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**Reference 2.0 in Action: An Evaluation of the Digital Reference Services
in Selected Philippine Academic Libraries**

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Abstract :

Purpose of this paper: This paper presents the current status of digital reference service among selected academic libraries in the Philippines - the University Library of the University of the Philippines Diliman, the Rizal Library of the Ateneo de Manila University and the University Library of the De La Salle University Manila, by figuring out how information service is provided using IM and Social Networking Sites.

Design/methodology/approach: A survey was conducted to examine the nature, practice and impact of DRS and to ascertain users' preferences and level of awareness of the availability of Ask-a-Librarian - an information service offered through IM, and the Facebook fan page of the university libraries under study.

Findings: Interestingly, the findings reveal that the full potential of reference service 2.0 has not yet been maximized. When it comes to reference services in academic libraries, students and faculty members have chosen to go online: Ask-a-Librarian, web forms, e-mail and Facebook. A significant increase in the number of reference transaction was observed after integrating Web 2.0 and digital reference tools to its information services. IM and Facebook were found to be the most useful tools in finding relevant information. A majority of the queries received were brief and factual information inquiries and questions on how to use online databases.

Practical implications: The paper further explores the different aspects of IM and Facebook reference service: statistics, content of the questions and quality of the answers, reference interview, and the user's awareness and preferences. The results of this study may prescribe practices integrating Web 2.0 applications to beef up reference service, in which academic librarians in the Philippines may benchmark.

What is original/value of paper: This is the first systematic evaluation of the nature and practice of reference 2.0 in Philippine setting that sees a valuable contribution that could boost academic libraries in the country, as they endeavor to provide world class service to many.

INTRODUCTION

"The user is not remote; it is the library that is remote from the user." -- (Lipow, 1999)

One of the most significant developments in reference services these past several years has been the emergence of the digital reference services (Granfield, 2008). Also known as virtual reference services, digital reference service (DRS) is "reference service initiated electronically, often in real-time, where patrons employ computers or other Internet technology to communicate with reference staff, without being physically present" (RUSA, 2004).

DRS comes in two types, namely: *asynchronous*, where a patron submits a question through e-mail and web form and the librarian responds at a later time; and, *synchronous*, where a patron communicates directly with a reference librarian in real-time using web chat applications (Granfield & Robertson, 2008; Singh, 2004). Chat, Voice-over-IP (VoIP), video conferencing, short messaging system (SMS), and Instant Messaging (IM) are some of the tools used in synchronous DRS.

Launched in 1984, the *Electronic Access to Reference Services* (EARS) of the University of Maryland Health Services in Baltimore was one of the earliest DRS in the United States (Singh, 2004). DRS initially started from e-mail reference (Wassik, 1999), which enables asynchronous interaction between the client and the reference librarian beyond the normal library service hours (Pomerantz, Luo & McClure, 2005). The proliferation of various forms of DRS such as chat, IM, web forms and searchable Frequently Asked Questions (FAQs) has been the benchmark of value-added service for many academic libraries. Back in early 2000s, a number of libraries launched chat reference services (Ellis & Francoeur, 2001), which allow real-time communication between the library client and reference librarian. Nowadays, more sophisticated communication channels are being used in DRS such as videoconferencing, virtual world, VoIP, and Social Networking Sites.

The Philippines is quite behind in terms of the development of DRS compared to its counterparts abroad. The employment of e-mail reference service could be traced back in the early 2000s. With the proliferation of web chat applications, a few number of academic libraries started offering chat reference services in 2009. Some of the academic libraries offering DRS in varying forms are the University Library of the University of the Philippines (UP) Diliman, the UP College of Engineering Library, the Rizal Library of the Ateneo de Manila University (ADMU), the University Library of the De La Salle University (DLSU) Manila, the James O'Brien Library of Ateneo de Naga University (ADNU), and the Centro Escolar University (CEU) Library. All of these libraries utilized chat with the use of IM and Social Networking Sites specifically the *Facebook*.

The provision of DRS in academic libraries is a response of librarians to the ever growing information needs and changing information seeking patterns and behavior of the clients – who are becoming less visible in the library. A majority of today's library clients are *Millennials,* who are characterized as technology savvy, visually oriented, multi-taskers, very demanding and expect nomadic, anytime

and anywhere communication (Becker, 2009). In relation to this, there are changes in the help-seeking preferences of students. Library clients prefer to access the library via the Internet and seek the help of a reference librarian in a digital environment. Thus, they opt to make use of the DRS over the traditional reference service being rendered. However, use preference of the library clients may be influenced by their level of awareness on the availability and the knowledge on the features and processes involved on the existing DRS (Granfield & Robertson, 2008).

The implementation, management and evaluation of DRS have attracted so much attention from among information professionals over the past years (Pomerantz & Luo, 2006; Pomerantz, Luo & McClure, 2005), that various evaluation methods were developed to assess the quality of such services. The evaluation of DRS can be from the point of view of the user and from the point of view the service itself (Pomerantz & Luo, 2006). In response to the emerging issues and challenges in implementing, managing and evaluating DRS, librarians as well as professional associations, such as the International Federation of Library Associations (IFLA) and the American Library Association's (ALA) Reference and User Services Association (RUSA), compose, modify and publish guidelines for DRS (RUSA, 2004; IFLA, 2005). There have been a substantial number of studies on evaluating the DRS in foreign countries but very little research made locally.

RESEARCH PROBLEM

The primary concern of this study is to evaluate the DRS among selected academic libraries in the Philippines - the University Library of the UP Diliman, the Rizal Library of the ADMU and the University Library of the DLSU Manila in terms of communication process and quality of the answers.

Specifically, the following research questions were investigated:

1) What are the available DRS among selected academic libraries in the Philippines?
2) What are the current practices of selected Philippine academic libraries in implementing DRS?
3) What is the user's level of awareness of the existence, preferences in using and attitude toward DRS?
4) What is the quality of chat reference services being provided to clients among academic libraries?
5) What is the impact of DRS in reference and information services?

The results of this study may prescribe integrating Web 2.0 applications to beef up reference service, in which academic librarians in the Philippines may benchmark. This is the first systematic evaluation of the nature and practice of reference 2.0 in Philippine setting that sees a valuable contribution that could boost academic libraries in the country, as they endeavor to provide world class service to many.

LITERATURE REVIEW

A review of the literature related to the subject matter revealed a host of international studies on DRS, which include evaluation (Shachaf & Horowitz, 2008; Lochore, 2004; Pomerantz, Nicholson, Belanger, & Lankes, 2004; Pomerantz & Luo, 2006; Odsinada, 2010); case studies (Radford & Kern, 2006; VanDuinkerken, Stephens & MacDonald, 2009); use and user satisfaction assessment (Kibee, 2006; Dee & Allen, 2006; Roesch, 2006; Janes, 2002); transcript analysis (Pomerantz, J., Luo, L., &

McClure, C., 2005; Bradford, Costelo & Lenholt, 2005; Francoeur, 2001; Radford, 2006); and recommendation for best practices (Shaw & Spink, 2009). A few others are on the user's awareness, preference and attitude toward DRS (Granfield & Robertson, 2008).

Digital Reference Services

Many libraries continue to offer DRS on both asynchronous and synchronous transactions. Asynchronous reference tools include e-mail and web forms, while synchronous reference tools include chat reference, video-conferencing or web-camera services and digital reference robots (Singh, 2004). Today, Web 2.0 tools, which includes *Facebook*, *Second Life*, *Twitter,* blogs and media or resource sharing, are also applied in asynchronous reference services where in library clients may seek 24/7 help from the reference librarian with time delay response.

Wassik (1999) proposes a structured six-step process of developing and implementing digital reference service:
- Informing, which involves preliminary research to identify the areas of expertise and existing service areas;
- Planning, wherein procedures, methods and policies on DRS are developed;
- Training, where training plan are developed to prepare staff for the service;
- Prototyping, which involves pre-testing of the service before launching;
- Contributing, which involves publicity and resource development for service support; and,
- Evaluating, which includes service assessment to identify improvement opportunities.

Chat reference refers to the services where the "core of the communication between the librarian and user is an exchange of text messages in real-time" (Francoeur, 2006) using either IM or chat. Many US academic libraries provide the opportunity to "chat" online with a reference librarian that is more resource-intensive than e-mail reference (Lochore, 2004). Chat reference comes in various types, from chat using simple technologies (also known as IM reference) e.g. *Yahoo!* Messenger, *Google Talk* and web-based chat rooms, to a more sophisticated using web contact software e.g. *Virtual Reference Software*, *24/7 Reference* (Singh, 2004). In this regard, real-time interactive chat software were developed to allow co-browsing feature, such as the *e-Gain*, *HumanClick* and *LivePerson*. Libraries prefer using free chat software such as *Yahoo!* Messenger, *Google Talk*, *AOL Instant Messenger*, *Meebo* and many more.

Since the integration of chat reference to DRS, libraries and librarians have become concerned with the issues and challenges that have occurred, along with the advantages. Several factors should be taken into consideration when implementing chat reference service. These include cost of chat software, staffing management and viability of the service (Lou, 2006; Radford & Kern, 2006). It is important to note that not all chat reference services are successful. Few libraries have discontinued chat reference because of low volume, software problems and staffing model (Radford & Kern, 2006).

Users' Awareness and Preferences in Digital Reference

DRS in academic libraries deserve to have high level of marketing in order to make its clients aware on the availability of such services. In addition, information professionals should have clear understanding on the help-seeking preference of today's library clients. However, not many studies have been conducted to examine the users' awareness and preferences in digital reference service (Luo, 2008).

Studies have proven that face-to-face reference or traditional reference desk continues to be the mostly used reference service and at the same time, the first choice in getting help in the library (Grandfield & Robertson, 2008; Luo, 2008). Nevertheless, DRS satisfy the needs of library clients who work outside the library. Furthermore, studies suggested that awareness and exposure to the existing DRS can influence the help-seeking choices and preferences of library clients. Students who are not familiar with *Ask-a-Librarian* using IM tend to prefer e-mail reference over chat reference (Nilsen, 2004; Luo, 2008). Likewise, faculty members who are not aware with *Facebook* fan page will most likely submit their reference queries through web form.

Ruppel and Fagan as cited by Grandfield & Robertson (2008) explored whether a chat reference using IM software to converse in real-time with students would solve some user's anxiety to the reference desk. Their results show that the students have had experienced both traditional and IM reference. IM reference allows them to ask assistance from the librarian with great amount of convenience.

In a survey conducted by Foley (Grandfield & Robertson, 2008), she asked library clients as to their reasons why they prefer to use chat reference over visiting, telephoning or e-mailing the reference staff. They mentioned the following reasons: convenience; hassle in making telephone call; off campus access; and, liked the instantaneous nature of online communication.

Digital Reference Evaluation

Few studies suggest that establishing best practices in DRS is advantageous to define quality services and introduce new assessment indicators (Shaw & Spink, 2009). For example, Morin and Kresh as cited by Shaw and Spink (2009) recommend that DRS best practice serves as a guide to ensure consistency during the implementation of a DRS. They identified the following ways in order to develop best practices in DRS: 1) review digital reference guidelines; 2) assess the existing reference policies and guidelines to identify what is being emphasized; 3) examine current practices by checking with librarian's tacit knowledge; 4) compare the organization's mission and goals to patron's needs; and, 5) utilize any new software or recent organization changes to improve processes.

While there have been several reference evaluation measurements over the past few years, Ronan, Reakes and Cornwell (2003) claimed that the standards and guidelines "are lagging behind the rapidly evolving world of online synchronous reference" (Shachaf & Horowitz, 2008). In relation to this, RUSA published the *Guidelines for Implementing and Maintaining Virtual Reference Services* and *Guidelines for Behavioural Performance of Reference and Information Service Providers* to help reference librarians improve user-librarian interaction, both in traditional and DRS.

A host of recent studies propose using the IFLA Digital Reference Guidelines and the RUSA *Guidelines for Behavioural Performance of Reference and Information Service Providers* in order to evaluate quality service (Shaw & Spink, 2009; Shachaf & Horowitz, 2008). Higher level of adherence to these guidelines is expected from libraries offering digital reference in order to increase service effectiveness (Shachaf & Horowitz, 2008). Interestingly, the study of Shachaf & Horowitz showed low levels of adherence to IFLA guidelines and RUSA behavioural guidelines.

Different types of measurement for evaluation were also used in various studies, namely: 1) quality of the answers based on accuracy, completeness and adequacy of answers, referencing for sources quoted, response appropriateness to the user audience, opportunity for interactivity, and the level of instruction provided during the transaction; 2) process effectiveness and efficiency based on

services accessibility, response timeliness and duration, percentage of questions received, percentage of questions answered, and percentage of questions not answered; variants of DRS; staff qualification; policy; privacy; and marketing; 3) cost effectiveness which includes DRS session costs, the infrastructure and software needed to support quality DRS, and the impact on other library expenditures; 4) user satisfaction on the process and results using indicators e.g. accuracy, timeliness, staff behavior, etc.; and, 5) breadth and extent of the service including the allowed question types, style and scope of the answers, and knowledge base (Shaw & Spink, 2009; Roesch, 2006; Shachaf & Horowitz, 2008; Pomerantz, Luo & McClure, 2005; Odsinada, 2010; Bradford, Costelo & Lenholt, 2005; Francoeur, 2001; Radford, 2006).

RESEARCH METHODOLOGY

Sample

A preliminary survey of websites of 356 academic libraries was conducted to determine whether those libraries are currently offering DRS and what tools they use. Among the academic libraries providing DRS, three of the largest academic libraries in the Philippines were chosen as subjects of this study, namely: the University Library of the UP Diliman, the Rizal Library of the ADMU and the University Library of the DLSU Manila. Subjects were selected on the basis of availability of DRS particularly the *Ask-a-Librarian*, e-mail reference and *Facebook* fan page, length of existence and numbers of reference transactions received. A total of 280 questionnaires with a response rate of 85% (n=239) were distributed to clients who visited the library in April –May 2011 to know their awareness, preferences and attitudes toward DRS.

Data Collection and Analysis

A list of academic libraries with website listed on the Philippine Association of Academic and Research Libraries (PAARL) Wiki was used (http://paarl.wikispaces.com/Libraries). Each academic library's website was visited and examined as to the availability of DRS. Letters of clearance to conduct the study were sent to the university librarian or library director of ADMU Rizal Library, DLSU University Library and UP Diliman Library one month before the data gathering. Data were collected through survey questionnaires, interviews and examination of available documents including annual reports, usage statistics, chat transcripts and reference queries posted in their *Facebook* library fan page. Once permission has been granted, the reference librarians were personally interviewed to gather in-depth information on the nature, practices and impact of DRS.

The survey questionnaire was distributed to the sample being studied. Its focus was whether the library clients were aware on the availability of DRS of their respective library, their most and least preferred reference 2.0 services, and their attitudes toward these services (see Appendix A).

The accomplished questionnaires were compiled and analyzed. Descriptive statistics and ranking were used as statistical treatment in analyzing the data. Chat transcripts and queries posted in the *Facebook* library fan page in 2010 were printed and examined carefully and categorized into different types of reference services, namely: 1) information service such as library directions, bibliographic verification, factual and brief reference queries, location library resources, document delivery, database searching, referrals and interlibrary loan; and, 2) instruction and assistance such as use of library information tools, identifying and gathering resources, and use of online databases. Reference queries received through the *Ask-a-Librarian* and *Facebook* library fan page were analyzed in terms of communication process (show professional courtesy and respect when

answering questions, acknowledge receipt of patron question, sends prompt reply, search strategy explained, objective behavior (reference librarian), neutral questioning technique, greet patrons, thank the patron, includes signature, and includes concluding remarks) and quality of answers (accurate answer, completeness, includes jargon, internet abbreviation or acronyms, clarity of response, misspellings or wrong grammar, use authoritative sources and provides at least one resources).

RESULTS AND DISCUSSION

Availability of Digital Reference Services

Twenty-two (22) of out 356 academic libraries in the Philippines have DRS both in asynchronous and synchronous transactions (table 1). Three big academic libraries are currently offering all of the identified DRS, namely: ADMU Rizal Library, DLSU University Library and UP Diliman Library. Few academic libraries have integrated Web 2.0 tools e.g. *Facebook* and *Twitter* in DRS. Looking at the wall postings of the *Facebook* fan page and *Twitter* accounts of the 17 academic libraries, these Web 2.0 tools are being used as marketing tool to promote library services and collections and not really to as venue to provide reference and information services to library clients. Five academic libraries have IM reference using *Yahoo! Messenger* and/or *Google Talk*.

Table 1
Academic Libraries Offering DRS
n=356

Academic Libraries	IM Reference	Web Form	VoIP	FAQ	Online Library Instruction	Twitter	Facebook
Adventist International Institute of Advanced Studies		Yes					
Arellano University							Yes
Ateneo De Manila University	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ateneo De Naga University (James O'Brien Library)	Yes	Yes			Yes		Yes
Central Philippine University (Henry Luce III Library)							Yes
Centro Escolar University	Yes				Yes		
De La Salle University -Manila	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Far Eastern University					Yes		
Lourdes College Library-Cagayan de Oro City							Yes
Our Lady of Fatima University							Yes
San Beda College				Yes			
St. Jude College						Yes	Yes
University of Batangas				Yes	Yes		Yes
University of Luzon						Yes	Yes
University of Saint Louis (Tuguegarao)							Yes
University of Santo Tomas		Yes			Yes	Yes	Yes
University of the Philippines Diliman	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Urios University						Yes	Yes
Virgen Milagrosa University Foundation				Yes		Yes	Yes
World CITI Colleges				Yes			
Xavier University							Yes
Zamboanga State College							Yes
Total	5	6	3	7	8	8	17

Level of Awareness on Digital Reference Services

One hundred eighty-nine (189) out of 239 respondents are aware of the existence of the DRS in their respective libraries (table 2). In addition, only 34% (65 respondents) of the respondents who are aware of the digital reference have utilized the services.

Table 2
Awareness and Use of DRS
N=239

	Yes	No
Awareness of DRS	189	50
Utilization of DRS	65	174

When the respondents were asked to rate their level of awareness, respondents have a fair level of awareness on existence of the *Ask-a-Librarian* (IM), VoIP reference, online tutorials and SMS reference. Respondents showed a moderate level of awareness on the availability of the following DRS: web forms yielded a mean of 2.77; e-mail reference, 2.76; *Facebook* (library fan page), 2.70; and, searchable FAQs, 2.63 (table 3). Figures in table 3 show that respondents are most familiar with the availability of the web forms where they can submit their reference queries. Results implied that respondents are more familiar with asynchronous than synchronous type of DRS. Library clients may not be familiar with synchronous reference such as *Ask-a-Librarian* (IM), SMS reference, etc. because these are relatively new services offered in many academic libraries. Although majority of the respondents are familiar with DRS, the extent of their awareness is not high. Librarians need to proactively promote these kinds of reference services to ensure that users know about the existence of DRS in order to maximize its full-potential. Marketing has been highlighted as one of the important factors in user's awareness (Radford & Kern, 2006). One way of marketing the DRS is to provide a prominent and easily accessed link in the library website.

Table 3
Level of Awareness of the Existence of DRS
n=189

Digital Reference Services	High	Moderate	Fair	None	Mean	Level
Web forms (in library website)	62	51	46	30	2.77	Moderate
e-mail reference	59	51	53	26	2.76	Moderate
Facebook (library fan page)	66	44	35	44	2.70	Moderate
Searchable FAQs	49	54	54	32	2.63	Moderate
Ask-a-Librarian (IM)	47	45	49	48	2.48	Fair
Online tutorials	23	53	58	55	2.23	Fair
SMS reference	14	16	47	112	1.64	Fair
Voice-over-IP (VoIP)	9	23	43	114	1.61	Fair

Sixty percent (60%, 115 respondents) of the respondents learned the existence of DRS through the library website; 60 respondents learned about it from a friend; and, 53 of them have read it from the library bulletin (table 4). Only 30 out of 189 respondents who are familiar with DRS learned about it from their librarians.

Table 4
Distribution of Respondents According to Where/Whom They Learn
n=189

Sources	No. of Respondents
Library website	115
From a friend	60
Library bulletin	53
Library orientation	50
From your instructor	40
Library brochure	40
From the librarian	30

Users' Preference in Using Digital Reference Services

Respondents were also asked whether they have sought help from the librarian or any library personnel through the DRS. While a majority of the respondents are familiar with the existence of DRS, only 65 out of 189 respondents (73%) have asked help from the librarian using the *Ask-a-Librarian*, e-mail reference, *Facebook*, etc. (table 2).

Respondents who have utilized the DRS were asked to rank the five DRS according to their preference for getting help from the librarian. Ratings were on a scale of 1-5 where 5 being the highest, 1 being the lowest. It was reasonable to rank the DRS into five separate questions, since options are clearly different depending on the function and use. When respondents want to know basic information about the library, they preferred to ask the librarian through the *Ask-a-Librarian* (IM) which yielded the highest mean rank of 3.49 (table 5). It is followed by e-mail reference and *Facebook* library fan page that yielded with a mean rank of 3.43 and 3.08, respectively.

Twenty-one (21) respondents ranked the *Ask-a-Librarian* (IM) the most preferred DRS while nine respondents preferred it the least (table 5). As expected, the least preferred DRS is the online tutorials, wherein 28 respondents ranked it no. 1 (with a mean rank of 2.31). Results imply that respondents favour synchronous DRS over asynchronous when they want to learn more about the library. The respondents want immediate answer to queries pertaining to library rules and regulations, services offered and schedules.

Table 5
Respondents' Ranking Preferences in DRS
n=65

Digital Reference Services	5	4	3	2	1	Mean	Rank
When in need of information about the library							
Instant messaging	21	16	9	11	9	3.49	1
e-mail reference	16	19	12	12	7	3.43	2
Facebook (library fan page)	10	8	22	10	16	2.83	4
Web forms (in library website)	10	19	10	17	10	3.08	3
Online tutorials	9	4	11	14	28	2.31	5
When requesting for document delivery							
Instant messaging	11	24	13	9	8	3.32	2
e-mail reference	32	8	10	6	9	3.74	1
Facebook (library fan page)	6	9	28	11	11	2.82	4
Web forms (in library website)	8	21	7	26	3	3.08	3
Online tutorials	8	3	7	13	34	2.05	5
When asking for help on how to use online subscriptions, WebOPAC, etc.							
Instant messaging	30	12	8	5	10	3.72	1
e-mail reference	12	24	13	11	5	3.42	2
Facebook (library fan page)	7	12	21	10	15	2.78	4
Web forms (in library website)	8	12	14	26	5	2.88	3
Online tutorials	8	5	9	13	30	2.20	5
When looking for specific and highly specialized resources							
Instant messaging	21	19	9	8	8	3.57	1
e-mail reference	21	15	13	8	8	3.51	2
Facebook (library fan page)	5	13	19	12	16	2.68	4
Web forms (in library website)	10	14	13	27	1	3.08	3
Online tutorials	7	4	11	10	33	2.11	5
When requesting for library orientation							
Instant messaging	19	14	12	8	12	3.31	2
e-mail reference	15	18	15	9	8	3.35	1
Facebook (library fan page)	12	10	19	14	10	3.00	3
Web forms (in library website)	7	15	14	21	8	2.88	4
Online tutorials	11	7	4	12	31	2.31	5

When respondents are requesting for document delivery, they preferred to do it through e-mail reference, which yielded a mean rank of 3.74 (table 5). The estimate consensus ranking, from the most to the least preferred, is as follows: (1) e-mail reference (3.74); (2) *Ask-a-Librarian* (IM) (3.32); (3) web forms (3.08); (4) *Facebook* library fan page (2.82); and, (5) online tutorials (2.05). Among the respondents who have utilized the DRS, 32 of them ranked e-mail reference as the most preferred reference 2.0 tool in document delivery transaction. Since document delivery transaction requires more time to search for the requested articles or documents which may or may not be included in the library collections, it was reasonable for the respondents to choose e-mail reference which

allows reference librarians to respond at a later time. Compared with the rating preference of the respondents when they need information about the library, *Ask-a-Librarian* (IM) has the second highest rating. This is primarily because of the limitations of the IM software used by the academic libraries included in this study such as no file transfer function for *Yahoo! Messenger* pingbox, and the log in requirement to *YM* to be able to send files via the *Ask-a-Librarian* services.

Respondents were also asked what DRS they most prefer to use when seeking assistance from the librarian in using the online subscriptions and WebOPAC. The preferences for online instruction or assistance were the same with the preferences when the respondents need information about the library, wherein the *Ask-a-Librarian* (IM) yielded the highest mean rank of 3.72, while online tutorials has the lowest mean rank of 2.20. On the other hand, preference rating of the *Ask-a-Librarian* (IM) for online instruction is higher than when information is needed about the library. Based on the study conducted by Desai and Graves (2006), online instruction is both possible and appropriate in the IM reference. Library patrons want to learn on how to use the available online databases, WebOPAC, etc. to find the information needed in their research works. IM reference enables to provide the necessary online interaction involved in instruction. Surprisingly, online tutorials for instruction ranked the least preferred DRS among the respondents.

In addition, Table 5 presents the top three most preferred DRS of the respondents when looking for specific and highly specialized resources, namely: (1) *Ask-a-Librarian* (IM), mean rank of 3.57; (2) e-mail reference, 3.51; and, (3) web forms, 3.08. The ranking preference of respondents in looking for specific and highly specialized resources is the same with the ranking preference in online instructions. Again, e-mail reference is the most preferred DRS when respondents request for library orientation. It yielded a mean rank of 3.35 (table 5). The rating preferences of respondents who have used the DRS are the same for both requesting document delivery and library orientation. However, the mean rank is relatively higher than those in requesting for document delivery.

Results of the current study clearly reflect that use and users' preference of DRS could be dependent on the awareness of the library patrons (Nilsen, 2004; Luo, 2008). Users' preference in DRS varies according to type of reference and information service. Note that the unfavourable rating for online tutorials is worrisome, wherein online tutorials ranked the least preferred DRS in all five questions.

User's Attitude toward Reference 2.0

As Janes (2002) would put it, "experience is a powerful indicator of attitude and opinion." Figures in table 6 showed that the use of DRS to ask questions and seek assistance from the librarian has made their research more interesting (103) and cheaper (63). The results are consistent with previous study (Janes, 2002). The respondents do not think that DRS has made their research more difficult and more time consuming. In fact, 12 respondents stated that DRS has made their research faster; hence, it saves time.

Table 6
Distribution of Respondents According to their Attitude toward
DRS in Research Work
n=239

Attitudes	No. of Respondents
More interesting	103
Cheaper	63
More fun	50
Very different	38
More challenging	21
Save time/Faster	12
More time consuming	4
More difficult	3

Ninety-six (96) out of 239 respondents said that the use of DRS has made reference librarians more efficient (table 7) in providing reference and information services. With the utilization of reference 2.0 services, reference librarians become more approachable and helpful. The respondents do not think that reference librarians became ineffective in DRS.

Table 7
Distribution of Respondents According to their Attitude toward
DRS and Reference Librarian
n=239

Attitudes	No. of Respondents
More efficient	96
More approachable	81
Helpful	77
More visible	47
More skilled	2
More accessible	2
Ineffective	0

Digital Reference Service Practices in Academic Libraries

Ask-a-Librarian @ Rizal Library

The Rizal Library, with a user population of 10,000 (8,500 undergraduate students and 1,500 graduate students) aims to provide information and service in support of the teaching, research and community service functions of the ADMU. Currently, it has 250,000 volumes of books; 8,000 volumes of serials; 60, 000 volumes of microfilm; and, 140 titles of electronic books. The first DRS offered at the Rizal Library was e-mail reference. Conceptualized by Mr. Fernan Dizon, head librarian of the Reference and Information Services Section, the IM reference and web forms were initiated in 2008 in response to the increasing demand of library clients who want to seek assistance remotely.

The ADMU Rizal Library initially used *Yahoo! Messenger* IM software because of its popularity to users. Clients are required to log in using their *Yahoo! Mail* account to chat with a reference librarian. *Yahoo! Messenger* allows the library to archive all chat reference transactions. But since not all clients have *Yahoo! Mail* account, the ADMU Rizal Library stopped using *Yahoo! Messenger* and replaced it using the *Meebo* in 2010. With *Meebo*, clients can easily send messages to the reference librarian who is online from 7:30AM to 9:30PM on weekdays and 8:00AM to 6:00PM on Saturdays. One disadvantage of using *Meebo* in chat reference is that transcripts were not automatically archived. To archive the chat transcripts, the reference librarian shall have to copy, paste and save them onto a word processor, which is time consuming. Consequently, reference librarians decided to discontinue the archiving of chat transcripts.

Three professional librarians and one support staff are assigned to provide reference and information services via the *Ask-a-Librarian (IM)*. Using *Meebo*, they can now log in simultaneously in order to attend to all clients asking for help all at the same time. Reference librarians answer the query in real-time. If the librarian is offline, clients are advised to send their queries using the web form and expect a response within 24 hours. There is no written policy on DRS. In practice, *Ask-a-Librarian (IM)* accepts any type of queries e.g. ready reference, use of online databases, etc. from anyone whether ADMU clients or non-ADMU clients. For research type of queries, reference librarians normally give only instruction on how to find information or refer the patrons to relevant information resources.

Since its implementation, IM reference of the ADMU Rizal Library continues to receive various reference queries. During its first fiscal year (2008-2009), reference librarians received a total of 290 queries with an average of 48 queries every month (table 8). In 2009-2010, a total of 872 queries were recorded which indicates 200% increase from the previous fiscal year.

Table 8
Instant Messaging Queries Received by ADMU Rizal Library, 2008-2010

	2008-2009	2009-2010	Percentage Difference
IM reference queries	290	872	200%
Monthly Average	48	73	52%

The ADMU Rizal Library also launched its *Multiply*, *Facebook* fan page and *Twitter* in 2010 to be more visible to library patrons. These are another venue to efficiently disseminate information on library services, activities and events. The pages are regularly checked by the Assistant Director for

Marketing for questions, comments and feedback from the clients in order to be and acted upon accordingly.

Some of the challenges encountered in IM reference are technology problems, spam bots, and unreasonable request from the patrons. In spite of the IM reference's popularity and high volume of transactions, there has been no preliminary study conducted by the section to evaluate its success.

LORA of DLSU Library

Similar with the ADMU Rizal Library, e-mail was the first DRS that was offered by the DLSU Library's Information-Reference, as it enabled reference librarians to accommodate queries coming from the different types of users, 24/7. As the Library continues to capitalize on the web technology for rendering information service, it gave a twist to this service by introducing an email and chat facility, dubbed as the *Library Online Reference Assistant (LORA)*.

The LORA, including its image avatar, was formally launched in September 2009. It was packaged as a female virtual icon of a reference librarian who renders accurate and instant answers to queries posted by the users of the library, whether or not one is member of the university. When online during service hours (weekdays 7:00AM to 8:00PM, Saturdays 7:30AM to 7:30PM), *Chat with LORA* attends to queries in real-time through its IM facility provided by *Yahoo! Messenger*. When offline the *Ask LORA,* web form is made available to the users, where queries are immediately attended to by the Information-Reference staff once service hours have resumed.

With the boom of social networking sites, LORA also became visible in *Facebook* and *Twitter* in 2010. And in February 2011, the DLSU Library introduced *Text LORA*, an SMS reference service that caters to all library users who are on-the-move, and that it provides them with "information at their fingertips". It was designed to answer queries requiring brief answers, and are accommodated up to 10:00PM on weekdays and 9:30PM during Saturdays.

The success of LORA has brought in close to more than 200 transactions per month for the IM reference and up to more than 100 transactions per month for the e-mail reference within the academic years 2009-2010 and 2010-2011 (table 9). The popularity of *Chat with LORA* among the library users has surpassed *Ask LORA* in terms of the number of transactions received in AY 2010-2011.

Table 9
Queries Received through Digital Reference Services
DLSU Library, June 2009-March 2011

	AY 2009-2010	AY 2010-2011	Percentage Difference
E-mail LORA	1,104	947	-14%
Chat with LORA	1,004	1,904	90%
Text LORA	0	41	41%
Total	2, 108	2,892	37%

The variety of DRS being provided by the DLSU Library posted several challenges on the part of the reference librarians handling these services. The nature of these facilities made clients expect instant answers at quicker response time, mistaking LORA to be a chatbot, and not a real person. On a busy

day, *Chat with LORA* gets up to eight queries/transactions from eight different clients in a minute, with one or two transactions carrying up to 25-30 questions at a given time. The same librarian who handles the IM service would also entertain face-to-face transactions and answer queries coming in by phone. However, despite the bulk of transactions, library users are satisfied with these services.

The LORA facilities are being handled by two full-time reference librarians, five professional librarians (on-rotation basis), and one full-time assistant reference librarian, where all types of queries are accommodated. LORA is used as the official signature of the system.

Ask-a-Librarian @ UP Diliman

The UP Diliman Library is the largest academic library in the Philippines in terms of size of the collection (more than one million volumes of print and non-print resources) and size of user population (25,000 students, faculty and staff). The *Ask-a-Librarian* (IM) of UP Diliman Library started with a pilot in July-September 2009. It uses *Google Talk* and *Yahoo! Messenger* pingbox which do not require clients to log in using their *Yahoo! Mail* and *Gmail* accounts. It operated for 54 hours per week (Monday to Saturday, 8:00AM to 5:00PM) with an average daily volume of five sessions.

Starting in October 2009, the *Ask-a-Librarian* service was extended until 12 midnight since the library has midnight services. Since then average daily volume had increased to approximately 42 transactions per month. Four full-time reference librarians of the General Reference and Electronic Resources Section are handling the *Ask-a-Librarian* service including the e-mail reference and web forms. Chat transactions received by UP Diliman Library are not automatically archived in the system. Thus, reference librarians need to save the transcripts manually onto a word processor.

Furthermore, the UP Diliman has written DRS policy which is patterned after the IFLA Digital Reference Guidelines and the RUSA *Guidelines for Behavioural Performance of Reference and Information Service Providers.* It is important to note as stated in the DRS policy of UP Diliman Library that the reference librarians will respond primarily to queries of its constituents (students, faculty and staff) and thereafter, the needs of its alumni, other libraries, government researchers and private researchers. Queries are answered in the order they are received and clients should submit only one request at a time and should wait for a reply before submitting another. Library clients should indicate their full name, affiliation, valid e-mail address and clear details of query. A reply will be sent to them within one to three days depending on the volume of DRS transactions received.

Table 10 presents the statistics of queries received through the Ask-a-Librarian and *Facebook*. A significant increase (58%) in the number of DRS transactions was recorded in AY 2010-2011. Some of the factors contributed to the increased in transaction were active marketing strategies, visibility of *Ask-a-Librarian* icon on the library website and awareness level of the actual and potential library users.

Table 10
Queries Received through Ask-a-Librarian and *Facebook*
UP Diliman Library, June 2009-March 2011

	AY 2009-2010	AY 2010-2011	Percentage Difference
Ask-a-Librarian	360	514	55%
Facebook fan page	90	198	120%
Total	450	712	58%

In July 2009, the UP Diliman University Library *Facebook* fan page was created with an objective of multi-level marketing of library services and resources using Web 2.0 tool. Currently, it has more 8,000 fans which primarily composed of UP students, faculty, and staff. Fans can post reference queries and comment on the wall. Every hour there is one reference librarian who is in-charge in screening and answering the queries and comments posted on the wall. In addition to the *Facebook* fan page, the College of Engineering Library II has a *Twitter* and VoIP reference.

Chat Reference and *Facebook* Library Fan Page Evaluation

A total of 800 chat transcripts received in 2010 were analyzed wherein 308 were received by UP Diliman; 282 from DLSU Manila; and 210 from ADMU. A majority of the queries received were brief and factual information inquiries with a total of 357 transactions; use of online databases, 191; and, locating library resources, 86 (table 11).

Table 11
Chat Transactions per Type of Reference Queries, 2010

Types of Reference Queries	No. of transactions in ADMU	No. of transactions in DLSU	No. of transactions in UP Diliman	Total no. of transactions
Factual and Brief Reference Queries	101	130	126	357
Use of Online Databases	68	70	53	191
Locating Materials	13	23	50	86
Use of Library Information Tools	19	18	34	71
Document Delivery	3	2	21	26
Literature Search	1	10	12	23
Referrals	1	6	8	15
Library Directions	3	1	3	7
Bibliographic Verification	1	3	1	5
Identifying and Gathering Materials	0	19	0	19
Total	**210**	**282**	**308**	**800**

Out of the 357 brief and factual information inquiries, 222 were queries about the service hours; rules and regulations pertaining to fines, borrowing and access to special collections; and, requirements for visitors to visit the library and their privileges. Other queries that were accommodated include: policy on lost books and other in-house library policies; how books are

ordered; whether or not classes are suspended; inquiries about other offices and course offerings in the university; university activities; and, assistance in troubleshooting and reserving equipment units. Ninety-eight (98) out of the 191 queries on the use of online databases were about getting a remote access accounts for EBSCOHost, ProQuest, Academic OneFile, Gale Virtual Reference Library, ScienceDirect, and all other subscription databases.

In 2009, a number of academic libraries in the Philippines have integrated *Facebook o*n their DRS. Unlike IM reference and e-mail reference, *Facebook* library fan page is not highly utilized when clients are seeking for assistance from the reference librarian (table 12). The UP Diliman Library received a total of 176 reference queries in 2010 wherein 61% (110) of the total transactions are factual and brief reference queries. Note that there has been no reference queries received from the *Facebook* library fan page of DLSU Manila. This is probably because bulk of DLSU's digital reference transactions were received through the *Ask LORA, Chat with LORA* and *Text LORA* which are all synchronous DRS.

Table 12
Reference Queries Received through *Facebook* Library Fan Page, 2010

Types of Reference Queries	No. of transactions in ADMU	No. of transactions in DLSU	No. of transactions in UP	Total no. of transactions
Factual and Brief Reference Queries	1	0	110	111
Use of Online Databases	1	0	25	26
Locating Materials	1	0	12	13
Use of Library Information Tools	0	0	11	11
Document Delivery	0	0	5	5
Literature Search	0	0	7	7
Referrals	0	0	6	6
Library Directions	0	0	0	0
Bibliographic Verification	0	0	0	0
Identifying and Gathering Materials	0	0	0	0
Total	3	0	176	179

IM Reference Quality

Each of the IM reference transcripts was examined to determine the quality of DRS transactions. Appendix B presents a representative sample to the chat transactions. In terms of communication process, the reference librarians handling the synchronous reference services showed professional courtesy and respect when answering questions. All academic libraries in this study have developed pre-scripted online conversations in greeting the patron, acknowledging the receipt of patron's question, and clarifying the reference queries if necessary to facilitate prompt response to online clients. According to Radford (2006), "greeting ritual is an example of how interpersonal relationships are formed in the chat environment and how the librarian cultivated a positive tone and open rapport with the client." However, there are times where reference librarians failed to acknowledge the receipt of queries or give instant answer to clients' questions because of some software problems, high volume of transaction at time and limited staff available.

With regard to instruction type of reference queries, the reference librarians were able to explain the search strategies involved in accessing the online subscriptions and WebOPAC. As expected, reference librarians showed objectivity in their behavior toward library clients by being neutral during the reference interview.

All of the three academic libraries include signatures. The ADMU Rizal Library uses Rizal Library as official signature. LORA is used as the official signature of the DLSU Manila University Library. Reference librarians of UP Diliman University Library are required to introduce themselves using their personal names.

Table 13
Comparison of IM Reference Quality

	IM Reference Quality Indicators	ADMU	DLSU	UP Diliman
Communication Process	Show professional courtesy and respect when answering questions	Yes	Yes	Yes
	Acknowledge receipt of patron question	Yes	Yes	Yes
	Sends prompt reply	99%	Yes	99%
	Search strategy explained	Yes	Yes	Yes
	Objective behavior (reference librarian)	Yes	Yes	Yes
	Neutral questioning technique	Yes	Yes	Yes
	Greet patrons	Yes	Yes	Yes
	Thank the patron	Yes	Yes	Yes
	Includes signature	Yes	Yes	Yes
	Includes concluding remarks	Yes	Yes	Yes
Quality of answers	Accurate answer	Yes	Yes	Yes
	Completeness	99%	99%	99%
	Includes jargon, internet abbreviation, acronyms	Yes	Yes	Yes
	Clarity of response	99%	99%	99%
	Misspellings or wrong grammar	.05%	.05%	.05%
	Use authoritative sources	Yes	Yes	Yes
	Provides at least one resources	Yes	Yes	Yes

Reference librarians provided accurate answers to queries received via *Ask-a-Librarian* or *Chat with LORA.* Note that 99% of the chat transactions were completely answered. Answers to some reference queries were incomplete because clients left before completing the transaction and technical problems due to Internet connection. Barriers such as network disconnection and abrupt departure of the clients are just two of the factors affecting the quality of DRS (Radford, 2006).

Note that the reference librarians have used jargon, Internet abbreviation and acronyms during the reference interview. Likewise, library clients used SMS style of exchanging messages with the librarian. A minimum number of transactions with misspellings or wrong grammar (0.05%) was recorded.

CONCLUSION

The premise of this study was based on the assumption that a reasonable exposure to DRS such as *Ask-a-Librarian* (IM), e-mail reference and *Facebook* library fan page, had occurred among library clients of UP Diliman, ADMU and DLSU Manila. In this regard, an examination of nature and practices of reference 2.0 and of awareness and preferences for various types of services would contribute valuable information for strategic planning regarding integrating Web 2.0 applications to improve reference and information service and help reference librarians become more visible among invisible and remote library clients.

Evidently, the traditional reference desk continues to be the most popular means of getting help in the library but findings of this study confirm that DRS or reference 2.0 has become attractive to the *Millennials* that satisfies their information needs in cheaper, convenient and efficient ways.

A significant increase in the number of reference transaction was observed after integrating Web 2.0 tools to its information services. IM and *Facebook* were found to be most useful reference 2.0 tools in finding relevant information. A majority of the queries received were brief and factual information inquiries, use of online databases and locating library resources.

The results of this study reveal that DRS provide accurate information. Reference librarians were able to establish good interpersonal relationships with clients in a chat environment. The quality of DRS is good; however, it should be noted that DRS is not a total replacement of face-to-face reference service.

RECOMMENDATIONS

The following are recommended based on the above findings:

1. Develop a marketing plan for DRS to increase the level of users' awareness and service utilization;
2. Develop a policy on DRS; and
3. Training of reference librarians to achieve successful reference interview in DRS

FUTURE DIRECTIONS

Much more research needs to be conducted among academic libraries in the Philippines to understand and improve the quality of DRS particularly the IM reference. Further study on the evaluation of DRS in terms of cost-effectivity, usage and organization process in various types of libraries must be conducted also. In addition, there is a need to study further the awareness, attitude and preferences in DRS among high school students and graduate students.

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APPENDIX A

Survey Questionnaire

A. USER'S AWARENESS ON THE EXISTENCE OF DIGITAL REFERENCE SERVICES

Are you aware of the existence of the DRS in your library?

 _____ YES   _____ NO

If yes, to what extent are you aware of the existence of the DRS in your library? Please check the appropriate answer.

Digital Reference Services	*Level of Awareness*			
	High	*Moderate*	*Fair*	*None*
Instant Messaging (*Ask-a-Librarian*)				
e-mail reference service				
Facebook (Library fan page)				
Web forms (in library website)				
Voice-over-IP (VoIP)				
SMS reference				
Searchable Frequently Asked Questions				
Online tutorials				

How did you learn the availability of digital reference services in your library?

___ Library website   ___ Library brochure   ___ Library orientation
___ From a friend   ___ Library bulletin   ___ From The Librarian
___ From your instructor

B. USER'S PREFERENCES IN USING DIGITAL REFERENCE SERVICES

Have you ever asked help from the librarian or any library personnel through the DRS?   _____ YES
_____ NO

When I want to know basic information about the library, I prefer to ask the librarian through _____
Please rank the following according to your preference (5 being the highest, 1 being the lowest)

Digital Reference Services	Rank
Instant Messaging (Ask-a-Librarian)	
e-mail reference service	
Facebook (Library fan page)	
Web forms (in library website)	
Online tutorials	

When I need to request for document delivery, I prefer to do it via _____
Please rank the following according to your preference (5 being the highest, 1 being the lowest)

Digital Reference Services	Rank
Instant Messaging (Ask-a-Librarian)	
e-mail reference service	
Facebook (Library fan page)	
Web forms (in library website)	
Online tutorials	

When I need assistance in using the online subscriptions, WebOPAC, etc., I prefer to ask the librarian
via _____
Please rank the following according to your preference (5 being the highest, 1 being the lowest)

Digital Reference Services	Rank
Instant Messaging (Ask-a-Librarian)	
e-mail reference service	
Facebook (Library fan page)	
Web forms (in library website)	
Online tutorials	

When I need help in looking for specific and highly specialized resources in the library, I prefer to get assistance from the librarian through _____
Please rank the following according to your preference (5 being the highest, 1 being the lowest)

Digital Reference Services	Rank
Instant Messaging (*Ask-a-Librarian*)	
e-mail reference service	
Facebook (Library fan page)	
Web forms (in library website)	
Online tutorials	

When I want to request for library orientation, I prefer to do it via _____
Please rank the following according to your preference (5 being the highest, 1 being the lowest)

Digital Reference Services	Rank
Instant Messaging (*Ask-a-Librarian*)	
e-mail reference service	
Facebook (Library fan page)	
Web forms (in library website)	
Online tutorials	

C. USER'S ATTITUDE TOWARD DIGITAL REFERENCE SERVICES

The use of digital reference services to ask questions and seek assistance from the librarian has made my research_____. (Please check your answer)

_____ more challenging
_____ more interesting
_____ more difficult
_____ more fun
_____ very different
_____ more time consuming
_____ cheaper
_____ others
        Please specify _____

The use of digital reference services has made reference librarians _____. (Please check your answer)
_____ more visible
_____ more approachable
_____ more efficient
_____ more helpful
_____ ineffective
_____ others
        Please specify _____

APPENDIX B

Representative Sample of Chat Transactions

Reference Queries	Type
CLIENT: Hello Good Evening, i just would like to inquire CLIENT: if youre open on saturdays REFERENCE LIBRARIAN: Good evening. Yes, we are open on Saturdays, 8:00am - 6:00pm CLIENT: Im a student from UP Diliman, What do i need to bring so i could research there? REFERENCE LIBRARIAN: An undegraduate or graduate student? CLIENT: undegraduate REFERENCE LIBRARIAN: You'll need to present a referral letter from your librarian, valid ID, and visitor's fee (P50.00 on Saturdays) REFERENCE LIBRARIAN: Please be reminded that we do not allow those in slippers, short shorts and tube tops. CLIENT: may i ask about the american historical collection? CLIENT: do you happen to have the Philippine Commission Reports up to 1935? REFERENCE LIBRARIAN: You may search their collection through our site, http://rizal.lib.admu.edu.ph	Factual/brief reference queries
CLIENT: good evening Reference Librarian. REFERENCE LIBRARIAN: Good afternoon!! REFERENCE LIBRARIAN: What can I do for you? REFERENCE LIBRARIAN: :) CLIENT: can you help me look for a book for my thesis? REFERENCE LIBRARIAN: What's the title of the book? CLIENT: i'm not sure but can you suggest any book concerning literature of the Philippines? REFERENCE LIBRARIAN: Ok. wait for a moment. REFERENCE LIBRARIAN: Here are the list of titles available in our OPAC re: your inquiry: http://xxxx.xxxx.edu.ph/search ok CLIENT: thank you Reference Librarian! :D REFERENCE LIBRARIAN: You're welcome. :d	Literature search
CLIENT: hello? REFERENCE LIBRARIAN: Good afternoon CLIENT: dear rizal lib, how much is the photocopy per page in the photocpying sections? REFERENCE LIBRARIAN: The photocopying prices are as follows: REFERENCE LIBRARIAN: short bond - .65 long bond - .70 CLIENT: Thank you! REFERENCE LIBRARIAN: You're welcome.	Factual/brief reference queries
CLIENT: hi there! im in the mvp building and i wanna access some online resources. may i ask for the password? REFERENCE LIBRARIAN: Good evening. If you're within campus, you don't need a password to be able to access the online resources. Kindly proceed to the library's web site (http://rizal.lib.admu.edu.ph) and click on the Online Sources tab. Then, just click "All" and all the databases, with their links, will come up alphabetically. Just click on the link of the database that you want to access. CLIENT: alright. thanks! REFERENCE LIBRARIAN: You're welcome	Use of online subscriptions

Table 10 (cont.)

Reference Queries	Type
CLIENT: hi hello? wer can i find list of dissertations on line in ur library? REFERENCE LIBRARIAN: Good afternoon!! CLIENT: can u help me my problem? CLIENT: ok thank you.. REFERENCE LIBRARIAN: For the online dissertations, you could try searching on the Proquest Dissertations on this link: http://www.xxxx.edu.ph/xxxxxxx/xxxxxxxxxx_xxxxxxxxx.xxx REFERENCE LIBRARIAN: For the open access dissertations, you can check this link: http://www.xxxx.edu.ph/xxxxxxx/xxxxxxxxxx_xxxxxxxxx.xxx CLIENT: a million thanks. REFERENCE LIBRARIAN: :) You're welcome.	Use of online subscriptions
CLIENT: hi! ds is an inquiry on accessing to JSTOR if ur familiar? CLIENT: im not enrolled as of the moment so im doing research in the field. i used to have access to JSTOR that was when i was enrolled last 2008. can i renew that again and how much will it cost if ever thanks very much! CLIENT: whats the pre req to have access? REFERENCE LIBRARIAN: Hello! Good afternoon! Welcome to Ask-A-Librarian services of the UP Diliman University Library. Please state your complete name, school/institution, email and year level. Thank you. CLIENT: xxxxx, up baguio, xxxxx@yahoo.com, 2005 alumni REFERENCE LIBRARIAN: If you have your special card you can come to the library and you can use our jstor database CLIENT: how can i avail of the special card? is it compulsary to be enrolled or not necessarily? REFERENCE LIBRARIAN: If you have an alumni card, just present it to the circulation counter and you will be given a special card. It is needed when you use the library services. CLIENT: is it possible to have access all the time to JSTOR and not go to UP Lib all the time? updgenref: We don't give a remote access account for JSTOR only proquest, Academic OneFile and GVRL for those who are currently enrolled CLIENT: o i see. ok thank you very much for the assistance. have a nice day!!	Use of online subscriptions; factual/brief reference query
CLIENT: I am a mother of a grade two student of a chinese school,they were given spelling words in tagalog, and one of them is the word maaalalahanin,is this word correctly spelled? REFERENCE LIBRARIAN: hello! it's maalalahanin CLIENT: thanks! but the teacher insist that it is spelled with three a's, may i know where I can find reference to show her the correct spelling? REFERENCE LIBRARIAN: can you wait? i'll just get our english-tagalog dictionaries here or if you want please call us at 981-8500 loc 2861 look for ms. rhea REFERENCE LIBRARIAN: i'll just check for it CLIENT: it'sok,I'll wait.thank you REFERENCE LIBRARIAN: according to the New Filipino Filipino English Dictionary, it say's ma-a-la-la-ha-nin [alaala] pr. Maasikaso; maintindihin. REFERENCE LIBRARIAN: Maalalahanin sa kalusugan ng kanyang anak. REFERENCE LIBRARIAN: Reference : The New Filipino Filipino with English Dictionary Revised REFERENCE LIBRARIAN: Edition REFERENCE LIBRARIAN: Published by Encleare Foundation REFERENCE LIBRARIAN: its 2007 edition REFERENCE LIBRARIAN: you're welcome CLIENT: I really don't expect feedback,I thought you will just ignore my question, I am really thankful that there is someone who agrees to help. thanks much REFERENCE LIBRARIAN: it's our pleasure to help you	Factual/brief reference query

Table 10 (cont.)

Reference Queries	Type
CLIENT: Available ba online ang Implementing Rules and Regulations sa Katarungang Pambarangay updgenref: hi REFERENCE LIBRARIAN: are u a UP student? CLIENT: no, i'm a government worker doing some research for my work right now. REFERENCE LIBRARIAN: have searched in our collection thru our WEBOPAC... http:\ilib.upd.edu.ph REFERENCE LIBRARIAN: wait po... I will try to check our other indexes... REFERENCE LIBRARIAN: sir, I found a link in the internet CLIENT: thank you, i'll wait. REFERENCE LIBRARIAN:but I am not sure if this is the one ... it is still loading... REFERENCE LIBRARIAN: If ever you needed to be sure... you could also contact the U.P. Diliman College of Law Library at 9205514 local 300 and 302. REFERENCE LIBRARIAN: Can you give your complete email address... so if in case this pingbox hangs.. I could still email you a possible answer to your query...can you wait.. REFERENCE LIBRARIAN: the document is still loading... please wait CLIENT: leovillarino@msn.com. By the way i'm with the CHR here in Cebu City. Been trying to look around for the IRR of Chapter VII of RA 7160. Out of despair, I tried your site. REFERENCE LIBRARIAN: http://lgrc.lga.gov.ph/greenstone/collect/katarung/index/assoc/HASH0128.dir/doc.pdf REFERENCE LIBRARIAN: sir could you try to look on the link... there is problem in my browser it is not responding... http://lgrc.lga.gov.ph/greenstone/collect/katarung/index/assoc/HASH0128.dir/doc.pdf BUZZ!!! updgenref: still there? CLIENT: thank you. I'll try. Yes, I'm still around. REFERENCE LIBRARIAN: the link is about a "Katarungang Pambarangay : a handbook" CLIENT: I've accessed the link. its more of an illustration than the provisions itself. I need the provisions itself of the IRR. CLIENT: I mean, if the codal provisions is available, mas maganda so I can cite the law itself in my work. REFERENCE LIBRARIAN: ok, I will check sir... REFERENCE LIBRARIAN: sir, how about this link... http://www.lawphil.net/statutes/repacts/ra1991/ra_7160_1991.html CLIENT: well, its the law itself, RA 7160 not the IRR. vI've tried that too. Anyway, thank you for your help. Please email me for other possible info or links in this matter. Good day! REFERENCE LIBRARIAN: okey, will be glad to email you... REFERENCE LIBRARIAN: good day also...	Use of information tools; Factual/brief reference query

About the Authors

MARIAN S. RAMOS is the Head Reference Librarian of the University Library, University of the Philippines Diliman's General Reference and Electronic Resources Section. Her ten-year experience in the field of reference and information service ushered her into teaching the same course in the University's School of Library and Information Studies. She has been a speaker in various seminars and conferences for information professionals in the Philippines specializing reference and information services, electronic resources and access to information. Ms. Ramos has earned her Bachelor and Master Degrees in Library and Information Science from the University of the Philippines.

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