Content analysis of reference desk enquiries leading to reform: A case study at University of Malaya Library

Norida Abu Bakar

University of Malaya Library, University of Malaya, Malaysia e-mail: noridaa@um.edu.my

ABSTRACT

This study was about the analysis of 1313 reference enquiries at Central Library, University of Malaya over three (3) years period since 2011 until 2013. The aim of the study was to transform simple traditional enquiries into digital reference mode. The enquiries were asked at the reference desk face to face as well as via telephone and recorded in a simple database. Findings indicated that there are equal numbers of enquiries between procedural / directional enquiries and in-depth enquiries / information resources related enquiries. Most of procedural/directional enquiries can be transformed into digital mode such as mobile application or using social media as a platform to interact with users. However, it was realized that in-depth enquiries still require librarians to physically mend the reference desk.

Keywords: Reference Desk, User enquiries, Mobile applications, Reference Service.

INTRODUCTION

Reference service is considered as a core library service. Each of university libraries provides reference services. Reference services offered a variety of formats such as emails, face to face, phone calls and chats. Reference services need skills and knowledgeable librarians or information providers to provide efficient and effective services to users. It is a known service for users to seek for help with anything or everything to find resources from complex to simple enquiries.

According to Ohio Reference Excellence (2008), reference service is valuable to the community because libraries have a variety of information for everyone in the community. Libraries strive to provide equal, objective service for all patrons and promote the value information for problem-solving in everyday life for entertainment and enlightenment.

In this digital era, there are changing trends in accessing library resources and library information. Users access the resources through the net using mobile technologies. They can also access online databases and digital collections remotely outside of library building boundaries. According to Luo (2007), the evolution of library reference work had been greatly influence by the advent of new technologies, such as computing,

electronic mass storage and networking technologies. Directional enquiries such as search for library materials, find a book using floor maps, renew books, library opening hours and also search for a book using library catalog are accessible on mobile phones. Hong Kong University of Technology mobile site, m.HKUST enable their users to access these information via mobile phone (Yee, 2012).

Reference desk enquiries are part of reference services. It provides in-person service whereby users can directly consult the librarians. There are many types of questions asked by user including direct question or in-depth questions. The types of questions asked can be classified as procedural/directional enquiries, information resource related enquiries (in-depth enquiries), IT related enquiries, circulation enquiries and other universities enquiries (Table 1).

Table 1: Study variable and definition is use as a guidance for librarians to classified the types of questions asked by users. [Source: SCONUL (2010)]

Types of enquiries	Explanation	
Procedural / directional enquiries	These are enquiries relating to the Library's rules and regulations and operations plus those requesting direction to a specific item of stock, resource or area of the Library/building. This includes enquiries about the location of a specific book or classification number	
Information resource related enquiries	These are enquiries which require the use of information resources owned or accessed by the Library, or a detailed knowledge of the Library's stock. This includes enquiries about the content of databases and help finding material on a specific subject area	
IT related enquiries	These cover matters such as printers, passwords and general software packages. This includes enquiries about how to access electronic resources but not the content of those resources, which should be included in (b)	
Circulation enquiries	These are enquiries relating to circulation matters transaction of library materials (renew,reserve and loan,lost of library materials) and also related to library membership (internal and external membership)	
Other University enquiries	These are enquiries about any other university services, e,g student services, careers, counselling services and also interlibrary loan & document delivery services	

Miles (2013) mentioned that an increasing numbers of librarians claim that the reference desk is outmoded and that there are better ways to provide reference service. The traditional concept of reference desk enquiries are where the librarian is sitting at the desk and waiting for the users to approach them. This concept of reference services force the librarian to stay at one point of station or place. Merely indicates a symbol of the service and not the reference service itself.

Magi & Mardeusz (2013) found that in academic libraries, although students can access web, thousands of subscribed databases, books or interlibrary loan, they are frustrated in doing their research. They need human touch and consultation to teach and guide them how to find information, select good information, evaluate the information and

apply the information. However, this reference service is not just tied at reference desk. Librarians are trying to develop a variety of modes of reference models to face the technology development.

Another issue is about staffing model of reference desk. Morgan (2009) mentioned that one of the models that widely used is to utilize paraprofessional to assist with reference service, freeing professional librarians for other duties because professional librarian involved in a number of duties such as collection development, liaison work, outreach program, research and publication, supervision and management and etc. The University of Malaya library also applies the same practice if librarian on duty involved with other task. The question is whether this paraprofessional could help in solving complex reference enquiries. Paraprofessionals refer to employees who do not have a Master of Library Science or any certificate related to library science but being trained to work alongside a professional librarian such as senior support staff.

Thus, there are questions lingering around us whether physical reference desk is still a need in this digital era or it is a must for a librarian scheduled to duty at the physical reference desk or reference desk can be eliminated. Data collected at reference desk at the University of Malaya Central Library and analyzed to find out types of enquiries that have been acquired.

LITERATURE REVIEW

Miles (2013) in his study examines the prevalence offering reference services from the reference desk. The results show that 58.82 percent of the libraries surveyed which serves smaller student body size use nearly all their professional librarians in reference work. 66.4 percent of the respondent currently provides reference services from traditional reference desk. The findings also shows that many librarians still have strong feeling about service they can offer from the traditional reference desk where they are trained to assist user and be visible to library users. 77.46 percent of the responding libraries where reference questions are not declining at the reference desk. They are some reason from some of the library where the questions are declining. This is due to the unapproachable librarians, student do not know who the librarians are, student embarrased to ask for help, student think they can do their research independently and they can look for answers in the internet.

Human touch or human interaction is still an important factor in providing reference service eventhough it is a digital reference or face to face reference. According to Magi and Mardeusz (2013), many students at University of Vermont wrote about the value of face to face individual consultations with librarian. In-person interaction is more valuable where they can visual or see how librarians go about searching and finding materials. They can ask librarians directly and get immediate response. Collaboration with the expert librarians can help them choose the materials and evalute the materials.

Ramos and Abrigo (2012) wrote in their studies that RUSA published the Guidelines for Implementing and Maintaining Virtual Reference Services and Guidelines for Behavioural Performance of Reference and Information Services Providers to improve user —librarian

interaction in traditional concept of reference and also digital reference. The findings of the study shows that users prefer to access library via internet and seek help from reference librarian in a digital environment. Most of the users prefer to communicate with librarians such as chatting through Instant Messager (IM). Email reference is only used when it requires more time to respond the enquiries. Online tutorial is the less preference by users because they cannot interact with the librarians.

Shepherd and Korber (2014) wrote about knowledge based system, LibAnswers which used by Meriam Library California. LibAnswers is a reference tool where the ability of the system is to create a knowledge based of library questions and answers. It is a combination of knowledge based, chat and SMS question. It provides centralized access for all virtual reference questions. Librarians on duty at the reference desk are responsible to answer all questions from LibAnswers, chat, email, SMS and also face to face with users. LibAnswers is a tool that supplements and complements traditional reference services.

Luo (2007) in her study present a historical view of library reference evolution under the influence of new information technologies. There are two primary changes, increase of the availability and accessibility of electronic resources such as from printed materials to electronic materials such as online, CD-ROM and internet. The other changes are the expansion of the media through which reference services are provided from face to face to remote reference such as telephone then change to digital form such as email, web form and chat.

DATA COLLECTION

The purpose of this study was to conduct content analysis of reference desk enquiries at the Central Library; University of Malaya Library. The aim was to transform simple enquiries into digital reference mode. The types of enquiries analyzed include:

- i. Procedural and directional enquiries asked at the reference desk.
- ii. In-depth enquiries or information resources related enquiries.
- iii. Identify mode of enquiries.

The findings will be used to identify the point of user needs and simplify the information for user satisfaction. Frequently asked question such as procedural and directional can be tabulated and reform to other mode for the ease of users. Librarians expertise in handling the enquiries are also become an issue to answer in-depth enquiries because paraprofessionals are also involve serving users at the reference desk. Findings of the analysis will help to tabulate the in-depth enquiries to set a module of training for professional librarian and paraprofessionals in handling reference enquiries at the reference desk.

Data for this study was collected from the month of February 2011 until December 2013. These 1313 transaction of enquiries asked by users at the Reference Desk, Central Library keyed in by the librarians on duty. A simple database was designed for librarians to record the enquiries from users after they have completed. After reference interview session with users and complete all the process, librarians have to input the data and identify the types of enquiries from the drop down menu. Figure 1 below shows the

attributes and field involves in this database. There are 5 tables to record the information.

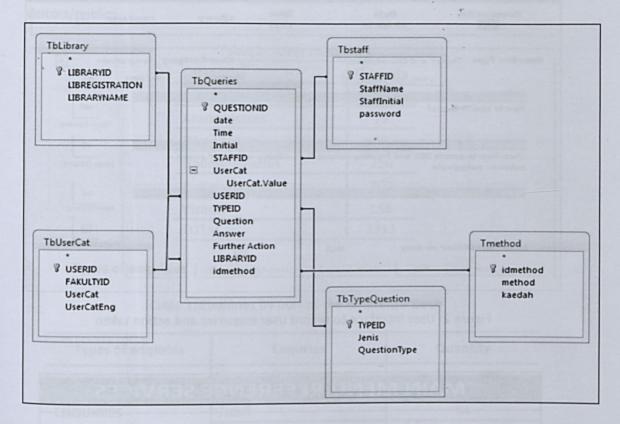


Figure 1: Database designed to collect Reference Desk Enquiries

Details about database design:

- i. TbLibrary: Details about location of the reference desk: Example: Central Library. Law Library. Medical Library
- TbUserCat: Details about category of user such as Academician, Non Academic, Undergraduates student, Postgraduates student, Visitors and External members.
- iii. TbStaff: Details about librarian attending the enquiries such as Name, Initial.
- iv. Tbmethod: Details about enquiries mode such as one to one or phone call.
- v. TbTypeQuestion: Details about question types.

Figure 2 shows the user interface for librarian to record all the enquiries by user's categories, date, time and library. Librarians need to input all the details and take action as guidance to other librarian in handling similar enquiries.

Figure 3 shows main menu for librarian to look at a report by date, librarian, question type, queries by user's category and also question type.

There are several steps taken before data analyzed. 1313 of reference enquiries are selected as a sample of data. Empty field or incomplete data will be removed because it is not usable as a data to be analyzed.

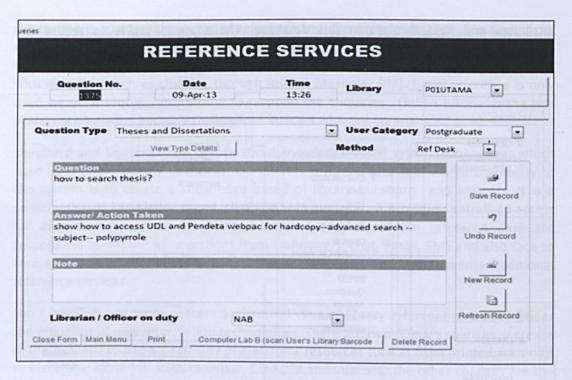


Figure 2: User interface to record user enquiries and action taken

		is of reference by	sk enaulei
QUERIES	FORM Open Queries Form User Re	equest Password Form	Close Form
	PREVIEW REPORT		
	REPORT BY DATE	Preview Report	10001
	REPORT BY LIBRARIAN	Preview Report	
	REPORT BY QUESTION TYPE	Preview Report	
	STATISTICS		
	QUERIES COUNT BY USER CATEGORY	Preview Report	gyraff .
	QUERIES COUNT BY QUESTION TYPE	Preview Report	
	TOTAL QUERIES COUNT BY DATE	Preview Report	

Figure 3: User interface to view report

FINDINGS

The data collected was analyzed by:

- User categories
- ii. Types of enquiries
- iii. Enquiries by Reference mode

i. User categories

All enquiries are from University of Malaya population such as Academician, Non-Academic staff, Postgraduates students, Undergraduates students and also visitors/public.

Table 2: User categories

Categories	Quantity	
External members	16	
Academicians	79	
Non Academic	12	
Undergraduates	250	
Postgraduates	800	
Visitors	156	
TOTAL	1313	

ii. Types of enquiries

Table 3: Enquiries by user at the Reference Desk

Types of enquries	Enquries	Quantity	
DIRECTIONAL	Direction to resources area of library building		
ENQUIRIES	/staff	84	
	Direction to specific item	31	
Procedural / directional enquiries	Locating library materials (Green card, BKOM,kad biru)	54	
	Location of a specific book or classification number	75	
	Past year exam papers	3	
	Phone directory	16	
	Library facilities	16	
86	Library rules and regulation	54	
	Requisition of library materials	4	
TOTAL		337	
IN-DEPTH ENQUIRIES	Interlibrary loan / Document delivery	71	
the crossplanning and a fair	ISI	41	
Information resource	Library Website	5	
related enquiries	Online databases / Interaktif Portal	98	
(215 Theuries, 13,536)	OPAC / My Account	124	

Types of enquries	Enquries	Quantity
	Internet / other resources.	10
Conservation (etc.)	Theses and Dissertations	40
TOTAL		389
with	General software packages	59
IT RELATED ENQUIRIES	How to access electronic resources (not content)	46
	Information skills session registration	34
	Password	25
	Printers	11
	Problem related to PC's at Digital Corner/ Lab	13
	Wifi Access	12
TOTAL		200
mae Desk	Library Account (Workflows)	23
CIRCULATION	Loan	37
ENQUIRIES	Lost of Library materials	25
	Overdue fines	34
	Renew loan	16
	Renew membership	92
	Reserve book	4
	Internal membership / External membership	81
TOTAL	Day The Party	312
Others	AND THE BASE POLICE AND ADDRESS OF THE	71
TOTAL	Table 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	71
Other Universities services	Phone stirectory	4
TOTAL	Cantillan Arthur	4
GRAND TOTAL	DINE COND. A LENGT	1313

Table 3 and Figure 4 above show total enquiries by question types asked by users at the reference desk, Central Library. Information resources related enquiries scores the highest number of enquiries, 389 (30%) enquiries followed by Procedural / directional enquiries, 337 (26%) enquiries. The lowest number of enquiries scores by other universities enquiries is 4 (0.3%). 312 (24%) enquiries are about circulation and 200 (15%) enquiries are about IT related.

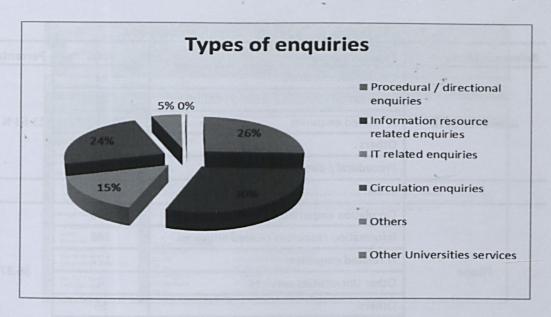


Figure 4: Type of enquiries

Figure 5 shows the details of enquiries by users. Enquiries about online databases scores the highest which is 98 while the lowest is 4 which is about other universities.

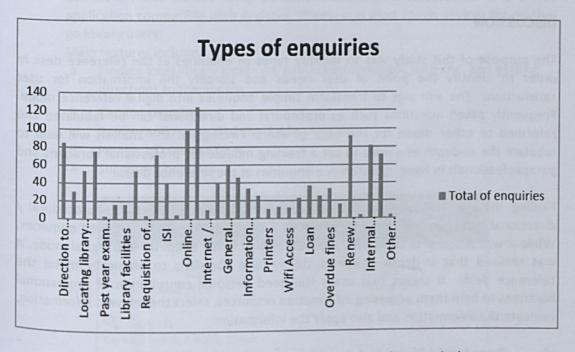


Figure 5: Details of enquiries by users at the reference desk

III. Enquiries by reference mode

There are two types of reference mode at the reference desk. Librarian will consult users in person or answer phone calls at the reference desk. The finding shows that majority of users prefer to get help from librarians at the reference desk through phone calls, (1134 enquiries, 86.37%) compared to consultation in person at the reference desk, (179 enquiries, 13.63%).

Table 4: Number of questions by reference mode

Reference Mode	Types of enquiries	Total	Percentage
	Circulation enquiries	62	
Reference Desk	Information resources related enquiries	41	
	IT related enquiries	25	13.63 %
	Others	12 .	
	Procedural / directional enquiries	39	
on enquaries	Total	179	
	Circulation enquiries	250	86.37 %
Phone	Information resources related enquiries	348	
	IT related enquiries	177	
	Other Universities services	4	
	Others	59	
	Procedural / directional enquiries	296	
10134	Total	1134	

DISCUSSION

The purpose of this study was to identify types of enquiries at the reference desk in order to identify the point of user needs and simplify the information for user satisfaction. The aim was to transform simple enquiries into digital reference mode. Frequently asked questions such as procedural and directional can be tabulated and reformed to other mode for the ease of users. Findings of the analysis will help to tabulate the in-depth enquiries to set a training module for professional librarians and paraprofessionals in handling reference enquiries at the reference desk.

Finding showed that there were equal numbers of enquiries between procedural / directional enquiries and in-depth enquiries / information resources related enquiries. While it was possible to transform procedural/directional enquiries into digital mode, it was realized that in-depth enquiries still require librarians to physically mend the reference desk. It shows that users still need personal consultation of professional librarians to help them accessing information resources, select the relevant information, evaluate the information and also apply the information.

a) Procedural / Directional enquiries

Findings showed that procedural and directional enquiries, IT related enquiries and circulation enquiries were frequently asked by users. Therefore, some enquiries were transferred to digital reference mode. Some of the reference services being implemented in digital mode by University of Malaya Library are as below:

Online Help Desk

Online Help Desk is a menu for users to enquire any problem related to IT. The person in charge is a person dealing with technical problems in the library. The University of Malaya Library started using Online Helpdesk since year 2010.

Content analysis of reference desk enquiries

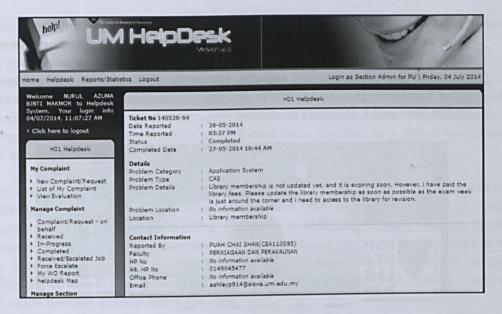


Figure 6: UM Help Desk

ii. BookMyne

UM Library has started using BookMyne application since 2013. It is a free application compatible with Android, iPhone and iPod Touch devices for on-thego library users

Main features include:

- Finding local library locations, contact information, web site, and getting directions to the library.
- b. Catalog searching
- c. Review and renewal of checked out items
- d. Review of overdue fines
- e Suggested readings

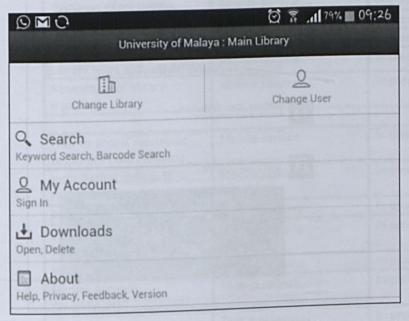


Figure 6: BookMyne: University Of Malaya Library

iii. Facebook

Facebook is a platform for University of Malaya students to communicate with library. It is also a platform for library to promote services or announce any event, library opening hours and etc. University of Malaya library has started using Facebook as a social media to reach users since year 2008 with total 17,609 likes and 4,016 visits till date.



Figure 7: The University Of Malaya Library Fan Page

iv. Twitter

Twitter is online social networking platform for the user to follow or keep track library activities. It was created in year 2010 with 518 current followers



Figure 8: UniMalaya Library @UniMalayaLib

Other platforms such as Instagram, Flickers, Blog, You Tube, Google Plus and Wikis. Other plans in the pipeline are as shown in Table 5

Besides using mobile technology to provide information about procedural and directional enquiries, interactive application such as WhatsApp also can be applied to provide text messaging service between users and librarians. According to Ramos and Abrigo (2012), library users prefer to seek help from librarian in a digital environment and access library via internet.

Yee (2012), in her study evaluating mobile services offered by academic libraries in USA, Australia, Singapore and Hong Kong. She found that demanded services on mobile devices include catalogue searching, SMS/text a librarian, locating spaces, booking computers and rooms. She also found that international students would prefer to text the librarian rather than to ask the reference librarian because of the language difficulties or inability to understand the librarian. On the other hand, texting is easy and fast while they are at their home country.

Physical reference desk is still a need but we can use other alternative or solution to provide reference service to user. The value of human interaction is critically needed especially for those who involve in research.

Table 5: Procedural / directional enquiries

Types of enquiries	Enquiries	Suggestion	Status
Procedural / directional	Direction to resources area of library building /staff	Design floor map for mobile services	In process
enquiries	Direction to specific item	QR codes / mobile service	In process
	Location of a specific book or classification number	Mobile service	In process
	Past year exam papers	Mobile service	Implemented
	Phone directory	Mobile service	Implemented
	Library facilities	Mobile service	Implemented
	Library rules and regulation	Mobile service	Implemented
	Requisition of library materials	Mobile service	Implemented
	How to access electronic resources (not content)	Mobile service	In process
	Information skills session registration	Mobile service	Implemented
	Printers	Text messaging	In process
	Problem related to PC's at Digital Corner/ Lab	Text messaging	In process
	Wifi Access	Text messaging	In process
Circulation enquiries	Library Account (Workflows)	Mobile service	Implemented
	Loan	Text messaging	In process

Types of enquiries	Enquiries	Suggestion	Status
Storony Its	Lost of Library materials	Text messaging	In process
bas letubiolotijob	Overdue fines	Mobile service	Implemented
	Renew loan	Mobile service	Implemented
one content to said	Renew membership	Text messaging	In process
	Reserve book	Mobile service	Implemented
	Internal membership / External membership	Text messaging	In process

b) In-depth enquiries

Most of the users using this service are postgraduate's student who involved actively in research. Based on data, it shows that online databases are the major questions queried by users. The question was about how to find the relevant articles journals or other eresources provided by library. This e-resource is accessible remotely from anywhere. Thus, we could notice from the findings that the highest numbers of enquiries were from phone call mode instead of visiting reference desk or face to face interaction.

This finding is quite similar with study done by Magi & Mardeusz (2013). They conducted a study to get students perspective about what they get from the consultation with librarian. They discovered that professional librarian has skills, knowledge, and experience in eight categories as below:

- i. Knowledge about reference sources and their effective use.
- ii. Knowledge about library procedures and resources.
- iii. Deep and broad knowledge of subjects and terminology.
- iv. Experience in topic development.
- v. Experience in doing research projects.
- vi. Knowledge about people on campus
- vii. Skill in active listening and providing affective support.
- viii. Ability to use synthesis to arrive at an answer.

Librarian expertise in handling the enquiries also becomes an issue when answering indepth enquiries because paraprofessionals are also involved to serve users at the reference desk. According to Morgan (2009), there are some arguments that paraprofessional do not realize when it is necessary to make a referral to professional librarian is they cannot answer the enquiries. In this case, training is needed for them to handle reference interview. Professional librarians also need to watch every transaction at the reference desk. Besides paraprofessional, new appointed librarian also face difficulties in handling reference interview and answering the enquiries.

Thus, based on the findings, we noticed what is the most frequently questioned enquired by users. Reference interview skills training can help and guide professional librarian and also paraprofessional to identify what are needed by user. Monthly courses can be organized to analyze all the enquiries and the action taken by librarians. The senior librarian or the expertise may guide, suggest or provide good solutions or answers for each enquiry.

CONCLUSION

In conclusion, the data shows that reference desk enquiries are needed even though reference service is under the influence of new information technology. The combination of traditional concept and modern concept of reference desk are implemented at the University of Malaya Library. The transformation of reference desk service keeps library reference abreast with the rapidly changing information horizon to fullfill users needs in information seeking. Interaction face to face with patron is the most important reason why library still need a physical reference desk. What are the implication of this study? Reference desk with profesional librarian and also trained staff is the foundation of the reference service. Reference desk is not going to dissapear.

REFERENCES

- Bielskas, A. and Kathleen M. D. 2012. *IM and SMS reference services for libraries* Chicago: ALA TechSource.
- Bishop, B. W and Jennifer A. B. 2013. Where do we go from here? Informing academic library staffing through reference transaction analysis. *College & Research Libraries* 74 (5): 489-500. Available at : http://ezproxy.um.edu.my:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=llf&AN=90230717&site=eds-live.
- LIHNN Wiki. 2010. SCONUL enquiry count form. Available at http://resources.lihnn.nhs.uk/wiki/(X(1)S(b0bwtimrnpiy3x45tr1zze55))/GetFile.asp x?File=%2Fquality%2Fcount_form0910.doc.
- Luo, L. 2007. Reference evolution under the influence of new technologies. Available at https://sils.unc.edu/sites/default/files/general/research/TR_2007_03.pdf.
- Magi, T.J. and Mardeusz, P.E. 2013. What students need from reference librarians. College & Research Libraries News 74 (6): 288-291. Available at: http://ezproxy.um.edu.my:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=llf&AN=88133119&site=eds-live.
- Magi, T. J. and Mardeusz, P.E. 2013. Why some students continue to value individual, face-to-face research consultations in a technology-rich world. *College & Research Libraries* 74 (6): 605-618. Available at http://ezproxy.um.edu.my:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=llf&AN=91747960&site=eds-live.
- Miles, D. B. 2013. Shall we get rid of the reference desk? Reference & User Services

 Quarterly 52 (4): 320-333. Available at :
 http://ezproxy.um.edu.my:2048/login?url=http://search.ebscohost.com/login.aspx
 ?direct=true&db=aph&AN=89630796&site=eds-live.
- Morgan, P. J. 2009. Training paraprofessionals for reference service: A how to-do-it manual for librarian. 2nd ed. New York: Neal-Schuman Publishers, Inc.
- Ohio Reference Excellent. 2008. Reference service. Available at http://www.olc.org/ore/1what.htm.
- Ramos, M. S. and Christine M. A. 2012. Reference 2.0 in action: An evaluation of the digital reference services in selected Philippine academic libraries. *Library Hi Tech News* 29 (1): 8-20. Available at :

- http://ezproxy.um.edu.my:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=llf&AN=74143567&site=eds-live.
- Shepherd, J. and Korber, I. 2014. How do I search for a book? *College & Research Libraries News* 75 (4), 197-214. Available at: http://ezproxy.um.edu.my:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=llf&AN=95586640&site=eds-live.
- Tyckoson, D. A. 2001. What is the best model of reference service? *Library Trends* 50 (2): 183-196. Available at : http://search.proquest.com/docview/220453593?accountid=28930.
- Wan Ab.Kadir Wan Dollah. 2012. Digital reference services in academic libraries. Kuala Lumpur: University of Malaya Press.
- Yee, A. 2012. Mobile technology: Academic libraries in Australia and beyond. Available at: http://www.vala.org.au/vala2012-proceedings/vala2012-session-3-yee.