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Circulation Analysis of Newly Acquired Print Materials in a University Library

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CIRCULATION ANALYSIS OF NEWLY ACQUIRED PRINT MATERIALS IN A UNIVERSITY LIBRARY

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ABSTRACT

Circulation is the process of loaning and returning of library materials. This study intends to determine the circulation trends of newly acquired print materials in the a university library in Northern Philippines Libraries. The data gathered from the Follett Destiny Library System of the University Libraries to determine the circulation trends of materials which purchased on the year 2014-2017. The total number of purchased title is 3002.Based on the result, the materials from General Interest/ Fiction/Graphic novels has the highest books circulated. It also showed that the USL Libraries purchased expensive books but not frequently used by the users and despite the high number of acquisitions directly relevant to the courses of Engineering, Architecture, Technology Education, Accountancy, Business, Hospitality and Education, Arts, Health, books on Graphics were more frequently borrowed 577 books, by both employees and students. It shows that even if the acquisition librarian did not purchase in the year 2016, still the general Interest/ Fiction/ GN/ Graphics has the highest books circulated. The total number of book title borrowed is lower than those of not used. The university library is purchasing the title of books that are being requested by the library patrons but most of the materials were not being utilized. The library users prefer spending their time in reading leisure books. The utilization of printed academic books in the university library is slowly decreasing.

Keywords: *Circulation analysis, print materials, libraries, utilization, acquisition*

INTRODUCTION

Every library exists to serve the needs of its community of users (Kannappanavar, 2010). For centuries, it served as repositories of information and knowledge. Libraries are not simply storehouses of books but also provide proactive services to their users both from within the library's stock and a wide range of external sources. Libraries came into being to provide a central location for hard-to-find, scarce, expensive or unique material and are known to us, as a place of accurate information found in several formats, it is organized by information professionals or other experts who provide convenient physical, digital, bibliographic, or intellectual access and offer targeted services and programs with the mission of educating, informing or entertaining a variety of audiences and the goal of stimulating individual learning and advancing society as a whole (Robinson, 2008).

Every year, libraries create their own action plan which will serve as their basis for the whole year activities. Acquisition is the process of securing materials for the library collection, whether by purchases, as gift, or through exchanged program (Ameen, 2006; Gorman, 1998). In order to know what particular book to acquire, librarians are

conducting an evaluation to teachers and the administration and also from the students through the aid of the wish list. Cataloging is an essential process in any library or information center in order to provide information access to all learning resources to library patrons. Technical services are the tasks carried on in a library that are concerned with the processing of library materials in order to make them accessible to the users of the library (Gorman, 1998). In addition, mechanical and technical processing of books will go to a very long process before they are being used by the students. Finally, if a book is already available in the system, circulation process will take charge. Circulation of a book is one measure of the importance of the book to the collection; one of the traditional approaches taken to use studies and collection evaluation in libraries (Nixon & Saunders, 2010; Littman & Connaway, 2004). High usage indicates that a collection is good since circulation is taken as evidence that a patron's need is being met (Wiemers, Baldwin, Kautz, Albrecht, & Lomker, 1984).

University libraries play a very important role in supporting the university's academic work. Without a library, both students and teachers will experience hardship and difficulties in looking for accurate and reliable information for learning and teaching (Karkee & Majumder, 2014). Despite all the activities and services that the library offers to cater the needs of the users, the utilization of materials is still decreasing because of the presence of technology. An additional factor to consider in regard to collection and circulation of print books is the increasing availability and popularity of e-books (Blummer & Kenton, 2012). As academic libraries increasingly invest in electronic resources, investment in print books and print book circulation have typically declined (Houlihan, 2005; Bullis & Smith, 2011; Kolowich, 2011; Rose-Wiles, 2013). There is growing evidence that e-books are used differently from print books. They are often preferred when searching for quick information or reading short sections, but most users prefer print books for lengthy readings or extensive research (Shelburne, 2009; Blummer & Kenton, 2012). Furthermore, previous researches recommended that an evaluation and assessment should be done in order to know what specific action is to be done to increase the utilization trends of all the resources in the library (Nagata, Satoh, Gerrard, & Kytomaki, 2004; Agee, 2005; Littman & Connaway, 2004).

Research Objective

The study intends to determine the circulation trends of the newly acquired print materials in a university library from the past 3 years along the following:

a. Total Number of Book Title Purchased
b. Total Number of Book Title Borrowed
c. Total Number of Times Borrowed
d. Total Number of Book Title not borrowed

Literature Review

Importance of Library

The university library is seen as the heart of the university because the library can stand on its own, but the university cannot stand on its own (Tiemo & Ateboh, 2016). University libraries play very important roles in supporting the university's academic work, without a library the university's academic work will not be successful, because libraries provide services that help in teaching, research and learning (Kumah, 2015). On the other hand,

library serves as the main source information services and resources to assist users in their studies and research activities, it possesses information in the form of books, periodicals, audio-visual and electronic media (Motiang, Wallis & Karodia, 2014). It is an agency which engages in the collection, processing, preservation and dissemination of recorded information in the various formats most convenient to its target users (Onoyeyan & Adesina, 2014). Libraries satisfy a fundamental need of society: the need to have the society's record readily accessible to the citizenry, and society continues to need access to organize information more than ever before. Libraries play a great role in national development through the support they offer to the education sector by supplying relevant information in multiple formats (Achitabwino, 2007). Libraries are integral to community development as they provide access to information and works of imagination in a variety of formats (Forsyth, 2005). A library plays a very important role in promoting the progress of knowledge and considered a store house of knowledge. It also provides knowledge center that is inspirational and conducive to good communication and teaching interactions, it affects the culture, innovation and it affects individual (Lehman & Nikkel, 2008). Libraries serve a vital social service by helping bridge the gap between the haves and the have not's, especially when it comes to literacy and computer skills training (King, 2018). It's a place where people come to know themselves and their communities, serve as catalysts for addressing social problems. Libraries which champion, promote, and reflect important democratic values, are a part of the community's political life (Edwards, Rauseo & Unger, 2013).

Utilization of Library Resources

Utilization of library and information resources and services has been a concern from the time libraries changed from being cultural monuments to knowledge acquisition and information communication centers (Mwatela, 2013). The primary purpose of university libraries is to support teaching, learning and research, in ways consistence with, and supportive of, the institution's mission and goals (Oyewusi & Oyeboade, 2009). The efficient and effective provision of library resources can have positive impact on academic achievement (Williams, Wavell, & Coles, 2001). Students utilize the library resources to catch up with their studies, finish assignments, do advance reading and also to gratify their leisure needs by reading some fiction books but it was found out that in other places, libraries are underutilized despite the willingness, lack of human and material resources was the main reason. Library resources were not widely advertised or promoted that causes lack non-utilization of patrons (Abdullah & Gibb, 2006).

In recent years, newly developed technologies are everywhere and because of that it is found in a study that most students rely heavily on the Intern et as well as the university libraries' online resources for information though still using the physical library for hard copy materials such as books, journals and papers (Tenopir, 2003; Bossaller & Atiso, 2015; Alemna & Adanu, 2005). In the same vein, Ugah (2008) opined that the more accessible information resources are, the more likely they would be used and the readers tend to use resources that require the minimum effort to access. Internet continues to be an important component of library services in today and tomorrow's library (Bao, 2002). It is therefore essential for every librarian to conduct needs assessment in order to satisfy and provide the information needs of the users because lack of computer units is also one of the problems why student's does not utilize the library. Basically, library resources are materials that users consult in making decisions and also for problem-solving (Olajide & Adio, 2017). Universities are to generate new

knowledge and also encourage transferred and adopted of this new innovation (Omotunde, Marie, Aluko-Arowolo, & Ayoola, 2014). Libraries have always played a significant role, enabling people to engage with all kinds of information and knowledge resources (Curran, Murray, Norrby & Christian, 2006). Libraries are especially important now when the whole idea of education is stressing more and more independent learning and acting. All citizens must be able to find and use information. It is the key raw material - but it is a zero resource, if there are no access points to it and if documents are in chaotic order (Mammo, 2011).

Digitization and Modernization of Library

Digital library is a collection of digital documents where users can gain an on-line access to information in its electronic version. Nevertheless, digital library as an organized and focused collection of digital objects, including text, images, video and audio, with the methods of access and retrieval and for the selection, creation, organization, maintenance and sharing of collection (Smith, 2001).

Digitization is the process of taking traditional library materials that are in form of books and papers and converting them to the electronic form where they can be stored and manipulated by a computer (Bainbridge, Thompson, & Witten, 2003). Digitization also defined as the compression of analogue media to digital form (Ibrahim, 2016). Digitization means no new buildings are required since it leads to the development of Internet in digitalized based libraries (Line, 1998). Digitization improves access to library materials. It has been noted that it is much more convenient to have all ones' books at their fingertips via e-reader (Zimerman, 2011). Libraries are undertaking digitization projects to provide wider access to and to preserve materials (Lopatin, 2006). Most of the libraries are in transition from traditional to modern libraries and that, although these libraries have started the process of modernization of services, a lot can be done to improve the current situation and provide modernized services to the user community. A library initiative formed after Google announced its library book digitization project has brought library digitization projects into the public eye, even though libraries were experimenting with digitization for at least a decade (Coyle, 2006).

METHODS

The study utilized a document analysis to determine circulation status of newly acquired print materials in University Libraries in Northern Philippines. The data were gathered from the Follett Destiny library system. It is composed of several modules including circulation system which served as the main source of data. It is where data can be located and can determine the transactions of every material. The researchers acquired the data about the utilization trends of the print materials of the University from the year 2014-2017.

RESULTS AND DISCUSSION

Table 1. Circulation Trends of Newly Acquired Engineering, Architecture, and Technology Education Print Materials

	2014	2015 (May)	2015 (September)	2016 (June)	2016 (September)	2017	TOTAL
Total Number Of Book Title Purchased	68	193	26	8	26	69	**390**
Total Number Of Book Title Borrowed	38	95	5	5	12	12	**167**
Total Number of Times Borrowed	115	781	7	118	18	15	**1054**
Total Number of Book Title Not Borrowed	30	98	21	3	14	57	**223**

Table 1 shows that the acquisition of materials for the collection of Engineering, Architecture and Technology Education is high during May 2015, a total of 390 titles were acquired from the year 2014-2017. From the 390 title, only 167 titles were borrowed from the library patrons for 1054 times. The total number of book titles which were not borrowed is higher that the borrowed materials. Overall, there are 223 titles not borrowed by the users. Littman and Connaway (2004) found that circulation patterns varied by subject area and were also affected by whether books were selected by librarians or department faculty.

Table 2. Circulation Trends of Newly Acquired Accountancy, Business, Hospitality Management Print Materials

	2014	2015 (May)	2015 (September)	2016 (June)	2016 (September)	2017	TOTAL
Total Number Of Book Title Purchased	190	303	186	16	6	261	**962**
Total Number Of Book Title Borrowed	66	137	126	10	1	108	**448**
Total Number of Times Borrowed	167	345	5404	55	2	668	**6641**
Total Number Of Book Title Not Borrowed	124	166	60	6	5	153	**514**

Table 2 shows that the University Libraries purchased the most number of books which is 962 titles for Accountancy, Business and Hospitality programs since the year 2014. The number of materials being purchase depends upon the total number of students in the department and the total library fee as well. Among all the category of collection, this is the second highest of frequently borrowed books. On the other hand, they also have the highest total number of books that were not borrowed, 486 titles in all. Despite the increasing demand for libraries to provide more resources with lower budgets and growing pressures of fiscal accountability, most libraries did not use circulation data to inform collection management (Carrigan, 1996).

Table 3. Circulation Trends of Newly Acquired Education, Arts, Sciences, and Health Print Materials

	2014	2015 (May)	2015 (September)	2016 (June)	2016 (September)	2017	TOTAL
Total Number of Book Title Purchased	126	0	183	72	6	231	**618**
Total Number of Book Title Borrowed	28	0	52	36	2	26	**144**

Total Number of Times Borrowed	445	0	211	129	6	48	**839**
Total Number of Book Title Not Borrowed	98	0	131	36	4	205	**474**

Table 3 shows that a total of 618 titles print materials were purchased in the year 2014 to 2017 for Education, Arts, Sciences, and Health. There were no purchased of books in the month of May 2015. The 144 titles were borrowed for 839 times by both the students and the faculty. The total number of books that were never borrowed by users is higher than those borrowed. In relation to the results, found that almost 65% had been checked out at least once, but books did not circulate within the first few years of purchased where unlikely to circulate at all (Letchumanan & Tarmizi, 2010).

Table 4. Circulation Trends of Newly Acquired General Interest, Fiction, Graphic Novel and Graphics Print Materials

	2014	2015 (May)	2015 (September)	2016 (June)	2016 (September)	2017	TOTAL
Total Number of Book Title Purchased	276	195	175	0	0	150	**796**
Total Number of Book Title Borrowed	157	167	151	0	0	102	**577**
Total Number of Times Borrowed	3037	3461	2113	0	0	406	**9017**
Total Number of Book Title Not Borrowed	119	28	24	0	0	48	**219**

Table 4 above reveals that despite the high number of acquisitions directly relevant to the different disciplines and programs, books on General Interest/Fiction/Graphic Novels/Graphics were more frequently borrowed, 577 books, by both employees and students. The 557 titles were borrowed 9017 times. From 96 titles, 219 were not borrowed. It shows that even if the acquisition librarian did not purchase in the year 2016, still the General Interest/ Fiction/GN/Graphics has the highest books circulated.

The use of print books is typically measured in terms of checkouts, but e-book usage reports provided by vendors are not standardized and may include a range of metrics such as sessions, page views, downloads, and/or pages printed (Crossett, Kraus & Lawson, 2009; Sprague & Hunter, 2009; Blummer & Kenton, 2012).

Table 5. Circulation Trends of Newly Acquired General Education Print Materials

	2014	2015 (May)	2015 (September)	2016 (June)	2016 (September)	2017	TOTAL
Total Number of Book Title Purchased	0	103	124	0	0	9	**236**
Total Number of Book Title Borrowed	0	66	54	0	0	0	**120**
Total Number of Times Borrowed	0	333	176	0	0	0	**509**
Total Number of Book Title Not Borrowed	0	37	70	0	0	0	**107**

Table 5 presents that there was no purchased of books in the year 2014 and 2016. A total of 236 titles were purchased in the year 2015 and 2017 and 120 of them were borrowed by the users for 509 times. 107 titles of books from the Filipiniana and General Education were never borrowed by the library patron. A similar recent analysis at the University of Kansas found usage patterns to be much more mixed and to vary by subject. Ten years earlier, Carrigan (1996) had reported that despite increasing demand for libraries to provide more resources with lower budgets and growing pressures of fiscal accountability, most libraries did not use circulation data to inform collection management. Numerous studies have compared the use of print and e-books (Letchumanan & Tarmizi, 2010; Annet Kinengyere, 2007). Most found that e-books had similar or somewhat higher use than print books, but patterns vary among libraries, user groups, and subject area. The use of printed materials is really decreasing and the use of internet and e-books in accessing information is very high.

Table 6. *Summary of Circulation Trends of Newly Acquired Print Materials*

	Engineering/ Architecture/ Technology Education	Accountancy/ Business/ Hospitality	Education/ Arts/ Health	General Interest/ Fiction/ Graphic Novel/ Graphics	General Education	TOTAL
Total Number of Book Title Purchased	390	962	618	796	236	**3002**
Total Number of Book Title Borrowed	167	448	144	577	120	**1456**
Total Number of Times Borrowed	1054	6641	839	9017	509	**18060**
Total Number of Book Title Not Borrowed	223	514	474	219	107	**1537**

Circulation of a book is one measure of the importance of the book to the collection and it is one of the traditional approaches taken to use studies and collection evaluation in libraries (Nixon & Saunders, 201; Connaway, 2004). The table 6 presents that overall, there are 3002 titles of print materials that were purchased by the library. The 1456 titles were borrowed for 18060 times by both the students and the faculty. From the total of all titles of book, the total of books that were not borrowed is 1537 which is higher than the borrowed titles. The graphic representation show that usage trends of the borrowing service by users and displays significant differences between the groups (Rodriguez-Bravo & Rodriguez-Sedano, 2016). The circulation trend depends upon the discipline which the university caters. The General Interest/Fiction/Graphic Novel/Graphics has the highest utilization statistics because it is the student's interest.

Library patron circulation is small and the faculty says that their student doesn't actively use their reading lists (Rodriguez-Bravo & Rodriguez-Sedano, 2016). An additional factor to consider in regard to collection and circulation of print books is the increasing availability and popularity of e-books (Blummer & Kenton, 2012.) Academic libraries have been somewhat slow to adopt e-book collections, especially compared with their rapid adoption of online journals (Connaway & Wicht, 2007; Elteto, Jackson & Lim, 2008) but the pace of e-book collection and use seems to be accelerating. There is growing evidence that e-books are used differently from print books, they are often preferred when searching for quick information or reading short section, but most user prefer print books for lengthy readings or expensive research (Shelburne, 2009; Blummer & Kenton, 2012).

CONCLUSION AND IMPLICATIONS FOR FURTHER RESEARCH

The study concludes that despite the constant effort of the University to acquire books or print materials from years 2014 to 2017, still there was low circulation of newly acquired print materials. It is then recommended that teachers, being the partner of librarians, must encourage and require their students to use library materials as their source of information. Furthermore, the university libraries should come up with new strategies to further increase utilization of print materials. And finally, since library patrons are living in the digital age and in the advent of technology, it is better to change the type of material they are acquiring, from print to e-books, so that they can access the information they need even with their own gadgets.

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