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## A Study on the Attitude of the BS Chemistry Students Towards the Use of BatStateU Main Library's Web OPAC Through their Electronic Gadgets

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### Abstract

With the development and application of information and communication technology, library services have undergone a great deal of improvement. The library cataloguing system has turned more user friendly through the use of internet. The traditional card catalogue has evolved into the computer-based online public access catalogue (OPAC). This research study examined the attitudes of selected BS Chemistry students of Batangas State University towards the use of their Main Library's Web OPAC through their electronic gadgets. A questionnaire was developed and distributed to student respondents. A Likert scale was used in the research questionnaire. Majority of the respondents had favorable perception and attitudes towards the use of their electronic gadget in accessing the Web OPAC. All of the respondents were able to access Web OPAC using their electronic gadgets and their searches were mostly thesis related. They all agreed that they asked assistance from the librarian on how to use their electronic gadget in accessing the library Web OPAC. Using their electronic gadgets, they were able to locate the documents of their interest from the library Web OPAC. Most of them agreed that they found more items than expected and they feel comfortable in using Web OPAC using their electronic gadget. They agreed that it was fun and easy to use Web OPAC through their electronic gadgets. Over-all they rate the use of electronic gadget in accessing the Web OPAC as very easy.

**Keywords:** Electronic Gadget; Library Services; Web OPAC.

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## **1. Introduction**

The boom of information and communication technology (ICT) application in libraries and other information centers has brought immense advantages in terms of the ease of access, storage, retrieval and dissemination of information resources that a library can give to its end-users. Traditionally, the students' access to library information was too laborious, especially to the students residing outside a 5 kilometer radius from their school. A typical trip to the library entailed physically going to the library and using catalogs in looking for available library resources, which can lead to a waste of time and money if the books they needed were not available on that particular moment. This is one of the reasons why students then seldom went to the library. The Online Public Access Catalog (OPAC) is an innovative gateway into a library's rich collection. It was defined it as an electronic database that contains same information such as author, title, and subject information about the materials that a library owns. But most of the time, it was associated to a computer workstation used to search a library's catalog [1]. Some OPACs can be union catalogs, wherein multiple libraries share the same database. It can either be the actual workstation in the library, or the interface provided by the library that is accessible from anywhere. The soaring demand of the library users for information necessitates a faster and easier access to the materials they need through user-friendly interfaces such as the OPAC. With the arrival of the Internet, most libraries have made their OPAC accessible from a server to users all over the world [2]. The third generation of OPAC comes with a computer/web interface, advance searching abilities and is known as the Web OPAC. The OPAC systems differ significantly in terms of search capabilities, interface design, response times, database size, and the bibliographic content of individual records [3]. For this reason, a study on the search for a best suited OPAC was done in the early 2011 by the Indiana University (IU) Libraries task force to select an open source discovery layer to serve as the public interface for IU's online catalog [4]. A Web OPAC is a complex term and is a combination of two major technologies: Web Technology and Computer Networking Technology. It is a library catalog on the Web or Intranet [5], wherein users can search the library resources by connecting to Uniform Resource Locator (URL) of Web OPAC anytime during the day and from anywhere in the world with access to internet. The Web OPAC covers HTML, ASP, XML Web server programming, to name a few. It is a computer networking technology which includes LAN, WAN, Internet, and Intranet. Simply, the use of Web OPAC has made students, academicians and library professionals to locate and access the library resources easily and faster. The incorporation of the use gadgets in schools and universities has changed the entire scenario of research and instruction. Many academic institutions are now providing free Wi-Fi service to their student body. Further, a large part of college students owns at least one electronic gadget (i.e. mobile phones, tablets, laptop computers). By maximizing the use of their gadgets, students are capacitated to think beyond the limits of their books and explore varied learning skills as much as they can. Electronic gadgets are not only useful for the students but it also helpful for teaching staff and even to the library personnel. When available, the students can search for their academic needs in their Library Web OPAC using their electronic gadgets, anytime and anywhere. The Batangas State University Main I Library offers Web OPAC access to all its students [6]. During the start of every academic year, the BatStateU students are oriented by the librarian personnel on how to properly use the Web OPAC. Library staff also assists the students in their search using the Web OPAC through the computers available in the library or through the students' personal electronic gadgets. However, some of the students are cautious to use their electronic gadgets in accessing the Library's Web OPAC. Their

wariness is brought by factors like slow internet access and small-size of their electronic gadgets. Consequently, these factors and the attitudes of the students towards the use of electronic gadget need to be examined in more detail. In view of this, the researchers found it necessary to determine the attitude of the BS Chemistry students towards the use of BatStateU Main Library’s Web OPAC, through their electronic gadgets. This study aimed to determine the attitude of the BS Chemistry students toward the use of the BatStateU Main Library’s Web OPAC system through their electronic gadgets. Specifically, it aimed to determine the following objectives: (1) to investigate the use of Web OPAC through electronic gadget; (2) to measure the affirmative perceptions about the use of Web OPAC through electronic gadget; (3) to measure affirmative post search perceptions of the students; (4) to determine the students’ satisfaction on Web OPAC services using their electronic gadget.

**2. Material and Methods**

This study made use of the descriptive method of research in determining the attitude of the students towards the use of BatStateU Main Library’s Web OPAC system through their electronic gadgets. The respondents of the study were limited to the third-year BS Chemistry students enrolled in Thesis Writing I, academic year 2017-2018. The researchers used the questionnaire based survey method. The researchers developed a self-made questionnaire which was validated by the University librarian and staff. The data collected through the questionnaires were organized, analyzed and interpreted.

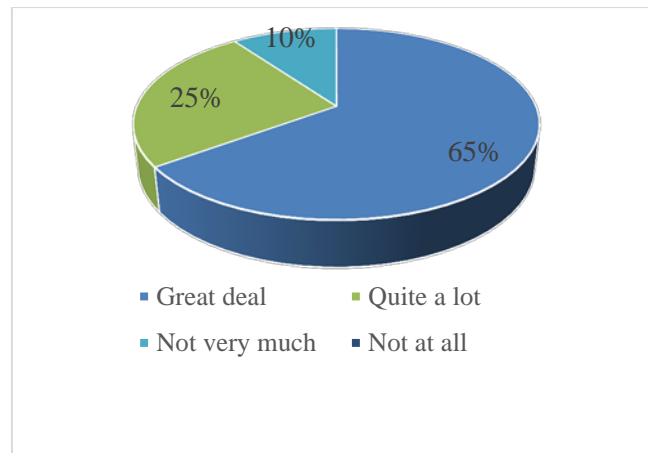
**3. Results**

**3.1. The Use of Web OPAC through E-Gadget**

All of the third year BS Chemistry students access the BatStateU Main Library’s Web OPAC using their electronic gadgets. Table 1 shows the types of documents they search. Students strongly agreed that most of their searches were on theses which were available at the Library because they are currently writing their thesis proposals.

**Table 1:** Types of Documents the Students Search in the Web OPAC through E-gadget

<b>Types of Documents</b>	<b>Mean</b>	<b>Verbal Interpretation</b>
Books	3.15	Agree
Reference Books	2.95	Agree
Reports	2.8	Agree
Theses	3.7	Strongly Agree
Journals	3.35	Agree



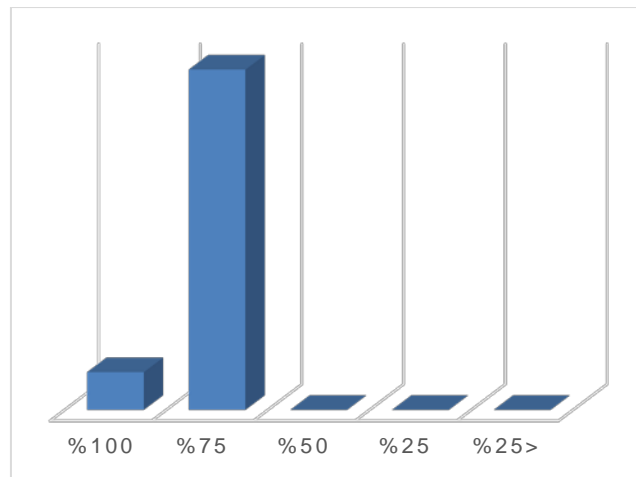
**Figure 1:** Extent of Use of Library Web OPAC through e-gadget.

Based on Fig. 1, 65% of the students most often use the Library Web OPAC through their electronic gadget. The student respondents strongly agreed that they use entries like title, subject, and topical keywords on their searches, which garnered weighted means of 3.66, 3.55 and 4.2, respectively. This may be associated to the fact that it is easier to search using topical keywords as entry because it will give a wider spectrum for list of references, especially when the students do not have any idea on what to search.

**Table 2:** Types of Entry used during their search

Types of Entry	Mean	Verbal Interpretation
Author	3.1	Agree
Title	3.6	Strongly Agree
Subject	3.55	Strongly Agree
Topical keywords	4.2	Strongly Agree
Series Statement	2.6	Agree
Publisher	2.6	Agree
Call Number	3.2	Agree

The early studies in Web OPAC used known-item search and subject search [7]. Nowadays, available Web OPACs have available bibliographic information about a specific item, wherein users can search either by title, author, or other subject fields. Subject searches are more open-ended as users can locate all items related to the subject of interest [3]. In the study conducted by Lau and Goh, hyperlinking selected terms in the bibliographic records or search results listing for browsing was highly suggested [7]. All of the student respondents were able to locate the documents of their interest from the Web OPAC through e-gadget. However, even if they were able to locate the documents they wanted, not all of the transactions/ searches were successful. Most of the students rated the success of locating their desired documents as 75% successful. This means that for every four transactions/ searches, only three of them proceed successfully.



**Figure 2:** Rate of success of locating the documents of interest from the Web OPAC through e-gadget

Based on Table 3, the students do not agree that they have learned how to use the library through a friend or from someone near their computers and through printed instructions. Most of them agreed that they have learned the use of Web OPAC through the library orientation they have attended. The proper awareness and orientation program of the library’s available services are imperative to motivate students to visit the library and maximize its use. In a study on the web usability techniques to assess student awareness of library resources were done at the University of the Pacific Library, the researchers were greatly alarmed that most of the students are not aware on the web services available in the University’s library. Only 39% of students who were surveyed were familiar enough with the library’s Web resources [7].

**Table 3:** How they have learned to use the Web OPAC.

Parameters	Mean	Verbal Interpretation
From a friend or someone at a nearby computer	1.95	Disagree
Using printed instructions	1.7	Disagree
Using instructions on the computer screen	2.85	Agree
From the library staff	3.2	Agree
From the library course or orientation	3.0	Agree
By myself without any help	2.45	Agree

### 3.2. Affirmative Perceptions about the Use of Web OPAC through Electronic Gadget

Based on Table 4, most of the students agreed that the Web OPAC available in the BatStateU Main Library was fun, comfortable and easier to use, and found more items than expected. More so, they disagreed that the BatStateU Library’s Web OPAC was difficult and confusing to use.

**Table 4:** Affirmative Perceptions about the Use of Web OPAC through Electronic Gadget

<b>Affirmative Perception</b>	<b>Mean</b>	<b>Verbal Interpretation</b>
<b>Statements</b>		
It was fun to use	2.85	Agree
It was easy to use	3.2	Agree
It helped me in finding the documents faster	2.95	Agree
It is very difficult to use	2.1	Disagree
It is very confusing to use	2.15	Disagree
I found more items than expected	3.45	Agree
I am comfortable with simple research	3.15	Agree
I am comfortable complex/Advance search	2.7	Agree
I am comfortable with quick search	3.5	Agree
I am comfortable when using Web OPAC	3.0	Agree

**3.3. Affirmative Post Search Perceptions about Library Web OPAC through electronic gadget**

After using the Web OPAC through electronic gadget, most of them agreed that the system was easy to use and that it was clear and understandable. They also agreed that the display interface was easier to read and it was easier to continue the search for additional books on the same subject. They disagreed that a friend or someone can use the Web OPAC and search effectively even with little or no training at all. Over-all, they considered that the use of Web OPAC through e-gadget was helpful. The same observations were given by the students of the Kent State School of Music when they evaluated their local university OPAC [8]. According to the students, they experienced briefer, less complicated, and more successful searches for media items.

**Table 5:** Affirmative Post Search Perceptions about Library Web OPAC through electronic gadget

<b>Affirmative Post Search Perception Statements</b>	<b>Mean</b>	<b>Verbal Interpretation</b>
It was easy to use the library Web OPAC for whatever I wanted to search	3.5	Agree
Interaction with the library Web OPAC to carry out my searches was clear and understandable	3.1	Agree
Overall, this library Web OPAC was helpful in assisting me to search the documents effectively	3.55	Agree
It would take a great deal of effort and practice for me to learn to use this library Web OPAC with proficiency	2.65	Disagree
My friends could use this Web OPAC to search effectively with little or no training	3.35	Disagree
Once I found a book on a subject or topic, it was easy to continue the search to find additional books on the subject	3.45	Agree
When a full, detailed Web OPAC record for a book was displayed, it was easy to read that display to find specific information about the book(s)	2.65	Agree

**3.4. Students’ Satisfaction on Web OPAC services using their Electronic Gadget**

**Table 6:** Library Web OPAC in terms of ease of use through electronic gadget

Parameter	1	2	3	4	Parameter
Very Difficult	0%	10%	40%	50%	Very Easy

Table 6, shows how the students rate the Library Web OPAC in terms of ease of use through electronic gadget. Half of the respondents rate the Library Web OPAC very easy to use through their electronic gadget.

Most of the students were satisfied with the ability of the Library Web OPAC through electronic gadget in assisting them in finding library resources. This is in contrast with the statement of Borgman [9] that despite the advances in technology, research continues to show that these systems are ineffective and hard to use. This only means that on the past decade Web OPAC changed and serve the needs of the clientele.

**Table 7:** Students’ Satisfaction on the use of the Library Web OPAC through electronic gadget

Parameters	Percentage
Very Satisfactory	0%
Satisfactory	75%
Unsatisfactory	25%
Very unsatisfactory	0%

**4. Conclusion**

All of the third year BS Chemistry students access the Library’s Web OPAC using their electronic gadgets and most of their searches were on theses which are available in the BatStateU Main Library. Most of them use their electronic gadget in accessing the Web OPAC. Student used title, subject, and topical keywords as entry in most of their searches. They were able to locate the documents of their interest from the Web OPAC through e-gadget but not all transactions/searches were successful. Library orientation on the use of Web OPAC helps the students to use it easily. After using the Web OPAC through electronic gadgets, most of them agreed that it was clear, easy to use, and understandable. They agreed that the display interface on their gadgets was better to read and it is easier to continue the search for additional books on the same subject. Half of the respondents rated the Library Web OPAC as very easy to use through their electronic gadget. Furthermore, they were satisfied with the ability of the Library Web OPAC through electronic gadget in assisting them in exploring and retrieving library resources.

**5. Recommendations**

Based on the conclusions mentioned, it is strongly recommended for the librarians to develop informational

marketing strategies to create awareness about the BatStateU Main Library's Web OPAC services among its student clientele. All of the primary and support staff of the library should be properly trained on navigating the Web OPAC and its other uses so that they could develop skills and render assistance to users encountering any difficulty while using the OPAC in the library. They should maximize the reach and potential of their web technologies to continuously improve their services with the rapidly changing times.

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