hours. This can be in the form of asking to be allowed to stay past midnight to making the extended library service hours applicable to Saturdays and Sundays. They insist the need to copy other countries and adopt a 24-hour library service.

Library clients often complain about the heat during summer months. They constantly ask when will the library become fully air-conditioned. Since the weather has become more extreme and erratic, the need for this is also shared by the librarians.

Library clients complain about the number of electrical sockets available. This is usually followed by queries on why they are obligated to pay for electricity often citing the rates being too high. They also ask for extension cords.

Library clients are very sensitive when it comes to the speed of the internet. Even a slight drop in speed and they would complain about it right away.

Other feedbacks:

Library clients complain when the materials they need are in other sections of the library which, given that it is already past regular hours, are already closed.

Library clients ask if they can bring food into the library.

Library clients ask why our collections have not yet been completely digitized. This is usually also what they say when they have a difficult time using microfilm materials.

Pros and Cons of extended library service hours:

There is a cash incentive given to librarians and library staff assigned to extended library service hours. There is also a transportation service for librarians and library staff since there are limited public transportation options at night.

Duty during extended library service hours is perceived to be unhealthy.
There are numerous accounts of employees who got sicker and fatter after being assigned there.

It is generally more peaceful during extended library service hours although there are occasional confrontational or difficult library client/s who insists on services that cannot be rendered during extended library service hours.

There is the perception that librarians and library staff assigned to extended library service hours have an easier job and they would sometimes be criticized by librarians and library staff assigned to other shifts.

Great care must go into selecting librarians and library staff to be assigned to extended library service hours since conflict with library clients who are in a rush or in an irritable mood is inevitable.

There is perception among library staff that extended library service hours should not be extended further for this allows library clients, especially students to cram and would foster procrastination and laziness. Most of them believe that 24-7 service would ultimately be detrimental to students.

DISCUSSION

The results of the study indicate that usage increases as the undergraduate student advanced through the degree, resulting in fourth year undergraduate students are the most common users of the service. The findings of the study, however, go against the perception that graduate students used the service more than undergraduate students. This could be because graduate students have fewer days for classes and opt to avail of the service only when necessary. There is no notable difference in usage between genders.

The study would seem to indicate that a significant number of library clients who availed of the service either live within or in near proximity to the library. This proves that proximity to the library affects a client's utilization of the service. It is worthwhile to note however that even the limited transportation options during late hours does not seem to deter library clients who live far from the University.

The study would seem to indicate that although library clients do not avail of the service daily, they still visit frequently, at least twice in any given week. The study would seem to indicate that library clients prefer to avail of the service on Tuesdays, which is the first day of classes. The study would seem to indicate that Fridays have the least number of library clients which confirms the perception that Fridays have the least number of library clients as noted in the narratives of librarians and personnel. The study would seem to indicate that library clients usually stay for a 3-4 hours or longer.

The study would seem to indicate that the top reasons for staying during extended library service hours is that most library clients are doing something else during the day. It is also interesting to note that the second highest reason is that they believe that they study better at night.

The study would seem to indicate that the most common activity for library clients is studying and surfing the Internet. Observations from librarians and library staff indicates that library clients generally make use of social media, video streaming, and academic electronic resources.

The study clearly shows that extended library service hours are essential to library clients. Most of the respondents (80.4%) indicated that extended library service hours were significantly important to them and not a single respondent indicated that the service was not important.

The study clearly shows a high level of satisfaction among library clients, however, with the number of complaints and suggestions for improvements, the researcher perceived this to be self-serving. Since the extended library service hours is essential, they indicate high levels of satisfaction even though there is much about it that they would want to change.

There is very little difference between the answers of respondents to the observations of librarians and personnel except on the topic of 24-7 service. Even though it was widely suggested by the library clients, the researcher did not find any data that would support the implementation of 24 by 7 service. The researcher also noted a strong aversion to the idea from the librarians and library staff.

CONCLUSION

The study indicates that library clients during this time are on the advanced stages of their degree program and as such, additional study needs to be undertaken to ensure that their research needs are adequately met. Librarians should explore alternatives and upgrades to the services they provide during extended hours.

Although the study would seem to go along with the findings that even though electronic access is popular it has not diminished the clamor for library services during extended hours (Lawrence & Weber, 2012), libraries would do well to explore avenues on how to provide an anytime, anywhere service. The study clearly showed that convenience is the top concern of library clients and although the study indicated high levels of satisfaction, there might be a point when a similar service might be available to library clients elsewhere. Responses already hint at the proliferation of student cafes and commercial study areas that provide the same services. Libraries must continue to offer better.

The study also indicates a certain level of dissatisfaction among librarians and personnel assigned to render extended library service hours. Although this was not fully explored, the study clearly shows that librarians and personnel have a firm grasp of the service and should be prioritized when implementing or upgrading similar services. The service is essential to the library clients of the University of the Philippines, Diliman and should be improved according to the necessities of library clients without compromising the librarians, library staff, and the institution itself. Improvements should focus on improving the facilities and general ambiance of the library section. Additional research is necessary to determine the feasibility of extending library hours further than what is currently offered.

RECOMMENDATIONS

The findings of this study may be used as preliminary reference in planning, managing, and/or improving libraries. Specifically, in the creation of policies, acquisition of equipment, and planning which services to render.

The study may be modified and replicated to assess current extended library service hours initiatives by other libraries. Special libraries and law libraries are prime examples of libraries that are perceived to require extended library service hours.

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PURPOSES IN USING TABLET (IPAD) IN UNIVERSITY OF THE CORDILLERAS LIBRARIES: A SURVEY REPORT

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ABSTRACT

The research aims to determine the purpose/s of the students in using tablet (iPad) as well as to compare the purpose/s of the students in using the tablet per trimester for the SY 2016-2017. It also aims to add to the limited research about the emerging role of tablets in libraries. To know the purpose of students' tablet use in the UC Libraries, a survey was conducted. Convenience sampling was used to select the respondents of the study, that is, students from Senior High School grade 11 and undergraduate students from first year to fourth year enrolled during the SY 2016-2017 at the University of the Cordilleras. The findings show a consistent result for the major and minor purpose of students in using the tablet. The major purpose of the students in using the tablet are use of search engine (Google, Yahoo, Bing) for research, use for social media, use for dictionary or encyclopedia, and to watch videos. Minor purposes, on the other hand, include to check weather, read or write blogs, and to read or edit documents. The results of the study provide areas where the library can improve in terms of advertising features and services tablets can offer to its consumers. It provides valuable data on what the library has to improve on its services such as its current awareness services and connectivity (Wi-Fi).

Keywords: Tablet computers; Academic libraries; iPad (computer); multimedia library services; Web applications in libraries

INTRODUCTION

The growing use of mobile technologies such as smart phones, laptop computers, electronic reading devices, and tablets presents new challenges for libraries. Thus, libraries should be at pace with the changes brought by these technologies. With the rapid upgrade and increase on the use of technologies, libraries also have the need to start adopting technological innovations to reach out to its patrons. Tablets, e.g., iPads, are very relevant in this generation's learning styles. In 2010, a group of new librarians in Ryerson University in Toronto saw a boost in tablet technology with the introduction of Apple's iPad and so they seized the opportunity to examine the emerging role of the

tablet in the daily academic lives of students. It was found that iPad is "a powerful tool in aiding collaboration, encouraging organization, and assisting learning regardless of field or level of academic achievement" (Eichenlaub, N. et.al, 2011). Furthermore, Evans (2014) said in his article that investing in one or a handful of iPads serves as a shared solution to multiple problems in libraries depending on the library's individual needs. Evans (2014) emphasized that tablet devices, such as iPads, extend beyond offering access to e-books as these also aids in circulating materials in the library.

The study of Kaur and Slimp (2013) show how the faculty and students of 270 community colleges throughout the United States and Canada use tablets for various academic needs. The top most use of tablets were accessing educational apps (applications), web browsing/checking of e-mail, accessing online courses, social media (Facebook, Twitter, etc.) browsing, and reading e-books. Meanwhile, students in Levinsky College of Education, Tel-Aviv, Israel, use iPads in various contexts such as: (a) for ongoing personal use; (b) for planning lessons; (c) for active integration in the classroom; and (d) for reading and developing content and games (Eyal, 2015). In the Philippines, Fredeluces and Halcon's (2015) study show that the top most reasons of students in using tablets in the Lyceum of the Philippines University Library are accessing social Media (Facebook, Twitter, etc.) and search engine (Google), watching videos, reading books or news and searching from the online databases. Using these studies as reference and with the availability of the resources, the University of the Cordilleras (UC) Libraries opted to do a survey research on tablets.

In the UC Libraries, around 70 computer units and 50 iPad tablet units connected to the internet are available. The students, faculty members, and non-teaching staff can use these devices for an hour daily. The 50 iPad tablets were purchased last April 24, 2014 and were circulated in August 2014. These gadgets at the UC Libraries provide an additional means to support library patrons' research works through having immediate access to the internet and to the library e-resources. Moreover, with the availability of these tablets in the library, students of the university are able to experience state-of-the-art facilities while learning. Moreover, there is a high utilization of tablets based on the SY 2015-2016 statistics obtained through its borrower's records. The 3 colleges leading in ranks are the College of Accountancy (9,498), College of Engineering and Architecture (4,050) and College of Teacher Education (3,938). However, knowing the usage is not enough. There is also a need to find out what is/are the purpose/s of the students in using the gadget. Furthermore, there is a limited research about the emerging role of the tablet in libraries which this study aims to investigate through looking into the purpose students use iPads or tablets in the UC libraries. This survey report aims to determine the purpose/s of the students in using tablets for the SY 2016-2017 to enhance the UC Libraries' services and policy development.

METHODOLOGY

Students from Senior High School grade 11 and undergraduate students from first year to fourth year enrolled during SY 2016-2017 at the University of the Cordilleras were the respondents of this study. The sample size of 400 was obtained from the average tablet users from SY 2015-2016. The total frequency of usage of tablet was divided per month and per term. To know the purpose of students' tablet use in the UC Libraries, a survey was constructed. The survey questionnaire was further checked by Research and Innovation Office (RIO) for validity. The first part of the questionnaire dealt with the profile of the respondents. The second part was concerned with purposes in using the tablets. The items regarding the purpose in using the gadget were based from the questionnaire of Fredeluces and Halcon (2015) on the reasons of students in using the tablet in the Lyceum of the Philippines University Library. Follow-up interviews were also used to verify respondents' answers and to gather additional data. Convenience sampling was used to select the respondents of the study. Through convenience sampling, the data was gathered as students come to use the tablets with a schedule allotted for administering the survey questionnaires.

Using the randomized technique, survey questionnaires were administered last November 7-24, 2016, January 9-28, 2017 and July 3-29, 2017 with specific time between 8:00 a.m.- 6:00 p.m. These are the times that the tablets have the highest utilization as reflected in the statistics. The schedule for administered survey questionnaire was the following:

Table 1. *Schedule for administered survey questionnaire*

Date	Days	Time
November 7, 2016	Monday	8:00 a.m.-10:00 a.m.
November 8, 2016	Tuesday	12:00 n.n.- 2:00 p.m.
November 9, 2016	Wednesday	2:00 p.m.-4:00 p.m.
November 10, 2016	Thursday	4:00 p.m.-6:00 p.m.
November 11, 2016	Friday	4:00 p.m.-6:00 p.m.
November 12, 2016	Saturday	4:00 p.m.-6:00 p.m.
November 14, 2016	Monday	4:00 p.m.-6:00 p.m.
November 15, 2016	Tuesday	4:00 p.m.-6:00 p.m.
November 16, 2016	Wednesday	10:00 a.m.-12:00 n.n.
November 17, 2016	Thursday	8:00 a.m.-10:00 a.m.
November 18, 2016	Friday	2:00 p.m.-4:00 p.m.
November 19, 2016	Saturday	12:00 n.n.-2:00 p.m.
November 21, 2016	Monday	8:00 a.m.-10:00 a.m.
November 22, 2016	Tuesday	12:00 n.n.-2:00 p.m.
November 23, 2016	Wednesday	12:00 n.n.-2:00 p.m.

Table 1. *Schedule for administered survey questionnaire (continued)*

Date	Days	Time
November 24, 2016	Thursday	8:00 a.m.-10:00 a.m.
January 9, 2017	Monday	10:00 a.m.-12:00 n.n.
January 10, 2017	Tuesday	12:00 n.n.-2:00 p.m.
January 11, 2017	Wednesday	12:00 n.n.-2:00 p.m.
January 12, 2017	Thursday	8:00 a.m.-10:00 a.m.
January 13, 2017	Friday	12:00 n.n.-2:00 p.m.
January 14, 2017	Saturday	8:00 a.m.-10:00 a.m.
January 16, 2017	Monday	4:00 p.m.-6:00 p.m.
January 17, 2017	Tuesday	12:00 n.n.-2:00 p.m.
January 18, 2017	Wednesday	8:00 a.m.-10:00 a.m.
January 19, 2017	Thursday	2:00 p.m.-4:00 p.m.
January 20, 2017	Friday	8:00 a.m.-10:00 a.m.
January 21, 2017	Saturday	10:00 a.m.-12:00 n.n.
January 23, 2017	Monday	10:00 a.m.-12:00 n.n.
January 24, 2017	Tuesday	8:00 a.m.-10:00 a.m.
January 25, 2017	Wednesday	12:00 n.n.-2:00 p.m.
January 26, 2017	Thursday	12:00 n.n.-2:00 p.m.
January 27, 2017	Friday	10:00 a.m.-12:00 n.n.
January 28, 2017	Saturday	4:00 p.m.-6:00 p.m.
July 3, 2017	Monday	12:00 n.n.-2:00 p.m.
July 4, 2017	Tuesday	2:00 p.m.-4:00 p.m.
July 5, 2017	Wednesday	2:00 p.m.-4:00 p.m.
July 6, 2017	Thursday	12:00 n.n.-2:00 p.m.
July 7, 2017	Friday	12:00 n.n.-2:00 p.m.
July 8, 2017	Saturday	4:00 p.m.-6:00 p.m.
July 10, 2017	Monday	10:00 a.m.-12:00 n.n.
July 11, 2017	Tuesday	10:00 a.m.-12:00 n.n.
July 12, 2017	Wednesday	2:00 p.m.-4:00 p.m.
July 13, 2017	Thursday	2:00 p.m.-4:00 p.m.
July 14, 2017	Friday	8:00 a.m.-10:00 a.m.
July 15, 2017	Saturday	10:00 a.m.-12:00 n.n.

In conducting the survey, the researchers asked the respondents, if they could answer the survey questionnaire after using the tablets. They were also reminded that they can approach the library personnel for concerns or queries regarding the questionnaire. The respondents answered the questionnaire voluntarily and were also informed that they can withdraw their participation in the research anytime as part of their informed

consent. Moreover, the researchers explained to the respondents what the study is all about and gave assurance that their identities would remain confidential and answers will only be used for the purpose of this study. Data gathered were tallied, classified and tabulated for analysis and interpretation. The descriptive statistics in percentage was used to describe the respondents in terms of the overall purposes in using the tablets. Percentage was used to present the answers of the respondents on the survey.

FINDINGS

Purposes in using the tablets

Use of tablet for the first trimester

Figure 1 presents the overall purpose of the respondents in using the tablets in the library for the first trimester SY 2016-2017. The major purpose of 24% of the respondents make use of tablets for search engines (Google, Yahoo, Bing) for their research. Thus, the major use of tablets is for search engines for student's research. Other purposes are the following respectively: 20% for social media; 12% for dictionary or encyclopedia and for watching videos. On the other hand, 4% of the respondents use tablets for reading or writing documents and reading or writing blogs, and only 3% use tablets for checking the weather.

Table 2. *Number of respondents using the tablets for the first trimester*

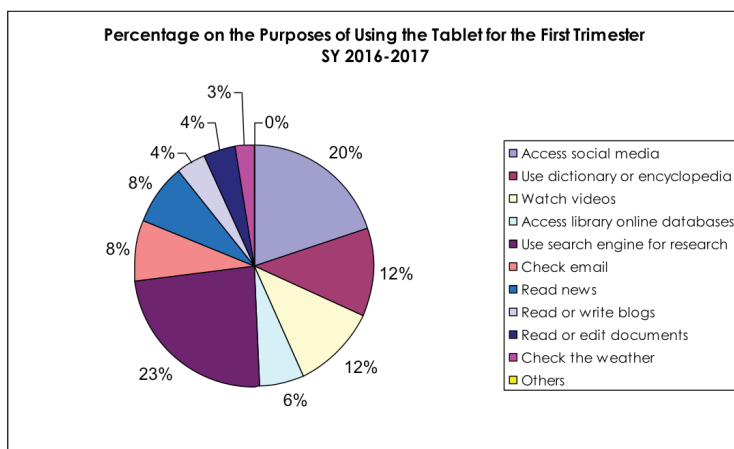| Purpose for the use of tablets	Number of Respondents	Percentage of Respondents
Use search engine for research	324	24
Access social media	271	20
Use dictionary or encyclopedia	158	12
Watch videos	158	12
Check email	107	8
read news online	109	8
Access online databases	78	6
Read or write blogs	54	4
Read or edit documents	58	4
Check weather	35	3
others	3	0

Figure 1. *Percentage of the purpose in using the tablet for the first trimester*

Use of tablets for the second trimester

Figure 2 shows the percentage of the purpose/s in using the tablets for the second trimester SY 2016-2017. The major purpose of 26% of the respondents in using the tablets are for the use of search engine (Google, Yahoo, Bing) for research. Thus, the major use of tablets is for search engines for student's research. Other purposes are the following respectively: 19% for social media; 12% use tablets for dictionary or encyclopedia; and 11% of the respondents use it to watch videos. On the other hand, 4% of the respondents use tablets for reading or writing documents and reading or writing blogs, while only 3% use tablets for checking the weather which makes it the least reason why students make use of tablets.

Table 3. *Number of respondents using the tablets for the second trimester*

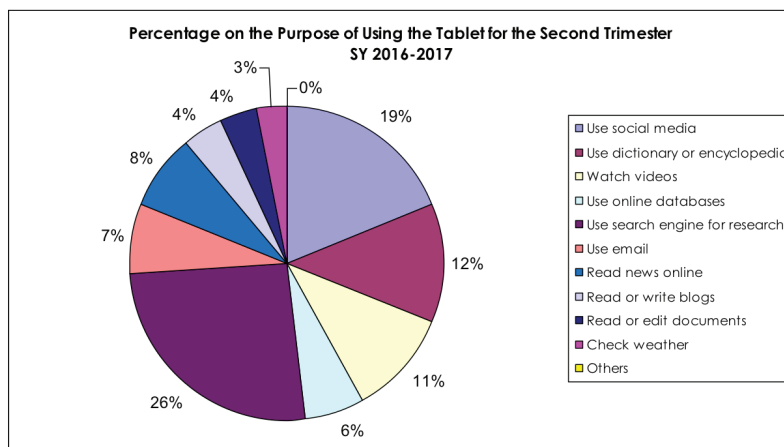| Purpose for the use of tablets	Number of Respondents	Percentage of Respondents
Use social media	222	18
Use dictionary or encyclopedia	153	12
Watch videos	137	11
Use online databases	77	6
Use search engine for research	324	26
Use email	90	7
Read news online	99	8
Read or write blogs	47	4
Read or edit documents	46	4
Check weather	34	3
Others	0	0

Figure 2. *Percentage of the purpose in using the tablet for the second trimester*

Use of tablet for the third trimester

The major purpose of 22% of the respondents was to make use of tablets for search engines (Google, Yahoo, Bing) for their research. Thus, the major use of tablets is for search engines for student's research. Other purposes are the following respectively: 21% for social media; 10% for dictionary or encyclopedia and for watching videos. Contrary to figure 1 and 2, figure 3 shows that 5% of the respondents use tablets for reading or writing documents and 4% of the respondents use tablets for reading or writing blogs, while only 2% of the respondents use tablets for checking the weather which makes them the least reason why students make use of tablets.

The three figures show a consistent result for the minor and major purposes of the respondents in using the tablets. First in rank is the use of search engines for research. This reflects the information seeking behavior of students, that is, they also use additional or alternative resources such as online references aside from print resources (Lacovic, 2014). The tablets provide an avenue where they can search any topic regarding their assignments, seat work and class report. Second in rank is accessing social media. Facebook and Twitter are popular free social networking sites which allow registered users to create profiles, send messages and keep in touch with friends and family, to be updated on the social news, to create and posts blogs, and the like. Third in rank is watching videos which includes watching musical or educational videos and movies online. The respondents watch videos related to their subject to understand more about the topic. According to a studies of Kay (2012), Allen and Smith (2012), Lloyd and Robertson (2012), Rackaway (2012), and Hsin and Cigas (2013), the integrating technology such as videos can enhance learning and be a highly effective educational tool. They also watch movies, musical videos and trending videos, Korean series, the Voice Kids and Pilipinas Got Talent. Fourth in rank is quick access to references such as dictionaries and encyclopedias in electronic format. This is a very handy and convenient

alternative to the printed copy available in the library as it saves time in finding answers to simple queries like definition of words, unlike borrowing printed book which takes more time (Connaway et al., 2011). Furthermore, Gilbert and Regenbogen (2000) stated that the Internet and electronic reference resources has a daily, up-to-date information that printed reference materials lack.

The result corroborates with the outcome of the researches done by Fredeluces and Halcon (2015), and Kaur and Slimp (2013). Furthermore, the respondents also had identified other purposes in using the tablets such as doing assignments, reviewing notes in UC MORALE, searching for addresses & and location of places, checking exchange rates, business purposes, and looking for long distance relationship online.

Table 4. *Total number of respondents using the tablets for the second trimester*

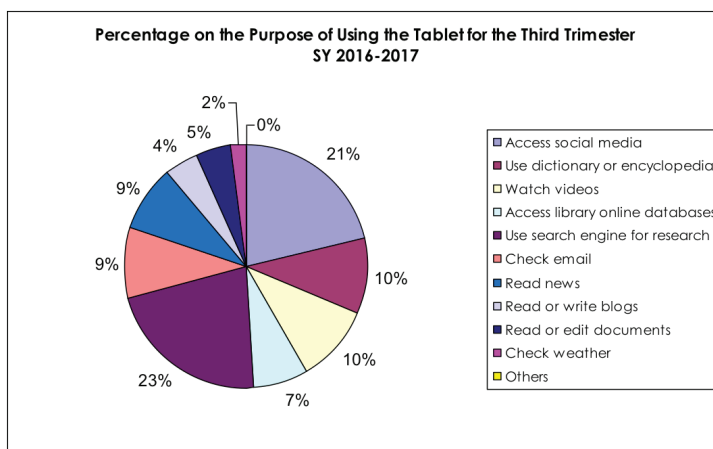| Purpose for the use of tablets	Number of Respondents	Percentage of Respondents
Use social media	222	18
Use dictionary or encyclopedia	153	12
Watch videos	137	11
Use online databases	77	6
Use search engine for research	324	26
Use email	90	7
Read news online	99	8
Read or write blogs	47	4
Read or edit documents	46	4
Check weather	34	3
Others	0	0

Figure 3. *Percentage of the purpose in using the tablet for the third trimester*

CONCLUSIONS AND RECOMMENDATIONS

Tablets are being used for different purposes. Specifically, the respondents use the tablets for research through the use of the search engines such as the Google, Yahoo, Bing; use of social media such as Facebook, Twitter; use of dictionary or encyclopedia; and accessing various websites to watch videos (e.g., Youtube, Vimeo). These findings show that the UC Libraries' venture in improving its ICT adoption proved to be useful for its students especially for their academics.

In the light of the results of the survey, the recommendations are as follows:
1. Maintain library services, particularly the circulation of tablets at the Media Center;
2. Sustain e-resources subscription and collaborate with other institutions for resource sharing;
3. Continue and heighten the promotion of electronic resources through libraries' current awareness services, particularly postings and advertisement in the bulletin boards not only within the library but all over the campus; improved interface and links of electronic resources in the UC Website Libraries tab and Destiny Library Manager Home Page; and
4. Improve Wi-Fi connectivity in the campus especially in the library's premises to make electronic resources more accessible.

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APPENDIX

Appendix A

Survey Questionnaire

 LIBRARIES

We would like to know your purpose/s in using iPad in UC Libraries. Please supply the needed information and put a check mark (/) on the options provided for your answer. Thank you!

Name (optional):_____
College :_____   Year Level: _____
Gender: _____

Purposes: (multiple purposes allowed)
☐   access social media(Facebook, twitter)   ☐   check email
☐   use dictionary/ encyclopedia   ☐   read news
☐   watch videos (YouTube, Vimeo)   ☐   read/ write blogs
☐   access library online databases   ☐   read/ edit documents
☐   use search engine (Google, Yahoo,   ☐   check the weather
     Bing) for research

others (please specify):
_____

FROM BOOK READER TO BOOKLOVER: UNDERSTANDING THE ESSENCE OF LIBRARY SERVICES FROM THE EXPERIENCES OF JOSE RIZAL UNIVERSITY'S JUNIOR HIGH SCHOOL STUDENTS

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ABSTRACT

The purpose of this study was to explore the experiences of the junior high school students on the library services and its impact on their personal reading inclination. This study will probe the significance of the existing library services in improving students' library borrowing and reading habits. The top one hundred (100) borrowers of the junior high school library were identified by extracting it from the KOHA library system. They were considered readers who became booklovers of the junior high school library. Top eight (8) of the one hundred booklovers were invited for a focus group discussion and were asked several questions regarding their experiences on library services and how those experiences influenced their book usage and reading habits. A recorded interview was transcribed and analyzed. Result shows that most of the experiences of the booklovers are focused on the library borrowing, collection services and use of technology-based services such as computers, net books and internet. Moreover, the experiences of the high school booklovers with the different library services offered in the junior high school library influenced students' book usage and reading habits. Indeed, the library services of JRU junior high school library play a significant role in increasing students' book usage and in developing students' reading habits.

Keywords: Library Services; Reading Habits; Library Use

INTRODUCTION

The library, as the heart of an institution, plays a vital role in developing the reading inclination of the students. To perform its role, it offers several services to meet the information and reading needs of its expected users. With social and technological developments, attention and interests of students are shifting. The role of the school library and librarian is very challenging since the students' book usage is becoming less. They are spending most of their time using their favorite gadgets, as it satisfies their information needs in just one click of a button. Thus, students' interests in reading books continue to decline. At the Jose Rizal University (JRU) library, specifically, in the junior high school library, many students are occupying the space, but not all are grabbing the books available in the library's collection. Mostly, library users are manipulating their own gadgets and are busy with their own interests. In fact, Peters (2009), stated that in this

century, reading could soar to new heights or crash and burn. He added that there are some fears from educators and librarians that sustained reading for learning, for work, and for pleasure may be slowly dying out as a widespread effect of social practice.

Librarians today are exerting greater effort of facilitating different programs and activities in the library to promote and to inculcate to the readers, the importance of reading, as well as to develop the students' reading habits. It is very important to always remind the students, particularly the young minds, the importance and benefits of reading and to get hooked on reading books. As stated by Kamla (2015), one should read books and other materials to acquire knowledge. According to him, a student must read books, other than his textbooks, so that the area of thinking and acting will become broader. Furthermore, he emphasized that the reading habit is one of the powerful and lasting influences in the promotion of one's personal development and social progress in general.

The Association of American School Librarians (2010) emphasized that reading is a foundational skill for 21st-century learners. Guiding learners to become engaged and effective users of ideas and information and to appreciate literature requires that they develop as strategic readers who can comprehend, analyze, and evaluate text in both print and digital formats. It is essential for learners to allot time to read for enjoyment as well as for information.

Ajayi (2014) claimed that reading is an essential tool for lifelong learning. He further argued that it is important for everyone to develop a good reading culture to perform excellently in academic endeavors. He further explained that reading skills for students are critical for academic performance and personal growth and he generalized that reading is a significant element of students' ultimate literacy development.

Amiyaw (2018) asserted that reading habits have a significant effect in students' learning. He also affirmed that the lack of favorable reading environment hinders the child's learning when they are at home and it is recommended that scheduled library hours should be required by every school even for only one hour and thirty minutes to give chance to students to visit the library and utilize its resources.

Moreover, Creel (2015) asserted that modeling reading, sharing books with students, and giving students opportunities to share their choices are instrumental components of reading encouragement. He added that since most students have access to classroom and school libraries, it is important that these collections appeal to their reading interests and offer a variety of resources to support self-selection.

It is very frustrating to know the fact reported in the readership survey conducted by the National Book Development Board (2012) that the number of Filipino adult readers in the country is declining, from 94% in 2003, 92% in 2007, to 88% in 2012. This is a great challenge posed to school librarians since they have to actively take their part in

motivating students to read.

Similar to the report by NBDB, Chavez (2017) said that only 17 percent of all children surveyed by Scholastic reported having time to read a book of their choice at school daily. He further mentioned in the same article that though the NBDB study did not pinpoint any reason for the decline of the reading habits of the Filipinos, the consensus among experts is that social media, television and the new lifestyle among the young have contributed to their waning interest in reading. He also mentioned that experts believe that the development of a reading habit among the youth is an important feature towards a literate, progressive and caring society since reading encourages learning and develops creativity among them.

Likewise, De Guzman (2013) mentioned that the digital era has brought so many drastic changes in the life of Filipino students and one of those manifestations is the loss of interest and poor attitude towards reading. She further discussed that reading was not the most preferred leisure activity for the students, though it was listed as one choice; instead, playing computer games, logging on Facebook, watching TV, and listening to music were their top choices to do during their leisure time.

Evidence from various sources showed that the school library had been effective in promoting itself as a space for reading (Ee, 2017). His study showed that wide range of literature is important for appealing to the different interests of various readers, including avid, reluctant and struggling readers. He further explained that the increased book loans demonstrate that it is not only the size of a collection that matters but the students' perception about the kinds of books and the environment for reading contribute to their desire to visit the library to borrow books or to read. He concluded that the school library is a microcosm of school life, and that the vision and actual usage of the school library was often inspired or limited by the principal's and staff vision of the school library.

With the present scenario, the school library is challenged to play a valuable and significant role in promoting the reading habits, making extensive use of books, not just textbooks, but also other reading materials. Libraries are challenged to intensify their services and employ strategies that would make reading attractive to the readers. Librarians are challenged to do their part in promoting reading to the young minds especially to the youth whose attention are divided due to technological advancements.

Despite how hard librarians are motivating the students to read by different promotional activities, we cannot deny the fact that teens now are more focused on technology-based activities. Wherever the students maybe, they always carry with them their favorite toy which is their gadget rather than bringing a book to read. As revealed in the study of Danladi (2018), he reported the decline of the reading culture in past couple of years specifically in Africa due to the emergence of technology and the rise of social media. He further discussed that young adults spend time watching television and chatting on social sites instead of reading. Moreover, the result of his study revealed that

the non-integration of the library uses in the school's curriculum, and students' addiction to phones and the social media were the major causes of poor reading culture. Thus, he suggested to the school librarian, school administrators, and the government to play their major roles in promoting reading culture.

We know for a fact that reading plays an important role in children's education since it leads them to the children's learning. Unfortunately, children do not choose to open books and read, hence, they are spending very little of their leisure time on reading which, drops dramatically as children enter adolescence (Covert, 2009). With this plight, school librarians are encouraged to review the services offered by the library and think of ways how it could help in promoting the reading program of the school. Librarians must act to preserve the culture of reading in the community, especially since the library is existing.

Awoyemi (2016) said that reading is a powerful means of communication that can form part of an individual to the extent that it becomes a habit which, once developed, would become very difficult to break. She further said that reading is an action of a person who reads, and habit is a product of this action or learning. Like all other habits, reading habits of an individual develops during the course of time.

To intervene with the challenge of today's society, the library provides ideal services for students to encourage and to entice them to borrow and read more books from its collection. Baro (2016) asserted that the school library is an integral part of educational system which cannot be ignored without jeopardizing the quality of education in schools. He also emphasized that school library is an important part of elementary, middle and high school programs without which students, would not thrive academically and invariably find it most difficult to conduct academic research before they reach college level. He further cited that a conducive learning environment is associated with the use of the library as a study space containing quality, relevant, current materials and information resources. Also, a professional librarian has been seen to have a positive effect on students. Grahams (2005) pointed out that the school library media center provides a wide range of resources and information that satisfy the educational needs and interest of students. He added that the library is a place where students may explore more fully classroom subjects that interest them, expand their imagination, delve into areas of personal interest, and develop the ability to think clearly, critically, and creatively about the resources they have chosen to read, hear, or view. Moreover, according to Olajide and Omotayo (2016), libraries are known to provide services ranging from borrowing/ loaning of materials, references, referral, selective dissemination of information, etc. They added that these services are provided by the library with the aim of meeting the information needs of the users and to ensure that the investment in the library is justified through ease of accessibility and usage of its resources.

Quality library services is a very good reason for attracting students to utilize the library's resources especially in increasing the number of readers in school. The researcher

believes that the result of this study will help librarians in enhancing services in their own library. This will serve as their baseline in establishing or creating reading projects and services that they might include in their library development plan.

This study aimed to explore the experiences of students who availed of library services and its influence on their personal reading inclinations. This will probe the importance of the different library services offered by the Junior High School Library in developing the library users' borrowing and reading habits. The conceptual framework shows the relationships among the variables of the study.
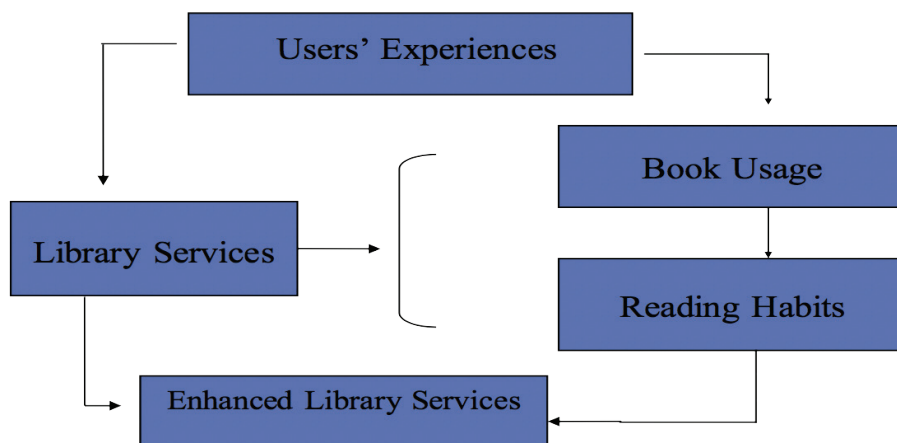

Figure 1. *Conceptual Framework of the Study*

William Gray's developmental or stage theory of reading includes readiness, learning to read, rapid progress in fundamental attitudes, habits and skills, extension of experiences and increase in efficiency and refinement of attitudes, habits and taste (Batalla, 2005). The respondents of this study, being the junior high school students, are expected to have developed their book borrowing and reading habits already, having been motivated by the services that they have used or experienced in the library during their early years in high school. Delved in this study was the role of the library services in generating students' inclination to read until a positive reading attitude is developed.

Acheaw (2014) mentioned that creative and pragmatic education involves the habit of personal investigation. He added that the act of personal investigation requires self-study to be followed by self-thinking and analysis. In the same study, he mentioned that self-study, otherwise referred to as one's own accord requires a habit, is also known as reading habit. He also stated that reading makes way for a better understanding of one's experiences and it can be an exciting voyage to self-discovery. Furthermore, according to Green, as quoted by Acheaw (2014), reading habit is best formed at a young impressionable age in school, but once formed it can last one's lifetime.

The following research questions were utilized to guide this study: (1) What are the library services experienced by the junior high school students?; (2) To what extent do library services influence the book usage and reading habit of the students?; (3) Is there a significant relationship on the services availed by the students on their book usage and reading habits?; and (4) What library services could be proposed to raise greater number of book lovers from junior high school?

METHOD

A combination of quantitative and qualitative approaches was used in this study. The explanatory sequential mixed method design was used by the administration of survey questionnaires to the 100 respondents and FGD with eight respondents. The top 100 borrowers of the junior high school library were the target respondents for this study. Their names were determined through their book usages which were extracted from the library system (KOHA) with the approval of the university librarian only for the purpose of this study. These 100 top borrowers were considered as readers who became book lovers of the junior high school division in the school year 2016-2017. The researcher believed that choosing the top book borrowers of the library as respondents could be more accurate since they are already availing one of the services of the library as shown on their actual book usage count.

The researcher-made questionnaire was designed to gather data on the library services and reading habits of the target respondents. The survey was made up of two parts: part 1 questions were designed to gather information about library services availed by the students and its level of influence, while part 2 was made up of questions that provide data about the respondents' reading habits. The material had undergone the face validation, pilot testing, Cronbach alpha test to check on the Validity and Reliability of the material which has .75 validity and reliability score.

Questionnaires were distributed to the respondents during their visit in the library on the duration of the study. To find out the services availed by the respondents, the result was computed using frequencies and percentages. On the other hand, level of influence was computed using weighted mean and identified by a scale. Finally, the result of the relationship of library services to the book usage and reading habits was determined using the Pearson Product-Moment Correlation Coefficient or Pearson r.

Focus group discussion (FGD) was the primary data-gathering technique employed in the qualitative part of this research. Semi-structured interviews exploring the experiences and its impact on the booklovers' book usage and reading habits were conducted, with the top eight (8) students book borrowers of the junior high school library to help explain and to deepen the understanding of the quantitative results. Since the study is focused on how their experiences on library services influence their book usage and reading habits, exploratory questions regarding such were asked. A signed consent form for the parents

of the respondents allowing their son/daughter to participate in the study and assurance of confidentiality was secured from the students prior to the FGD. The data collected were processed and analyzed in accordance with the problem statement and research question. Processing included coding and thematic classification of collected data.

RESULTS AND DISCUSSION

The data gathered in the course of research were analyzed. The results are hereby presented based on the questions set in this undertaking.

Table 1 shows the services offered by the Junior High School Library that were availed or experienced by the junior high school students, presented according to their rank. The top three library services availed by the junior high school students are borrowing of materials, collections (books, newspapers, journals), and use of net books and computers. While the three least availed library services by the respondents were multimedia, fun activities (book talk, storytelling, book club), and Online Services like Website, Web Opac, and Online Resources.

Table 1. *Library services experienced of the JHS booklovers*

Library Services	f (n=100)	RANK
1. Borrowing of materials	100	1
2. Collections (Books, Newspapers, Journals)	95	2
3. Use of Computers and Netbooks	94	3
4. Internet Access	92	4
5. Instructional Program (library orientation, library instruction, hands-on training)	89	5
6. Facilities	86	6
7. On-line services (website, Web Opac, Online resources)	82	7
8. Fun Activities (booktalk, storytelling, book club)	72	8
9. Multimedia	65	9

The results of the study reveal that there are services in the library that are not availed by many junior high school students. Only one among the ten services, which is borrowing materials, is fully experienced by the respondents. This means that many are still not informed of the services offered by the junior high school library. Greater effort should be exerted by the librarians to make these services enticing and inviting to the students.

Table 2 exhibits the weighted mean scores of respondents' level of influence of availed library services with their book usage and reading habits. Results reveal that the six (6) services which greatly influence the book usage of the respondents include the use of computers and net books; Internet Access; borrowing of materials; instructional programs like library orientation, library instruction and hands-on training; availability

of collections like books, newspapers & journals; and, facilities. While the three other services that moderately influence the junior high school students' book usage and reading habits were: the online services (website, web OPAC, online resources); fun activities like book talk, storytelling, and book club; and lastly, the presence and use of the multimedia. In general, the respondents' experiences on the different library services offered by the junior high school library moderately influenced booklovers' book usage and reading habits.

Most of the youth today enjoy the use of technology, and this innovation was also incorporated in the library services to meet the current needs of our readers. In fact, web-based library services are given emphasis by the librarians to meet the demands of the millennials. As shown in the table above, it is true that in the JRU library, many are using the Internet with the use of computers and net books to read, either for pleasure or for academic purposes.

Table 2. *Level of influence of library services*

Library Services	Weighted Mean	Verbal Interpretation
Borrowing of materials	3.78	High Influence
Collections (Books, Newspapers, Journals)	3.76	High Influence
Instructional Program (library orientation, library instruction, hands-on training)	3.77	High Influence
Fun Activities (booktalk, storytelling, book club)	3.45	Moderate Influence
On-line services (website, Web-Opac, On-line resources)	3.56	Moderate Influence
Multimedia	3.28	Moderate Influence
Use of Computers and Netbooks	3.8	High Influence
Internet Access	3.79	High Influence
Facilities	3.69	High Influence
GENERAL	**3.65**	**Moderate Influence**

To find out the significant relationship on the services experienced by the students on their book usage and reading habits, correlation of two different means was used. The results are shown on the next table. Table 3 shows that based on the Pearson r using the alpha value of .05, there was a significant weak negative correlation between the library services experienced by the junior high school booklovers and their book usage. This means that the more library services the students experience, the lesser their book usage becomes.

On the other hand, the experienced library services of respondents have significant weak positive relationship on their reading habits on both frequency and enjoyment. This signifies that the more library services the students experience, the more they develop their reading habits both in frequency and enjoyment aspects.

After the quantitative data were collected, qualitative data were obtained by the researcher. A Focus Group Discussion (FGD) involving eight students from different grade levels was held. The data gathered from the participants of FGD were encoded, analyzed and interpreted to support the quantitative data gathered and to answer some objectives stated in this study.

Table 3. *Relationship of library services on the respondents' book usage and reading habits*

Variables	r-value	Degree	p-value	Interpretation
Library services and book usage	-.01	Weak Negative Correlation	<.05	significant
Library services and reading habits (frequency)	.15	Weak positive correlation	<.05	significant
Library services and reading habits (Enjoyment)	.14	Weak Positive Correlation	<.05	significant

From the richness and thickness of the descriptions given by the respondents, exciting facts based on the experiences of the readers were found out. The booklovers reading choices and their purpose of reading were identified. Most of their reading preferences are fictions and some also read academic books and their major purpose of reading are both for leisure and for learning.

One of the important roles of the library is to provide its users quality services to meet their reading and information needs, one of which is to provide quality collections that suit their reading interests. To achieve this role, we must know first who our users are and what their needs are. As librarians, we must consider the reading choices of the users and their purpose for reading. Result shows that majority of the booklovers of the junior high school love to read fiction books. Six (6) out of 8 respondents said that they love reading fiction books, while two of them love reading academic books. The 6 students who love fiction books are reading just for fun, enjoyment, relaxation and for pleasure, while the other two who read academic books are reading it to learn new things and gain new ideas.

After knowing our users, the library needs to define what library services we have that our users utilize or avail as often as they would want to. The qualitative data also validated that only few services were familiar to the students and which the users have experienced in the high school division. Common services that were notable to them are services pertaining to collections, borrowing of books, use of Internet, use of computers and net books in which 8 of them said that these were the only services accustomed to them. Furthermore, 7 out of 8 respondents confirmed that they were using these services daily while one is using it twice a week. The data shows that the booklovers of the junior high school only used the services that are familiar to them and mainly focused on collection services and search facilities.

Respondents' experiences on library services related to collection, borrowing of materials, library fun activities and library hours influenced very much, the booklovers' book usage and reading habits. These services motivated young readers to borrow more books from the library. It is important to note that the library should always have interesting and engaging services intended for the kids for them to be encouraged to visit the library often, leading them to borrow more books.

Lastly, when junior high school booklovers were asked for suggestions on possible library services that may be included in its present services, the 3 major services suggested were: (1) Collections (more collections of movies which have book versions; acquisitions of books written by famous authors for young adults; and print copies of popular teen e-books, i.e. Wattpad, should be purchased); (2) library activities (more book talks, peer discussions about books and different contests that will market the new titles of books in the library); and (3) technology-based research (they wanted to integrate the use of technology in their library experiences).

With these results, there is a need for intensifying the information campaign by the library to inform the division of its existence, not only of the building or library itself, but also about the resources and services that everybody may avail.

Since our respondents were already readers, they were self-motivated when it comes to book borrowing and reading. But if their teachers would give them assignments which would require them to read books, students' book usage and habits of reading would intensify.

These findings matched with the study of Bamidele (2015), where in an evaluation of library use habits of students in public senior secondary schools in Nigeria shows that the respondents have low library use habits. Eze's (2016) findings also revealed that the students do not frequently use their school libraries due to lack of orientation, library stocked with outdated books, no library hours in school timetable, and library is situated in a noisy area. Rajaratnam (2013) in his research revealed that reading as a lifelong learning habit is sustained by the love of reading which must be nurtured beyond the school environment and formal schooling years. He further discussed in his study that if reading is not nurtured as a life-long habit, in the long run it will dull a person's sense of curiosity and interest, creativity and imagination that come from reading and its related skills like comprehension.

Similar results in the study of Sin (2012) found out that library service levels had a positive impact on students' library usage in terms of frequency of use. He elaborated that specifically, even after personal differences such as each student's socioeconomic status and achievement motivation were controlled for, higher service levels in the student's neighborhood public library contributed to more frequent library usage. The findings also suggest that continuous effort to fund high levels of public library services, particularly in disadvantaged areas, is worthwhile.

CONCLUSION

This mixed method study revealed that not all library services offered by the junior high school library were availed or experienced by the junior high school students. Since junior high school students belong to the millennial generation, library services relating to the use of technology come as their first choice. Though majority of the respondents were already readers even during their elementary days and their family is their great motivator on reading, it was found out that their experiences on library services specifically on the wide selection of library collections, the policy on allowing them to borrow library reading materials, the presence of fun activities, availability of Internet and library facilities are also influential factors in their current library book usage and reading habits. On the contrary, library services of the junior high school library have a significant relationship on the book usage and the reading habits of the junior high school booklovers. The respondents recommended for enhanced library services that would catch the attention of students, that is for them to continuously borrow books from the library, thus turning them into booklovers. No library services, no matter how great, would remain effective forever. All services needed to be refreshed, updated and even cancelled if it is not attractive any more to its target users. Thus, this investigation concluded that library services should always be appealing to its target users to yield greater number of book lovers.

RECOMMENDATIONS

Based on the results of the study the following recommendations are hereby made:
1. To entice more readers from the junior high school library, enhanced library services, as suggested by respondents, should be adopted for the future development plans of the library.
2. Librarians must work with the classroom teachers in promoting library services by requiring every class to conduct a supervised library research activity regularly.
3. A strong collaboration of the librarian and the academic community is needed in order to promote reading and develop students' reading habit.
4. A further study on this should be conducted using grounded theory.

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ELIZABETH B. PADILLA serves the De La Salle University Libraries for 32 years and is currently assigned as Readers' Services Coordinator. She earned her undergraduate degree in library science from the Philippine Women's University in 1985 and her master's degree from the Philippine Normal University in 2009. She is also an active member of professional organizations like the Philippine Librarians Association, Inc. (PLAI), Philippine Association of Academic and Research Librarians, Inc. (PAARL), and the Philippine Normal University Library and Information Science Alumni Association (PNULISAA) where she held various positions.

ROCHELLE SALONGA-SILVERIO graduated with honors, a cum laude, at UP SLIS in 2005. Subsequently, she garnered the top spot during the 13th Librarian Licensure Examination of the same year. Born in Valenzuela City, she serves Valenzuelanos as the Chief Librarian of the Pamantasan ng Lungsod ng Valenzuela and is currently the Librarian-in-Charge of the Valenzuela City Library. She is also a lecturer in UP SLIS teaching children's literature and young adult literature courses. She was awarded Best Thesis for her graduate research entitled, "A survey on the sustainable library practices and trends of selected academic libraries in Metro Manila" in 2011. At present, she is taking her Ph. D. in Reading Education at the UP College of Education and is part of the 3-year NEFLI Leadership Program of the National Library of the Philippines. Other than her academic endeavors, she writes at One Valenzuela, a blog which serves as her tribute to her hometown – of which her efforts were recognized by the Valenzuela Local Government Unit on the 150th birth anniversary of their local hero, awarding her the 2019 Gawad Dr. Pio Valenzuela para sa Social Media, the highest distinction given to a Valenzuela resident by the City Government.

JONATHAN F. SANTOS currently works as the head of the Information Systems and Network Services Section of the University of the Philippines (UP) – College of Engineering Libraries. He finished his Bachelor of Library and Information Science at the UP School of Library and Information Science and is currently taking his master's degree from the same institution. His interests include programming, web design, and emerging technologies as applied in libraries.

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