

Students' Perceptions of a Library, Self-Access and the Internet

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Abstract

University students are supposed to be able to search for information by themselves. To help students learn this important skill, a resourcing task was then assigned to the first year students. This paper shows the students' attitudes and perceptions towards searching from three information resources, namely, a library, a self-access centre and the Internet. A questionnaire was used to survey the students' opinion towards the three resources after completing the task. This task can increase the students' confidence in using the resources and raise their perceptions towards the resources as well.

Introduction

Recently there has been an increase in the application of task-based learning in English language learning (Legutke and Thomas, 1991; Willis, 1996). One standard task that is commonly assigned to students is resourcing (Tudor, 1996; Watson Todd, 1995). To evaluate students' work, teachers usually check the quality of the content and the language of their written reports or oral presentations. Teachers rarely check how students do actual resourcing or what problems they face when working. This study aims to survey the students' attitudes and perceptions towards three resources: a library, a self-access learning centre, and the Internet.

The Internet, the Library and Self-Access

There are various kinds of resources that students can search for information. Some students have their own books, while some prefer to use their department library. However, in the situation under consideration in this paper the students were suggested to use three different resources, namely, the Internet, the university library and a Self-Access Learning Centre (SALC). This was because all three are large collections easily accessible to students.

During the last five years, a lot of research has been conducted investigating internet-based activities in language classrooms and what the students get from such activities (e.g. Carrier, 1997; Eastment, 1996, 1998; Keyuravong, 1997; Peterson, 1997; Warschauer and Healey, 1998). In terms of a resource, people generally say that the Internet is the biggest library in the world. We can get every kind of information any time and anywhere if the computer is on-line. It also provides a learning environment that is less restrictive than the traditional language classroom (Peterson, 1997). However, there are also some disadvantages to the Internet as an information source, such as the extremely large amount of information, the lack of reliable, relevant and quality information, and the bad organization of information (Kelly and Nicholas, 1996).

Nevertheless, Internet users can gain a lot of benefits. Among a lot of dubious information, there is still a large amount of valuable information which can be accessed free of charge.

A library is a traditional resource that every student is familiar with. It is undoubtedly beneficial since it contains various kinds of information especially those that are relevant to the fields of study and the level of the students in that institute. Several pieces of research have shown the advantages of integrating the library with classroom learning. For example, Hamilton-Pennell (2000) found that the size of the library collection (e.g. books, magazines and newspaper) and whether it has the computers with access to library resources, databases and the Internet are factors influencing students' performance in learning. Olson (2000) also shows the link between higher reading scores and the quality of school libraries. So a dynamic and well-equipped library can help students to gain knowledge and can improve their learning.

Like the Internet and the library, a Self-Access Learning Centre (SALC) is a tool that promotes learner independence and responsibility for learning since the students have to become involved in the learning process such as selecting the materials that suit their level and interest. The major purpose of a SALC is to solve language teaching problems such as mixed-ability classes, and students with different background and needs (Sheerin 1989). However, a SALC can also be a good resource for finding information since it contains not only the materials for learning language but also a lot of reference books, text books, magazines etc. Gardner and Miller (1999), in explaining the different elements of self-access, argue that one is resources that provide learning materials, authentic materials, activities, technology, access to authentic language users, and access to other language learners. A SALC therefore provides students with a third option for finding resources.

The Problem

Many pieces of research and books discuss ways of integrating the Internet, a library, and self-access with classroom learning. Some of them also suggest providing Internet access in a library or even creating an electronic library (Kelly and Nicholas, 1996; Hamilton-Pennell, 2000). However none of this research compares these resources. This is largely because people involved such as librarians see them as complementary resources. However, from the students' perspective, these resources can be competitive since students have to make decisions about which one they should go to first when they need information.

Before taking this course the students had different experiences in using the Internet, a library, and self-access. Doing the resourcing task could make them get used to these resources because they were suggested to use all of them. This study aims to survey the students' perceptions of these resources after completing the task with a particular focus on how students perceive the value and usefulness of the three resources.

Research Methodology

The situation

The ability in searching for information to answer one's own questions is one of the major goals every teacher in the Department of Language at King Mongkut's University of Technology Thonburi (KMUTT) would like their students to achieve. Thus a task on Resourcing was carefully designed and put into a new course, LNG 102 (Foundation English II).

The course LNG 102 is a basic English support course which contains 3 big tasks and one adjunct. Resourcing is the second task which lasts 3 weeks. To complete the task, the students work in groups of 4 people and complete the following procedures:

1. The students select a topic. It could be any topic the group was interested in.
2. The students ask themselves what they want to know about the topic. Then they set up at least 3 questions about the topic.
3. The students search for information to answer their own questions. The students take notes and write a summary of each source.
4. The students write a report explaining whether they found the answers to their questions, how they worked, what problems they found, how they solved the problems and what they learned from doing the project.
5. The students give an oral presentation.

The aspect of the task which is focused on in this paper is the third stage where students search for information.

Subjects

After every group of students submitted their written report, a questionnaire was distributed to survey their opinions and attitudes toward each of the three resources. Forty students were asked to complete the questionnaire and thirty-two of them returned completed questionnaires.

These thirty-two students studied in 5 different departments of the Engineering Faculty, namely Civil, Electrical, Production, Instrument and Control Systems, and Electronics and Telecommunications. LNG 102 was their first English course at KMUTT. Like other students, they knew what a library is but many of them had never visited the KMUTT library before. All of them knew how to use the Internet but, before doing the project, many of them (50%) said they were not good at using the Internet. Only 8 students claimed that they could surf the Internet efficiently. Moreover, before entering KMUTT, none of these students had experience with self-access learning.

Student preparation for using the resources

In the first week of this course the students were given an orientation for the KMUTT SALC. They were assigned to work in groups, survey different corners, and report to the class. The teacher also took them to visit the library to listen to an orientation given by two librarians. This orientation included how to use the links provided in the library computers as well. In addition the teacher also discussed in class about how to surf the

Internet efficiently. A handout describing ways of searching the Internet and nine tips for Internet searching was also distributed to the students.

Instrument

To survey the students' attitudes toward these resources, three major areas of questions were asked in the questionnaire. The first concerns the first resource they thought of (before and after doing the project) when they needed information. The second concerns their feelings about the resources (both before and after doing the project) by rating the usefulness, the ease, and their own confidence in using each resource. Lastly, they were asked to describe advantages and disadvantages of each resource. A copy of the questionnaire is given in the appendix.

Findings

Changes in students' perceptions of three resources

According to the survey, before doing the task, the students had positive attitudes towards the three resources. They only seemed uncertain about how to use each of them. However, the students' perception of the three resources became even more positive after they completed the resourcing task. This can be clearly seen in Table 1.

Students' perceptions	Before	After	Percentage change
The library is useful for searching for academic information.	4.65	4.55	-2.17
The SALC is useful for searching for academic information.	3.81	3.94	+3.36
The Internet is useful for searching for academic information.	4.13	4.65	+11.84
It is easy to use the library.	4.06	4.1	+0.98
It is easy to use the SALC.	3.39	3.65	+7.39
It is easy to use the Internet.	4.06	4.32	+6.20
The confidence in finding information from the library by oneself.	3.71	4.16	+11.44
The confidence in finding information from the SALC by oneself.	3.42	3.81	+10.79
The confidence in finding information from the Internet by oneself.	3.87	4.45	+13.95

Table 1: Changes in students' perceptions of three resources

One remarkable change in the students' perceptions is the increase in the confidence in using the three resources. Before doing the task, the average score for this topic is the lowest. However, after finishing the task, a lot of students gain more confidence in using these resources, especially the Internet. This suggests that the resourcing task can successfully increase the students' ability to search for information by themselves.

The change in students' perception of the library appears rather negative in terms of its usefulness and ease since fewer students considered it a useful resource and the ease of using the library barely changed. However, the score of more than 4 out of 5 (for both Before and After doing the task) can be considered very high. This can be seen more clearly when comparing the library with the SALC where the average scores are the lowest among the three resources. On the other hand, the students' perceptions of the SALC became much better after doing the task, especially concerning its user-friendliness.

It seems easier to raise the students' perceptions of the value of the Internet. The data show that, like the library, the Internet obtains very high scores for both its usefulness and ease, both before and after doing the task. However the distinctive difference between the Internet and the library is the high increase in students' perceptions of the Internet after the students finished the task. Consequently the Internet seems to become the most useful and user-friendly resource.

The advantages and disadvantages of the three resources

The reasons for the changes described above can be illustrated by the answers to the third area of questions, the advantages and disadvantages of the three resources, which are shown in Table 2 and 3. Percentages in the table refer to numbers of respondents stating that advantages /disadvantages.

There are two major focuses concerning the advantages and the disadvantages of the three resources: the materials provided and the services.

Advantages		Library	SALC	Internet
Materials	amount / variety of information	84.38%	6.25%	65.63%
	up-to-date information	-	-	6.25%
	having Thai materials	6.25%	-	-
	practise language	-	50.00%	-
	reliable and academic-oriented information	18.78%	3.13%	-
	get expected information	3.13%	6.25%	3.13%
	entertainment	-	6.25%	6.25%
Services	ease to use	53.13%	9.38%	59.38%
	a lot of facilities	-	12.50%	-
	rapid	-	-	46.88%
	familiarity in use	6.25%	-	-

Table 2: The advantages of KMUTT Library, the SALC and the Internet in terms of information resources

Disadvantages		Library	SALC	Internet
Materials	no variety of information	15.63%	34.38%	-
	not enough copies for many users	40.63%	3.13%	-
	books aren't allowed to be borrowed.	3.13%	25.00%	-
	old materials	9.38%	-	-
	too much information	3.13%	-	6.25%
Service	not enough computers for searching for the location of materials	3.13%	-	-
	helpers are not very helpful	-	3.13%	-
	limited opening hour	3.13%	15.63%	-
	many rules and limitations	-	6.25%	-

Table 3: The disadvantages of KMUTT Library, the SALC and the Internet in terms of information resources

The outstanding points in Table 2 and 3 concern the amount and variety of information. A great number of students (over 50% of all students) find the library and the Internet treasures of information while a lot of students (34.38%) complain about the lack of information in the SALC. However, fifty per cent of the students consider the SALC a good resource for language practice. Since the goal of a SALC is supporting language learning whereas libraries and the Internet focus more on providing information, this means that all three resources have achieved their major goal.

The library is also popular in terms of the quality of the information since about eighteen per cent of the students stated that the information in the library is reliable and academic-oriented. Meanwhile the Internet is the only resource whose information is considered up-to-date although the percentage is not very high.

The above inferences can best be illustrated by looking at the students' answers to the opened-ended questions concerning advantages and disadvantages in the questionnaire.

Advantages of the library:

“สามารถที่จะเลือกหนังสือที่ต้องการ หรือสามารถยืมมาที่บ้านได้ และเป็นแหล่งข้อมูลที่ใกล้ตัวที่สุดในมหาวิทยาลัย”
 “Able to select the books needed or able to take them home. It's also the closest resource in the university.”

“สามารถค้นหาข้อมูลทางวิชาการ และอื่นๆ ได้หลากหลาย และหาได้มาก และง่ายกว่าแหล่งอื่น”

“Able to search for academic information and other varieties. It contains a lot of information and is easier to use than other resources.”

Advantages of the SALC:

“สามารถที่จะใช้ฝึกทักษะทุกๆ ด้านที่ต้องการ ในการทำรายงานจะใช้ศูนย์ SALC ในการพัฒนาทักษะในการเขียนและการพูด”

“Able to practise every skill needed. In doing this report, I used the SALC to develop my skills of writing and speaking.”

“ทำให้ได้ฝึกทักษะภาษาอังกฤษเพิ่มขึ้นเพราะเป็นศูนย์ฝึกภาษาอังกฤษโดยเฉพาะ”

“I can practise my English skills more because it is a centre for practising English.”

Advantages of the Internet:

“ได้รับรู้ข้อมูลที่กว้างไกล สามารถหาข้อมูลได้ทุกชนิด ทั้งทางวิชาการ หรือด้านอื่นๆ ด้วยครับ”

“I can get information from everywhere. I can find any kinds of information, both academic and others.”

“สะดวก รวดเร็ว สามารถหาข้อมูลแล้ว copy ลงในdisk ได้ แล้วพิมพ์ออกมาได้เลย ไม่เสียเวลา และสามารถใช้ได้ 24 ชม.”

“It’s convenient and rapid. I can find information and copy it onto a diskette. Then I can print it out right away without wasting much time. It also works 24 hours a day.”

One particular thing area where library cannot compete with the Internet and the SALC is entertainment. Some students prefer a resource that they not only get information but can also relax. Moreover, it is inevitably inconvenient for the students who want the same book to wait until that book has been returned.

The SALC has the opposite problem to the library. The purpose of setting up a SALC is to have students use the materials to study by themselves inside the area provided. As a result most books and materials in this resource cannot be taken home. So some students complained about the number of copies of each book. In addition, many of them (25%) complain about borrowing restrictions.

Amusingly, the Internet, on the other hand, is blamed for having too much information. One student also complained that he wasted time printing out the information.

The following are examples of the students’ explanation about the disadvantages of the materials provided in the three resources.

Disadvantages of the library:

“หาหนังสือได้ยาก มีข้อมูล แต่ส่วนใหญ่จะเป็น textbook ทำให้ต้องเอามาแปลอีก มีคนขโมยมาก ทำให้ร้อคิวนาน”

“It is difficult to find a book. There is the information needed but it is usually a textbook that needs to be translated. There are a lot of borrowers so I have to wait for a long time.”

Disadvantages of the SALC:

“เวลาในการปิด-เปิด และ การยืมสื่อต่างๆ เช่น ห้องบางห้องเปิดทำการช้ามาก และไม่สามารถยืมสื่อได้”

“The opening hour and borrowing system, e.g. some rooms are opened very late. And I cannot borrow materials.”

Disadvantages of the Internet:

“มีข้อมูลเยอะมาก ทำให้บางครั้งจะหาweb ที่เกี่ยวกับเรื่องที่ต้องการต้องใช้เวลานาน”

“There is a large amount of information. So it sometimes takes a lot of time to get the website that I want.”

As for the services, the majority of the students (more than 50%) consider the library and the Internet easy to use. One supportive reason for the ease of the library is the students' familiarity in using libraries when they were in high school. A lot of the students (46.68%) appreciate the rapid speed in getting information from the Internet. The SALC, however, is appreciated for the facilities provided inside. One major complaint about the SALC is the limitations of the opening hours and the detailed regulations.

A problem in using the Internet is caused by the computer system at KMUTT. Fifty-three per cent of the students complained about the computer facilities in the Computer Centre, such as the low numbers of computer, the poor quality of the computers and the server system.

The students themselves also have personal problems in using the resources as shown in Table 4. One serious problem that needs some solution is that there are still a lot of students who lack skills in using the resource.

Problems	Library	SALC	Internet
inability to understand the materials because of English	6.25%	6.25%	6.25%
not enough time	6.25%	-	3.13%
lack of skills in using the resource	31.25%	9.38%	18.75%

Table 4: Students' own problems in using the resources

Which resource is the first choice in the future?

Among the many advantages of the three resources, the amount and variety of information and the ease of use are the most important factors that the students will take into consideration when they have to select the first resource to use in the future.

According to the survey, both the library and the Internet are popular and regarded as trustworthy among the students. Before doing the task, about 47 % of the students

decided to go to the library first because they believed that the library contained a large amount of information and was easy to use. Some of them claimed they had seen the books they needed before. About 44 % of the students said they intended to use the Internet first because the Internet contains various kinds of information and it is easy to use as well. The SALC was rated less popular.

A number of students changed their mind after completing their task. About 19 % of the students changed from the library to the Internet because of its variety of information and ease of use. Also about 19 % of the students changed from the Internet and the SALC to the library for the same reasons. This shows that, from the students' perception, the library and the Internet are equally good starting places for resourcing.

Conclusion

Before the students did the resourcing task, they already had positive attitudes and perceptions towards the three resources, although they did not have much confidence in using them. Doing this task improves their skills in searching for information which, in turn, leads to more confidence in using the resources. The SALC seems to be the least useful resource of information but the best place for language practice while the library and the Internet are equally important resources of information for the students.

This research also suggests that giving an orientation session is not enough to make students learn something because they can not realize the usefulness of what the teachers teach them by only listening and doing exercises. Moreover, they gain little confidence in applying that knowledge. Thus teachers should bear in mind that the students can learn much better by having an orientation session, together with doing a task. They should also pay attention to the students' process of working, for example how they use information resources. By doing these things, it is hoped that students' ability and confidence in searching for information will be improved so that they can gain fully from their university studies and become more autonomous learners.

References

- Carrier, M. (1997) ELT online: the rise of the Internet, *ELT Journal* vol. 51 no. 3 pp. 279-309.
- Eastment, D. (1996) The Internet for teachers and learners, *Modern English Teacher* vol. 5 no.2 pp. 58-82.
- Eastment, D. (1998) Quality sites on the World Wide Web, *Modern English Teacher* vol. 7 no. 2 pp. 68-78.
- Gardner, D. and Miller, L. (1999) *Establishing Self-Access: From Theory to Practice*. Cambridge: Cambridge University Press
- Kelly, S. and Nicholas, D. (1996) Is the business cybrarian a reality? Internet use in business libraries. *ASLIB Proceedings*, vol. 48 no. 5 pp. 136-144.
- Keyuravong, S. (1997) The use of computers in English Language Teaching in Japan, *ThaiTESOL Bulletin* vol. 10 no. 2 pp. 62-70.
- Legutke, M. and Thomas, H. (1991) *Process and Experience in the Language Classroom*. London: Longman.

- Olson, R. (2000) Start spreading the news, *School Library Journal*, April 2000. Available at http://www.findarticles.com/cf_0/m1299/4_46/6448927/p2/article.jhtml.
- Hamilton-Pennell, C. (2000) Dick and Jane go to the head of the class, *School Library Journal*, April 1, 2000. Available at http://www.findarticles.com/cf_0/m1299/4_46/64489301/p1/article.jhtml.
- Peterson, M. (1997) Language teaching and networking, *System* vol. 25 no. 1 pp. 29-37.
- Sheerin, S. (1989) *Self-Access*. Oxford: Oxford University Press.
- Tudor, I. (1996) *Learner-Centredness as Language Education*. Cambridge: Cambridge University Press.
- Warschauer, M. & Healey, D. (1998) Computers and language learning: an overview *Language Teaching* vol. 31 pp. 57-71. Available at <http://www.lll.hawaii.edu/web/faculty/markw/overview.html>.
- Watson Todd, R. (1995) Robots: enhancing motivation in EAP course design, *Guidelines* vol 17 no. 1 pp. 58-69.
- Willis, J. (1996) *A Framework for Task-Based Learning*. London: Longman.

Appendix: The questionnaire used in this study

แบบสอบถามนี้มีจุดประสงค์เพื่อเปรียบเทียบความคิดเห็นและความรู้สึที่นักศึกษาที่มีต่อแหล่งค้นคว้าประเภทต่างๆ

กรุณาตอบคำถามต่อไปนี้โดยใช้เวลานให้น้อยที่สุด

1. ชื่อ/นามสกุลภาค

วิชา.....

2. หัวข้อรายงาน (project) สำหรับบทเรียนเรื่อง Resourcing

คือ.....

3. ครั้งแรกที่ทราบว่าจะต้องหาข้อมูลเพื่อทำรายงาน ท่านคิดถึงแหล่งค้นคว้าประเภทใดก่อน

☐ ห้องสมุด

☐ ศูนย์ SALC

☐ Internet

เหตุผล

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4. ในอนาคตถ้าท่านจะต้องหาข้อมูลเพื่อทำรายงานอีก (ไม่ว่าวิชาใดก็ตาม) ท่านจะใช้แหล่งค้นคว้า

ประเภทใดก่อน

☐ ห้องสมุด

☐ ศูนย์ SALC

☐ Internet

เหตุผล

.....

.....

5. ตัวท่านเองใช้ internet ในการสืบค้นข้อมูลสำหรับทำรายงานครั้งนี้หรือไม่ ☐ ใช่ ☐ ไม่ใช่

ถ้าใช่ ท่านคิดว่าตนเองประสบความสำเร็จในการใช้ internet หรือไม่ ☐ ประสบความสำเร็จ ☐ ไม่

ประสบความสำเร็จ

เหตุผล

.....

.....

ถ้าไม่ใช่ กรุณابอกเหตุผล

.....

6. กรุณาใส่ ✓ หน้าข้อที่แสดงถึงความสามารถในการใช้ Internet ของท่านก่อนการทำรายงานได้ดีที่สุด

----- สามารถใช้ internet สืบค้นข้อมูลได้ด้วยตัวเองอย่างคล่องแคล่ว

----- สามารถใช้ internet สืบค้นข้อมูลได้ด้วยตัวเองแต่ไม่คล่อง

----- สามารถใช้ internet สืบค้นข้อมูลได้ด้วยตัวเองแต่ต้องมีคนแนะนำหรือช่วยเหลือบ้าง

----- ไม่สามารถใช้ internet สืบค้นข้อมูลเลย

(สำหรับผู้ที่ไม่ได้ใช้ internet ในการสืบค้นข้อมูลสำหรับทำรายงานครั้งนี้ ไม่ต้องตอบข้อ 7)

7. กรุณาใส่ ✓ หน้าข้อที่แสดงถึงความสามารถในการใช้ Internet ของท่านหลังการทำรายงานได้ดีที่สุด

----- สามารถใช้ internet สืบค้นข้อมูลได้ด้วยตัวเองอย่างคล่องแคล่ว

----- สามารถใช้ internet สืบค้นข้อมูลได้ด้วยตัวเองแต่ไม่คล่อง

----- สามารถใช้ internet สืบค้นข้อมูลได้ด้วยตัวเองแต่ต้องมีคนแนะนำหรือช่วยเหลือบ้าง

----- ไม่สามารถใช้ internet สืบค้นข้อมูลเลย

8. โปรดแสดงความรู้สึของท่านที่มีต่อแหล่งค้นคว้าประเภทต่างๆ ก่อนการทำ project

5 = มากที่สุด

4 = มาก

3 = ปานกลาง

2 = น้อย

1 = น้อยที่สุด

	5	4	3	2	1	เหตุผล
8.1 ห้องสมุดมีประโยชน์สำหรับการสืบค้นข้อมูลทางวิชาการ						
8.2 ศูนย์ SALC มีประโยชน์สำหรับการสืบค้นข้อมูลทางวิชาการ						
8.3 Internet มีประโยชน์สำหรับการสืบค้นข้อมูลทางวิชาการ						
8.4 ห้องสมุดเป็นแหล่งค้นคว้าที่ใช้งานง่าย						
8.5 ศูนย์ SALC เป็นแหล่งค้นคว้าที่ใช้งานง่าย						
8.6 Internet เป็นแหล่งค้นคว้าที่ใช้งานง่าย						
8.7 มั่นใจว่าสามารถหาข้อมูลในห้องสมุดได้ด้วยตนเอง						
8.8 มั่นใจว่าสามารถหาข้อมูลในศูนย์ SALC ได้ด้วยตนเอง						
8.9 มั่นใจว่าสามารถหาข้อมูลจาก Internet ได้ด้วยตนเอง						

9. โปรดแสดงความรู้สึของท่านที่มีต่อแหล่งค้นคว้าประเภทต่างๆ หลังการทำ project

5 = มากที่สุด

4 = มาก

3 = ปานกลาง

2 = น้อย

1 = น้อยที่สุด

	5	4	3	2	1	เหตุผล
9.1 ห้องสมุดมีประโยชน์สำหรับการสืบค้นข้อมูลทางวิชาการ						
9.2 ศูนย์ SALC มีประโยชน์สำหรับการสืบค้นข้อมูลทางวิชาการ						
9.3 Internet มีประโยชน์สำหรับการสืบค้นข้อมูลทางวิชาการ						
9.4 ห้องสมุดเป็นแหล่งค้นคว้าที่ใช้งานง่าย						
9.5 ศูนย์ SALC เป็นแหล่งค้นคว้าที่ใช้งานง่าย						
9.6 Internet เป็นแหล่งค้นคว้าที่ใช้งานง่าย						
9.7 มั่นใจว่าสามารถหาข้อมูลในห้องสมุดได้ด้วยตนเอง						
9.8 มั่นใจว่าสามารถหาข้อมูลในศูนย์ SALC ได้ด้วยตนเอง						
9.9 มั่นใจว่าสามารถหาข้อมูลจาก Internet ได้ด้วยตนเอง						

10. ข้อดีของการใช้ห้องสมุดได้แก่

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11. ข้อดีของการใช้ศูนย์ SALC ได้แก่

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12. ข้อดีของการใช้ Internet ได้แก่

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13. ปัญหาและอุปสรรคในการใช้ห้องสมุดได้แก่

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14. ปัญหาและอุปสรรคในการใช้ศูนย์ SALC ได้แก่

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15. ปัญหาและอุปสรรคในการใช้ Internet ได้แก่

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