

Investigation of the purpose of using ARC and areas for improvement

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Abstract

本論文は宮崎国際大学が設ける自己学習センター(Academic Resource Center)の学生利用についての調査である。主に学生の ARC 利用目的と ARC が提供するサービスの質を調査した。調査においてセンター利用学生は利用目的を記入するフォームに答え、その結果から学生の主な ARC 利用目的を調査した。また学期終了後に ARC 利用者により詳細な ARC 利用目的とセンター利用により達成した内容を調査し、ARC が提供する効果的なサービスと改善点を調査した。結果として学生は放課後に最も ARC を利用しており、主な目的は TOEIC 学習と課題への取り組みだった。また、ARC が常備する教材とセンターに常駐していたティーチングアシスタントがこれらの目的達成に役立ったという結果となった。一方でスピーキング環境としては適しておらず、課題解決や資格学習以外の目的としては十分な学習環境を提供していない事が確認された。

This paper presents a survey of students' use of the Academic Resource Center, a self-study center established by Miyazaki International College. The main focus of the survey was students' intended use of the ARC and the quality of services provided by the ARC. Students who use the center fill out a form to indicate the purpose of their ARC use, and the results are used to determine the main purposes for which students use the ARC. At the end of the semester, ARC users were asked to provide more detailed information about their purpose for using the ARC and what they achieved through their use of the center. The results showed that students used ARC the most after school, and their main purpose was to study TOEIC and complete assignments. The survey showed that the learning materials and the teaching assistant stationed at the center were helpful in achieving these objectives. However, the ARC was not suitable as a speaking environment and did not provide an adequate learning environment for purposes other than completing assignments and preparing for qualifications.

Introduction

Study Environment and Problems Faced by Students at Miyazaki International College

At Miyazaki International College's Faculty of International Liberal Arts, in the

Department of Comparative Culture, students take most of their classes only in English. All handouts and assignments are written in English. Most of the students are Japanese, and have received a general English education in Japan. New students with relatively low English proficiency often have difficulty adapting to the English-only learning environment, especially at the beginning, and often struggle to perform well in class. In addition, the elimination of English classes and team-teaching classes after the third year of study reduces the opportunities for students to receive personal support from teachers during class. Therefore, many students seek extra learning support outside of class.

Self-Access Centers

A common environment in which students can improve their English outside the classroom is a self-access center. A survey given to students at Victoria University of Wellington showed that 90% of them found the self-access center valuable for their learning, and 88% of them reported that the center facilitated their autonomous learning (Cotterall and Reinders, 2001). Self-access centers are usually equipped with an environment for students to conduct self-study with a variety of learning materials. According to Dornyei (2001), allowing for student input based on personal interest introduces more autonomy and active learning into the process and is likely to raise students' motivation for vocabulary study. Therefore, a facility where students can freely choose what to study potentially raises their motivation.

However, many students with low English proficiency struggle to initiate their learning habits, because it is common for them to be unaware of the steps they should take. In a survey conducted by Cotterall and Reinders (2001), approximately 60% of the participants mentioned that finding the right materials at the self-access center was difficult. However, after providing them with an orientation that introduced what materials were available and instructed them on how to use them, the students had little problem finding appropriate materials. Similarly, McMurry et al. (2010) established a web-based database in which students could search for materials based on keywords. The search result was given with the material's media type, location and suggested use. It helped the students to be more aware of what materials they were available at the self-access center, which encouraged them to use more books from the center and spend more

time studying in the room. Another study was conducted by Ashcroft et al. (2018), in which beginner, intermediate, and advanced students were given paper-based and digital flashcards for vocabulary learning. The highest test scores were recorded by beginner students, with a TOEIC score of less than 230, using digital flashcards. On the other hand, there was no difference in the test results of the advanced students whose TOEIC scores were above 550 between paper and digital flashcards. This suggests that offering a variety of learning methods to students with low English proficiency who have not yet established effective learning methods may increase their learning efficiency. These results also indicate the importance of finding learning methods that suit each individual. Also, on the other hand, there is a high risk that learners will become discouraged if they lack sufficient vocabulary knowledge and strategies for learning new words (Nation, 2001). For these reasons, it is believed that independent learning environments require people or systems that can provide effective learning advice to students. Therefore, there are also self-access centers staffed with teachers, tutors, and teaching assistants for student support.

Academic Resource Center

A self-access center exists at Miyazaki International College. The room is large enough to accommodate a maximum of approximately 25 students, with five tables that can accommodate four people each, four computers, and one printer. This study center is freely available to all students from 7:00 to 22:00 on weekdays.



Figure 1 The Academic Resource Center

Materials Available at the ARC. A wide range of learning materials is provided on the shelves in the room for students' self-study, including study materials for TOEIC and EIKEN certifications, vocabulary books, dictionaries, grammar books, and games for English conversation activities.

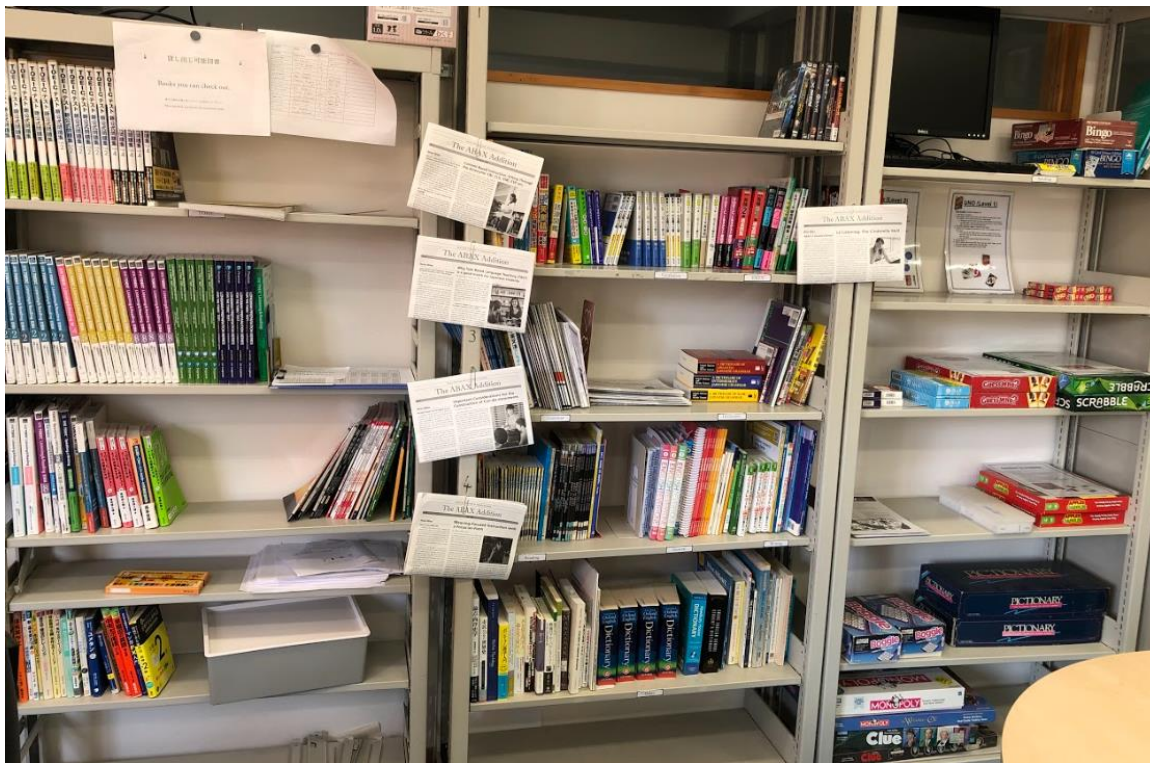


Figure 2 Learning materials in the ARC

TA System. In addition, the researcher was stationed at the ARC as a Teaching Assistant at specific times to provide students with language support. Table 1 shows the time when the TA was in the ARC.

Table 1 The time when the TA was in the ARC

Monday	14:00 ~ 17:15
Tuesday	14:45 ~17:15
Wednesday	14:00 ~ 17:15
Thursday	14:00 ~17:15

Total hours	12 hours 15 minutes
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Purpose of the Research

The ARC had been in operation as a self-access center for three years before this research was conducted, and the purpose of this study was to provide an environment tailored to the needs of students. Specifically, this study focused on the following three points:

1. Main purpose of students who use the ARC
2. Popularity of the ARC.
3. The ARC's room for improvement.

Method

The study was conducted over a four-month period from April 1 to August 31, 2021, and included all students at Miyazaki International College's School of International Liberal Arts (ILA). Two questionnaires were created in Google Form for this study: one for students who used the ARC during the study period and the other for all students at the beginning of the next semester.

Check in Sheet

A Google Form was used to survey the main objectives of the students using the ARC (Figure 1). The link to the Google Form was converted to a QR code using 'QR Code Generator' (<https://qr.io/>) (Figure 2) and placed at the entrance of the ARC, on each table, and on computer desks (Figure 3). Students were asked to scan the QR code with their smartphones each time they used the ARC and to answer the form. The codes were placed in the room at all times during the semester, and students answered the forms from 7:00 to 22:00 when the ARC was available.

Check in Form

ARCを利用する目的を以下から選択して下さい。
このフォームから収集した情報は後に研究に使用される場合があります。

Please choose your purpose of visiting the ARC.
The result of this form may be used for the future research.

yhirai@sky.miyazaki-mic.ac.jp (not shared) [Switch account](#)

* Required

学籍番号 Student Number *

Your answer

ARC利用目的 What is your purpose of using the ARC? *

- TAや他の学生への質問 | Ask
- 宿題、課題 | HW/ Assignments
- 資格勉強 (TOEIC、英検など) | Preparation for a qualification exam. (TOEIC/ EIKEN...)
- 英会話 | English conversation
- 英作文 | English writing
- 自習 (TOEIC 350点以下の学生) | Self-study (Those with under 350 TOEIC score)
- 自習 | Self-study
- Other: _____

コメント Comments (もしあれば) (if any)


Your answer

Submit
Clear form

Figure 3 Check-in form that students viewed by scanning the QR code on their smartphones.

QR.io
QR Codes ▾ FAQ Why Us? Product ▾ API Blog
Log In Sign Up

Link	E-mail	Text	Call	SMS
V-card	Whatsapp	Wi-Fi	PayPal	Event
PDF	App	Images	Video	Socials



Submit URL

<https://forms.gle/F61GV52naDYJzNDC7>

Your QR code will open this URL.

Figure 4 QR code generator

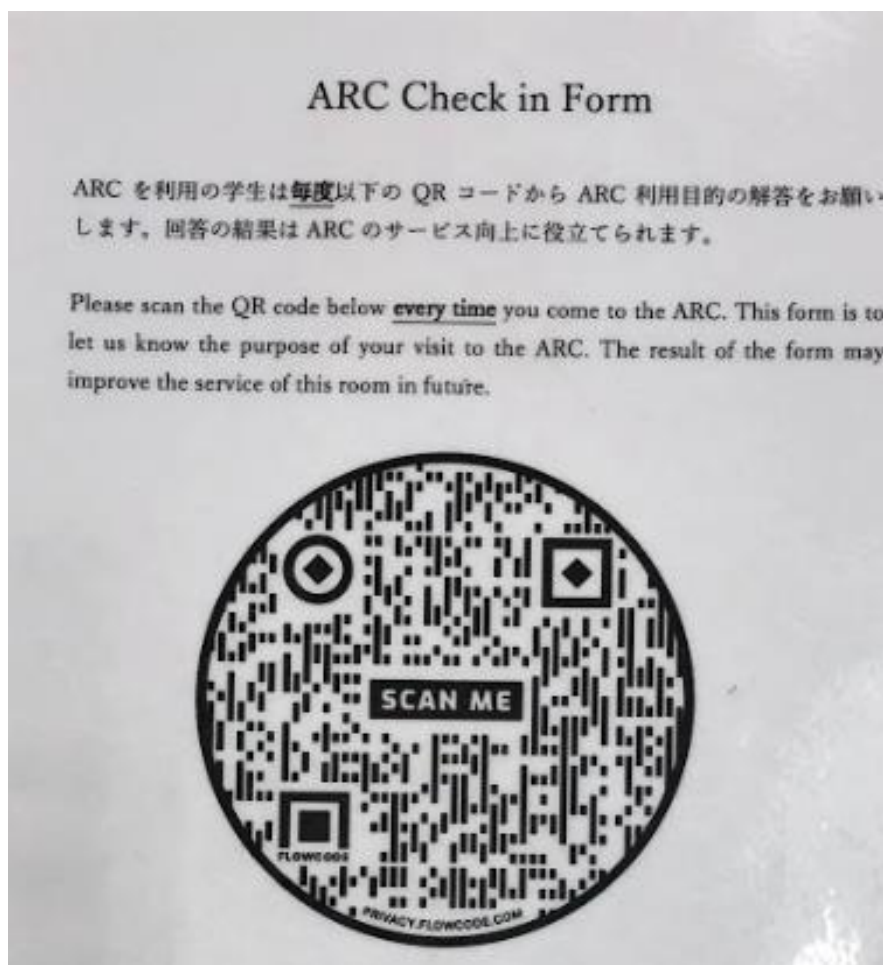


Figure 5 QR code placed on the ARC tables

Survey on ARC Use

The other survey was created in Google Form to investigate students' opinions on the use of the ARC in more detail. Form answers were requested from all ILA students during the September orientation in the fall of the 2021 semester. The form was announced and distributed by a different faculty member to minimize the risk of participants choosing favorable options for the researcher, who was in charge of the ARC. The first question asked the students how many times they had used the ARC in the previous semester (Figure 6). Students who answered "0" were automatically dismissed from the form (Figure 7), and those who chose the other options were asked to continue answering the rest of the questions. There were 19 questions in total, and the responses were anonymous. (See the Appendix for the questions asked in the survey).

Survey on the ARC usage

This is the survey on the ARC usage. We are sending this form to those who used the ARC during Spring Semester 2021. The purpose of this survey is to see how well the ARC is running, and to find out possible improvements on the service. Multiple choice questions are mostly required to answer, and short-answer questions are optional but looking forward to receiving as many answers as possible. Also, your answers might be used in a research paper as references. However, your personal information will be kept confidential. By filling out this form you agree to let us use your answers for the research paper.

これはARC利用に關してのアンケートです。このフォームは2021春学期にARCを利用した学生に送られています。アンケートの目的はARCの使用状況と改善点を把握する為です。選択問題はほぼ解答が必須となっています。記述形式の質問は回答が必須ではありませんが、可能な限り解答をお願いします。また、アンケートの情報は研究論文に使用される事があります。この場合皆様の個人情報は全て秘密に保たれます。このアンケート記入をもって皆様の解答情報の使用許可と代えさせていただきます。

[Switch account](#) Draft saved

Your email will be recorded when you submit this form

*** Required**

Q1. How often did you visit the ARC during Spring Semester 2021? *

2021年春学期にどの程度ARCを利用しましたか。

0 times

Less than 5 times

5-10 times

11-15 times

16-20 times

more than 20 times

[Next](#) [Clear form](#)

Figure 6 The survey sent to the students

Survey on the ARC usage

[Switch account](#) Draft saved

Your email will be recorded when you submit this form

Click submit to finish.

Send me a copy of my responses.

[Back](#) [Submit](#) [Clear form](#)

Figure 7 Those who answered "0 times" in Q1 automatically ended their survey

Results

Number of visitors to the ARC

From the result of Check-in Sheet

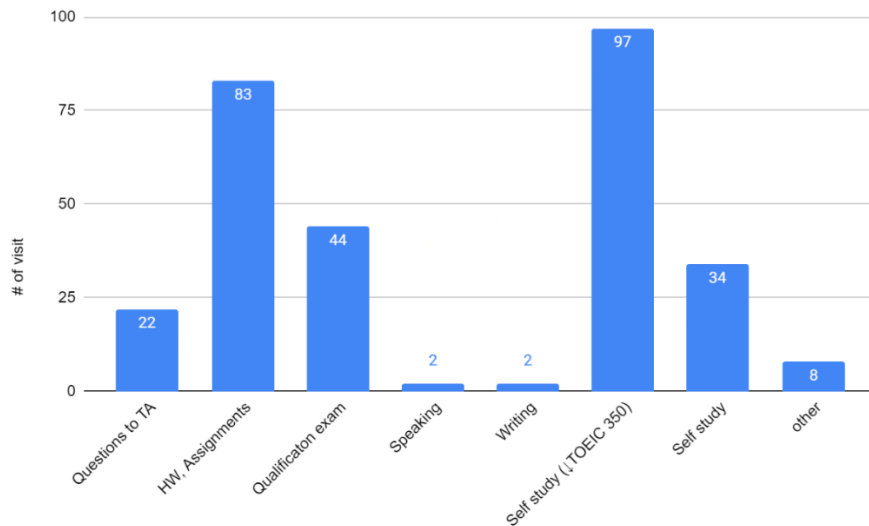


Figure 8 Purpose of using the ARC

The total number of users during the period was 292, with the largest number of first-year students with TOEIC scores below 350, followed by 83 students who used the service for homework and assignments, 44 students who used it to study for qualifications, 44 students who used it for independent studies, and 22 students who used it to ask questions to the TA. Fewer students used the service for speaking and writing practice, and those who answered "other" used it for chatting, and preparing for extracurricular activities.

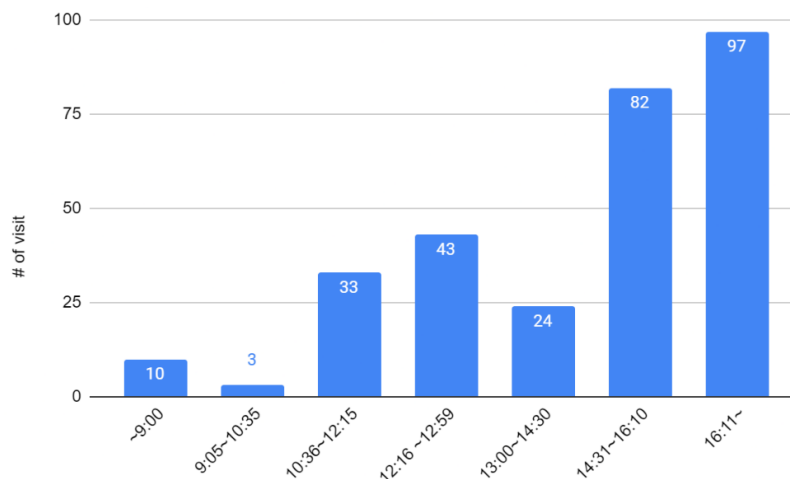


Figure 9 The time when students were using the ARC

As for the number of visits by time of day, the largest number was recorded after school (97 students), followed by 82 during 4th period, and 43 during the lunch break. Generally, fewer students used the ARC in the morning.

From the Survey

One advantage of using QR codes to track student use of the ARC is that the codes are scanned at the time of use; therefore, it is possible to accurately confirm the main purpose of student use. On the other hand, the number of students who reported visiting the ARC may be smaller than the actual number of students who visited the ARC since scanning the QR code is largely voluntary on the part of students. Therefore, the number of visits to the ARC was surveyed again during the September orientation in the fall of 2021. Overall, 155 students participated in the survey; then, excluding the students who had never used the ARC during the last semester, 82 students who had actually used the ARC answered the questions in the survey.

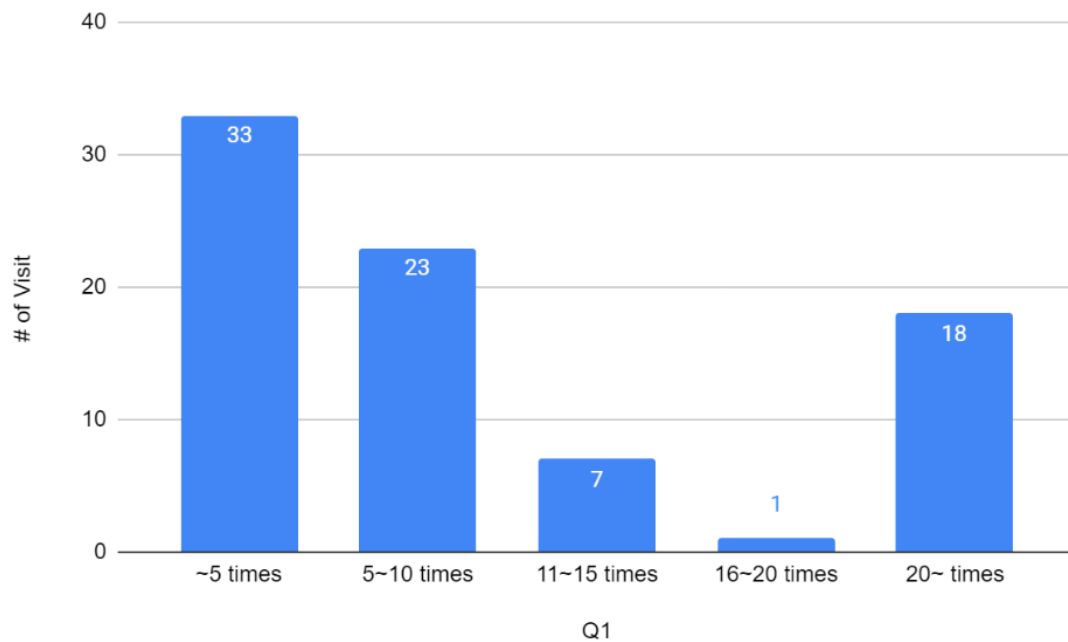


Figure 10 The number of times the ARC was accessed

Calculating the sum of the minimum and maximum values for each category, the minimum number of visits to the ARC was 601 and the maximum was 880. When compared to the results obtained from the QR codes, the number of students visiting the ARC was significantly different.

The Learning Environment in the ARC

When asked if the ARC is a good environment for a concentrated study, 27 respondents somewhat agreed, 19 agreed, and 16 strongly agreed, indicating that the majority of users found the ARC to be a good learning environment. A total of 20 users disagreed, and when asked the reason for their disagreement, the most common response was that noise from other students was their main concern. However, students who chose positive answers also reported that the room was quiet and easy to concentrate in, suggesting that the learning environment varied depending on the time students visited the room.

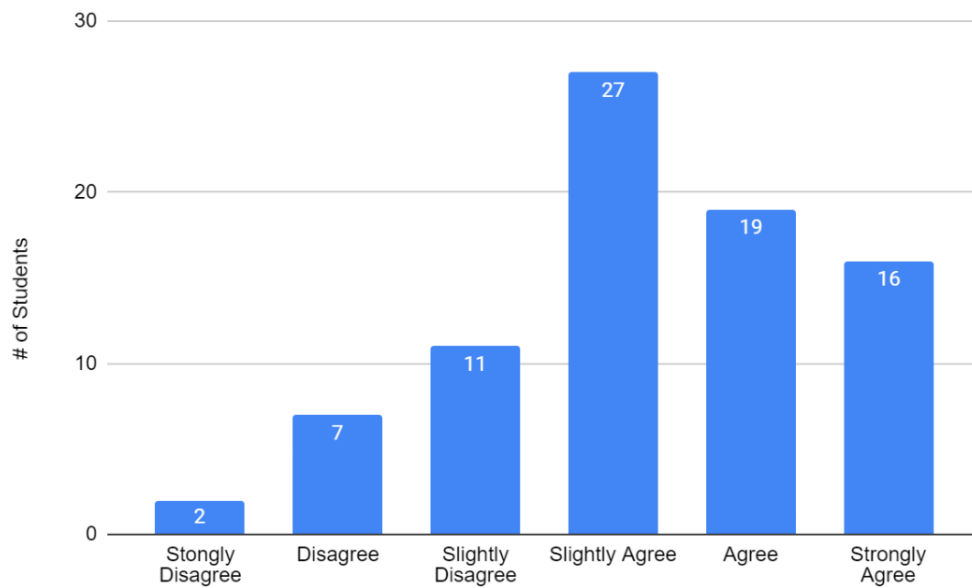


Figure 11 Were you able to concentrate on your studies at the ARC more than at home?

About the Learning Material Available in the ARC

The results of the survey reported that the majority of respondents were satisfied with the learning materials available in the ARC, with 20 agreeing, 14 slightly agreeing, and 12 strongly agreeing. The official TOEIC question booklets, EIKEN question booklets, posters summarizing English expressions on the wall of the ARC, and grammar books were the most frequently mentioned as particularly useful materials. On the other hand, since many students also used the ARC merely for homework and assignments, 22 students had never used the materials.

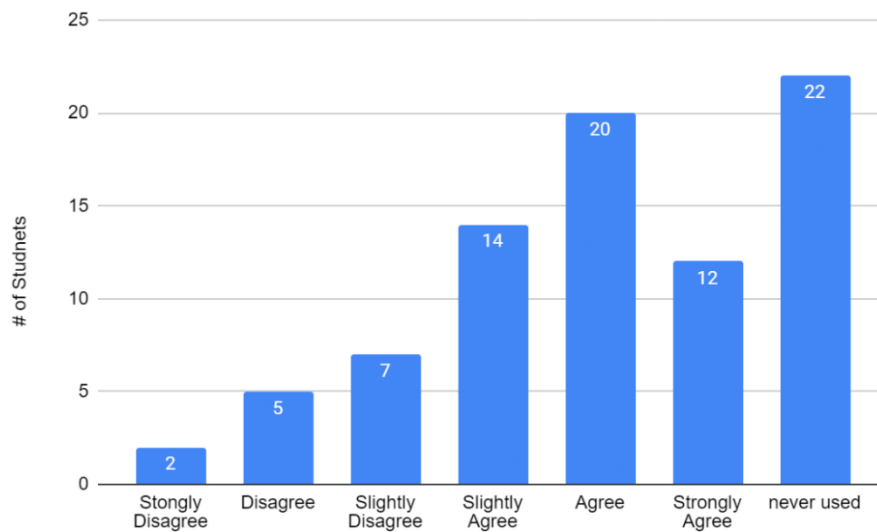


Figure 12 Learning materials in the ARC are helpful.

About the TA

The researcher provided ARC visitors with language support during the research period. Figure 13 shows how satisfied the students were with the support, and the majority reported that the TA, who is the researcher, was helpful for their self-study.

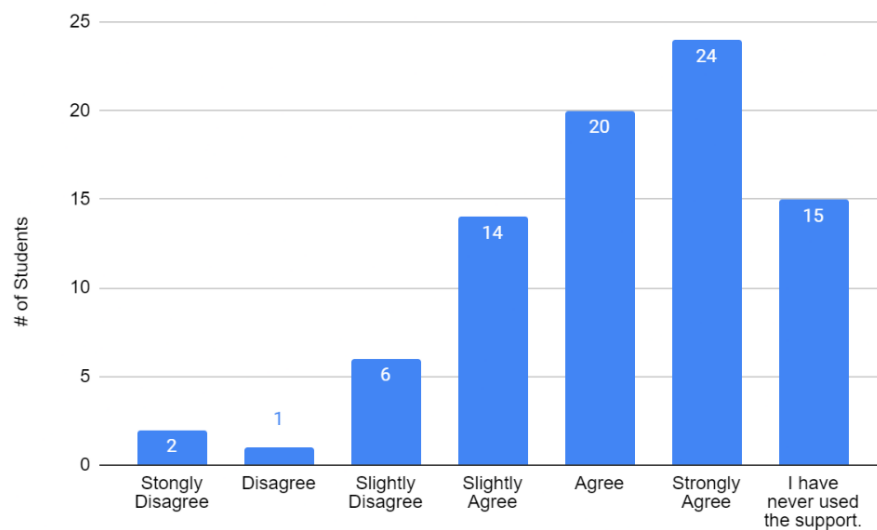


Figure 13 TA provided sufficient support for the study.

Figure 14 shows how students valued the support from the TA. The number of students who used the ARC mainly for receiving support from the TA was 51 when the total number of affirmative opinions was combined. As for the results of the QR code scan, only 22 students answered that they mainly used the ARC to ask questions to the

TA, suggesting that many students primarily used the ARC to study for qualifications or assignments, but the majority of them asked for language support from the TA during the process.

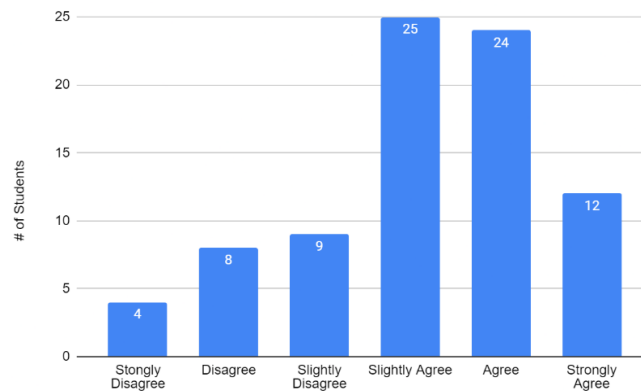


Figure 14 Getting help from the TA was one of the main reasons for using the ARC

The Speaking Environment in the ARC

ILA students take most of their classes in English only. Therefore, students need to improve their ability to speak English, and it is obvious that they would not be able to develop their skills solely by attending classes. The following results were obtained from a survey to visualize whether the ARC provided students with an appropriate environment for extra speaking practice.

Figure 15 shows how comfortable it was for students to practice speaking in the ARC. Among the respondents in favor, the most common opinion was slightly in favor, followed by 18 in favor, and 6 strongly in favor. Table 2 lists some of the students' reasons. (All of the student answers have been translated from Japanese by the author).

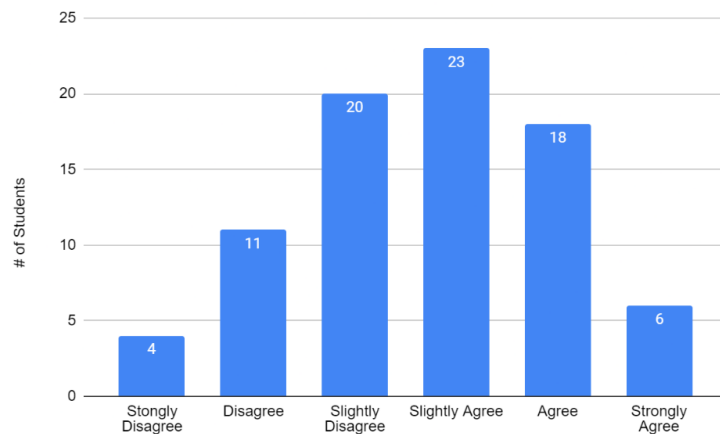


Figure 15 The ARC is providing a comfortable environment for speaking English

Table 2 Reasons students could practice speaking English in the ARC

Answer	Reason
Strongly Agree	I could talk with not only friends but also the TA.
	I could only find motivated students.
	Because I can talk to many people.
Agree	Because I could use Japanese when I have questions.
	I had an opportunity to talk with foreign students at the ARC.
	Because the environment in the ARC was not as tense as the classroom.
	Because it was quiet
	There were many speaking activities available there.
	There are many other students.
Slightly Agree	The environment is easier to speak English, unlike the classroom environment.
	Teachers helped us to speak English.
	When I could not say something in English, other students and teachers helped me quickly.
	The environment was much easier to have an English conversation with other Japanese students than the classroom environment.

In contrast, referring to Figure 15, while there were clearly more students in favor of all the other questions presented above, 35 students disagreed with this question. Table 3 shows the common reasons for this disagreement.

Table 3 Reasons the students could not practice speaking English in the ARC

Answer	Reasons
Strongly Disagree	The ARC is only one room with no partitions or sections. People who study for TOEIC and practice speaking English are difficult to be together in the room
Disagree	There are so many other people in the room.
	I don't usually talk with others there.
	I do not see many people talking in the room.
	There is no chance to have an English conversation.
	The room is so quiet that it is uncomfortable for me to talk in the room.
	When I was practicing speaking English, other students asked us to be quiet. The room is not an ideal place to practice speaking.
Slightly Disagree	I feel the room is designed more for self-study.
	Because I talk with teacher or friends at spoon [the common area for eating or talking] or classroom.
	I saw some other students quietly studying, so it was hard for me to break the silence.

Degree of Satisfaction Using the ARC

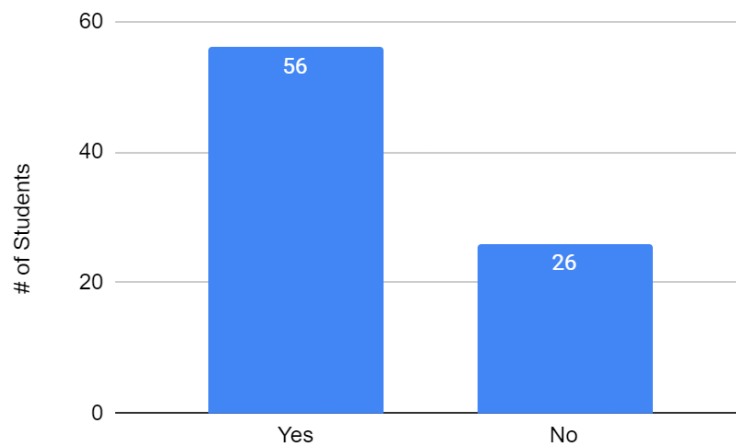


Figure 16 Do you feel that studying in the ARC has helped you improve your English proficiency?

Overall, throughout the semester, 56 students indicated that they felt their academic performance improved as a result of using the ARC, while 26 students disagreed. Those who answered “Yes” to this question were encouraged to share specific areas of improvement, and the results are presented in Figure 17.

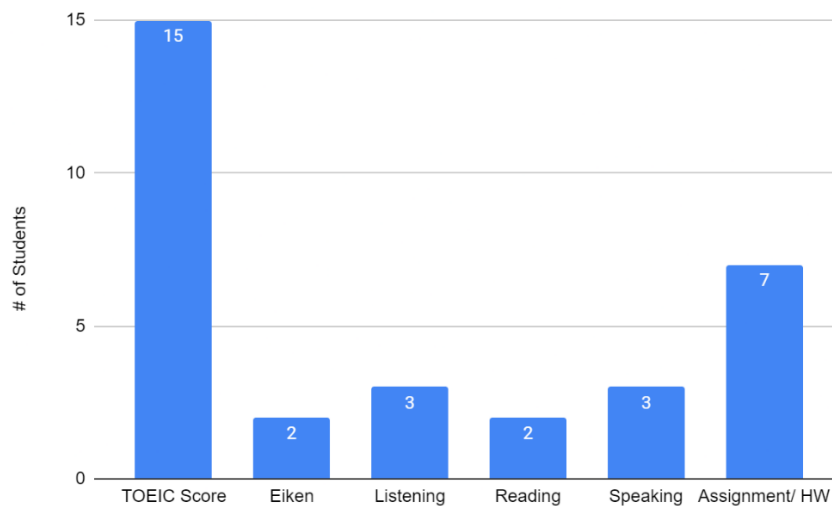


Figure 17 What area did you improve?

In total 32 students responded to the question: 15 students answered that their TOEIC scores had improved, 7 students answered that their ability to solve assignments and homework had improved, 3 students answered that their speaking or listening ability had improved, and 2 students answered that their reading ability or ability to study for the

Eiken test had improved. Some respondents also mentioned support from the TA as one of the reasons their TOEIC scores, problem-solving skills, and Eiken preparation skills improved.

Chance of Regularly Visiting the ARC among Students with a TOEIC Score under 350

Students whose TOEIC scores were below 350 in the spring semester of their first year used the ARC for 3 hours per week as part of their English class assignments, and a survey was conducted to determine whether they voluntarily used the ARC again in the following semester as a result of using the ARC for one semester. As shown in Figure 18, 22 students answered that they would like to use ARC again, 6 students answered that they would definitely use ARC, 4 students answered no, and 2 students answered that they would never use ARC.

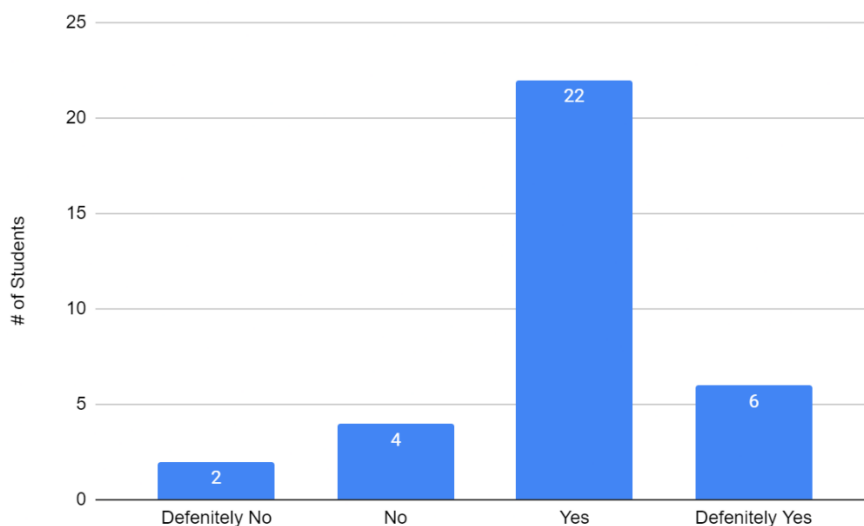


Figure 18 Are you going to visit the ARC during the fall semester without teachers' suggestions?

The following responses were obtained from students who provided detailed reasons.

Table 4 Reasons they either go to or do not visit the ARC the next semester.

Answer	Reason
Definitely not	I felt more comfortable studying at home.
No, I am not going to	I hate to study in a very quiet place.

	I did not get a lot of chances to get help.
	I prefer to study at the library.
Yes, I am going to	The teachers and the TA were helpful and kind.
	I would like to study for the TOEIC.
	To get higher grades
	I need to improve my English ability.
	It is easy for me to ask teachers questions.
	The place is easy for me to concentrate in.
	The learning materials there were useful
	The place was good to study with other students.
Definitely, yes	My TOEIC score was increased by studying in the ARC.
	Studying in the ARC has been my routine already.
	I want to improve my English skills.
	It helped me to study English.

General Assessment of the ARC

When students who used the ARC during the research period were asked whether they would recommend ARC to students who did not use it, 69 said they would, 1 said they would not, and 12 refrained from answering the question. The results suggest that the majority of visitors to the ARC experienced a certain degree of satisfaction with using the facility.

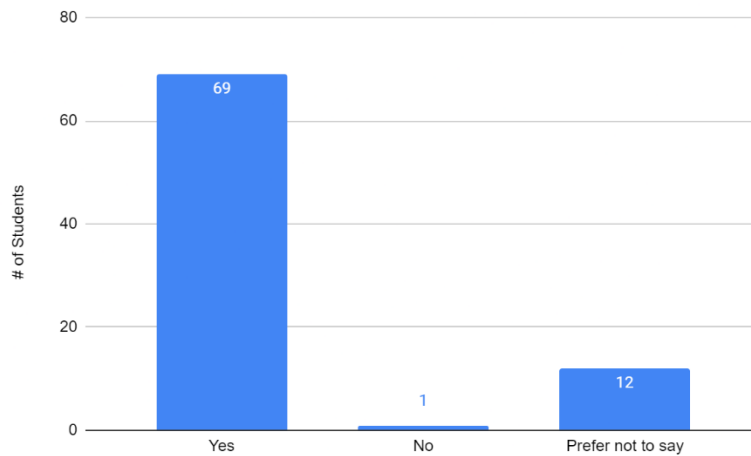


Figure 19 Would you recommend others to regularly visit the ARC?

The ARC’s Room for Improvement

The survey results showed that many students had positive opinions about the services provided at the ARC, but the room was obviously not perfect as a self-access center. Therefore, at the end of the survey, participants were asked to list the points that needed improvement in the ARC, and the following responses were obtained.

Table 5 What would you want to change to improve the ARC?

It would be better if we could separate the room according to the purpose of using the room so that people who want to play some games, practice speaking, and quietly study would have no conflicts.
The ARC needs to be publicized more. There are still many students who do not know about the room.
The TA needs to be in the room more.
We need to prohibit students from talking loudly in the room.
I would be happy if the room got a little bigger.
There are some students who use the room just for chatting. We need more clear rules to tell that the room is for students who really want to study English.
I think we need to change the rules every few hours or days.

I thought the room for ARC was a little small.
One of the biggest issues is that students who want to speak and quietly study are sharing the same environment. I feel hesitant to speak when I see other students quietly studying.
Students should not play Jenga in the room.
Students who talk too much should not use the room.
It would be nice if I could know when the TA is available in the room.

Discussion

The Popularity of the ARC

Figure 8 shows that 292 students used the ARC, but the number is possibly larger than the result considering the result from Figure 10 and the fact that scanning the QR code was voluntary during the survey period. Figure 19 shows that most users promoted the service to non-ARC users, clearly indicating that ARC supports students' independent learning.

On the other hand, although the ARC has many advantages when used, as Table 5 shows, there were still many students who did not know of its existence. Despite announcements about the ARC at the beginning of each course and during orientation sessions, awareness of the ARC was low, suggesting the need for more frequent and wider publicity activities. Examples of such activities include e-mail announcements about the ARC and TA's available times and the placement of posters in facilities frequently used by students, such as cafeterias, hallways, and computer classrooms.

The Teaching Assistant System

Figures 8 and 11 show that the majority of visitors came to the ARC for self-study or study assignments in a quiet environment. Figure 8 also shows that using the TA system was not the primary reason for most students. However, Figure 13 also indicates that many visitors received support from the TA and were satisfied with it. This indicates that the presence of a TA is a necessary part of the environment for ARC services, as students are able to ask questions immediately during their learning process. In addition, students are generally hesitant to ask questions in class, and few students go directly to faculty

members' offices after school to ask questions. However, many students visited the ARC and frequently asked questions to the TA. This suggests that students may take more initiative toward teachers in an environment where they do not necessarily have to ask questions to teachers. If they have a place where they can rely on teachers as their secondary means. In other words, if we could provide a place where students do not feel obliged to ask questions, they would have a more positive and relaxed mindset about sharing the same learning environment with their teachers.

On the other hand, from Figure 13, the opinion that the TA did not provide sufficient support, and Figure 18, the same opinion was confirmed as the reason for not using the facility the next semester. The TA was stationed to answer questions from the students; however, referring to Figure 9, there were certain periods when many students used the ARC, particularly after school. Therefore, some students could not use language support because of the availability of a single TA. In addition, most students commute to school by bus; however, there only two buses are running after the end of classes, which could have made it difficult for many students to wait for the TA to finish helping others. Figure 9 indicates that after-school and lunch breaks are the most popular periods for students to use the ARC, and it is highly doubtful that a single TA would be able to accommodate all requests from them. Therefore, introducing support from senior students or other English language instructors during these busy periods would be a solution to increase opportunities for students to ask questions.

ARC Materials

Figure 12 shows that the majority of visitors were satisfied with the material provided in the ARC, especially those who used textbooks for TOEIC and Eiken. In addition, according to Figure 17, the highest number of students answered that their TOEIC scores improved the most. This result can probably be attributed to the fact that they understood that it was necessary to improve their TOEIC scores to become third-year students or study abroad. Moreover, the TOEIC workshops were conducted directly by the TA in class, which possibly led to more students visiting the ARC in order to obtain better TOEIC scores.

However, some students responded that they were not satisfied; therefore, it is possible that they needed other educational materials. Unfortunately, no students responded with specific reasons for their dissatisfaction, and it is still unclear what materials they needed. However, as shown in Figure 17, few students answered that their speaking, reading, and listening skills had improved, and none of the students answered that their writing skills had improved. From these results, it is thought that increasing the number of teaching materials that support learning other than qualification studies will resolve some of the dissatisfaction with teaching materials that are always available at the ARC. In addition, because the TA specializes in the TOEIC, the TOEIC materials at the ARC were effectively used. However, if faculty members who specialize in other fields could be stationed at the ARC, they would be able to use other materials more effectively to enhance other aspects of the visitor's English proficiency.

Speaking Environment

In a normal classroom environment, students' motivation to learn English varies widely, and it is not uncommon for one student to feel uncomfortable speaking English when surrounded by less-motivated students who do not speak English. However, since the ARC is a place used by students for independent study, the environment was filled with a relatively high level of motivation, which possibly resulted in having these answers in favor. In addition, the fact that the number of people paying attention to students speaking English in the ARC was smaller than that in a regular classroom could also be a factor that eased their nervousness.

Interestingly, any ILA student's use of the ARC provided them with opportunities to interact with other students who did not share the same course schedule, which enabled them to receive more advice from a wider variety of students. Many students also commented that the quick support they received from other students and the TA during English conversations was helpful, and it can be inferred that the environment in which students could ask questions at any time improved their motivation for English conversations.

One of the advantages of the ARC is that all students can freely use the facility, but there are no specified rules for using the room. This resulted in the students sharing a

single space for various purposes. The lack of private or separated rooms in the ARC caused dissatisfaction among students who wanted to study quietly, and many students hesitated to engage in English conversation because of the quiet study environment. Although both students who wish to study quietly and those who wish to engage in English conversation have equal rights to use the ARC, some students speaking English in the ARC received complaints from students who were quietly studying. Therefore, it is obvious that the ARC requires establishing clear and reasonable terms of use to avoid conflicts among visitors with different purposes. The most effective measures are installing partitions in the room or creating private rooms separated by glass or other means. However, if it is difficult to expand the room or change the environment, it may be effective to set a "no talking" time to separate the time for students who want to study quietly from that for students who want to engage in English conversation.

Conclusion

Overall, most ARC users indicated that ARC provided a good environment for independent studies. In particular, ARC provided an effective service for studying assignments, TOEIC, and other certifications. Additionally, the environment in which users could ask questions to the TA at any time was considered to have created an environment that facilitated learning for students. However, this survey revealed that the ARC still has many areas for improvement.

The main issue was sound, as mentioned in the responses to other questions. For instance, the TA received complaints about noise from some English conversation activities such as Jenga and card games. Thus, the TA urgently established a rule prohibiting the use of these activities when other students are present. While both students who wanted to study quietly and those who wanted to practice speaking English had equal rights to use the ARC, it became clear that it was unlikely for these two groups to satisfactorily share one room at the same time.

An ideal improvement would be to expand the space and divide it into several private rooms. This would allow students who visit for various reasons to study simultaneously, without frustration. If this approach is unattainable, it would be effective to divide the time when students can access the ARC according to the purpose

of the study. In this case, after-school hours, which are the most frequently used, should be allocated equally to students who want to talk and stay quiet in the room.

Regarding the awareness of the ARC, although new students are notified of the existence of the ARC as a learning support service at their orientation and the beginning of each class every year, the level of awareness remains low. Therefore, it is necessary to regularly announce the services available at the ARC throughout the semester, as well as to continue the assignment to require new students to use the ARC, which was conducted for the first time this semester. The weekly schedule of the TA was posted on the door of the ARC, but could not be checked without visiting the ARC once. To cope with this issue, the schedule should be announced via email at the beginning of the semester and posted on the walls of other facilities that students visit often.

The results of Figure 8 and 17 indicate that the ARC materials were likely helpful for students to achieve higher TOEIC scores and complete their assignments. However, these are both teacher-led exercises, suggesting that the students' full autonomy to find and study materials on their own was not promoted. One possible reason is that students clearly understood the need to improve their TOEIC scores and complete their homework and assignments. Because they were aware that they would not be able to earn credits if they did not complete their assignments and would not be promoted if they did not improve their TOEIC scores, they may have prioritized learning for these tasks. However, the materials for speaking, writing, reading, and listening at the ARC did not clearly specify the benefits that students could gain from each material. Although improving these four skills is also vital for students to improve their English ability and perform well in classes, the lack of a clear statement of advantages that students can acquire from the materials could have resulted in poor access to the materials. While orientation introduced the existence of the ARC and the general genres of materials available in the room, the results suggest that it is necessary to clearly state the benefits of each material. As a result, students could find more value in the ARC than in recognizing the place to study for the TOEIC and assignments.

Appendix: Questions asked in the survey

Survey on the ARC usage

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* Required

Survey on ARC usage

Q2. ARC was a place where you could concentrate on your studies. *

ARCは集中して学習ができる場所だった。

	1. Strongly Disagree (とてもそ う思わな い)	2. Disagree (そう思わ ない)	3. I slightly disagree (やや思わ ない)	4. I slightly agree (や や思う)	5. Agree (そう思 う)	6. Strongly Agree (と てもそう思 う)
Q2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q3. You could concentrate on your studies at the ARC more than you do at home. *

ARCでの学習は、自宅学習よりも集中出来た

	1. Strongly Disagree	2. Disagree	3. Slightly Disagree	4. Slightly Agree	5. Agree	6. Strongly Agree
Q3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q3.1 According to your answer on Q3, why do you think so?

Q3でなぜその解答を選びましたか。

Your answer

Q4. The learning materials at the ARC helped your self-study or assignment work. *
 ARCの学習支援資料は自習や課題解決に役立った。(学習支援資料=TOEIC公式問題集、文法書、辞書など)

- | | | | | | | |
|----------------------|-------------|----------------------|-------------------|----------|-------------------|---------------------------------------|
| 1. Strongly Disagree | 2. Disagree | 3. Slightly Disagree | 4. Slightly Agree | 5. Agree | 6. Strongly Agree | I have never used them. (資料を使用した事が無い) |
|----------------------|-------------|----------------------|-------------------|----------|-------------------|---------------------------------------|

Q4

Q4.1 If you answer "Slightly Agree", "Agree" or "Strongly Agree" on Question 4, what was the most useful material? (If there is any specific one.)

Q4でやや賛成、賛成または強く賛成と選んだ人は、特に役立った資料はありますか。

Your answer _____

Q5. TA (Teaching Assistant) in the ARC was a helpful resource for your study. *
 ARCでのTAの存在は学習支援に役立った。

- | | | | | | | |
|----------------------|-------------|----------------------|-------------------|----------|-------------------|---|
| 1. Strongly Disagree | 2. Disagree | 3. Slightly Disagree | 4. Slightly Agree | 5. Agree | 6. Strongly Agree | I have never used the TA support. (TAを利用した事が無い) |
|----------------------|-------------|----------------------|-------------------|----------|-------------------|---|

Q5

Q6. Getting help from the TA was one of the main reasons that you used the ARC. *
 TAに支援を求めに行く事が、ARCを利用する大きな理由である。

- | | | | | | |
|----------------------|-------------|----------------------|-------------------|----------|-------------------|
| 1. Strongly Disagree | 2. Disagree | 3. Slightly Disagree | 4. Slightly Agree | 5. Agree | 6. Strongly Agree |
|----------------------|-------------|----------------------|-------------------|----------|-------------------|

Q6

Q7. Getting help in Japanese was one of the main reasons why you used the ARC. *

日本語で学習支援を求めに行く事が、ARCを利用する大きな理由である。

1. Strongly Disagree 2. Disagree 3. Slightly Disagree 4. Slightly Agree 5. Agree 6. Strongly Agree

Q7

Q8. Having more English conversation practice with an English teacher was one of the main reasons why you used the ARC. *

英語教員との英会話練習を行う事が、ARCを利用する大きな理由である。

1. Strongly Disagree 2. Disagree 3. Slightly Disagree 4. Slightly Agree 5. Agree 6. Strongly Agree

Q8

Q9. The ARC was the place where you could speak English comfortably. *

ARCは英会話を快適に行える場所である。

1. Strongly Disagree 2. Disagree 3. Slightly Disagree 4. Slightly Agree 5. Agree 6. Strongly Agree

Q9

Q9.1. Why do you answer so on Q9?

Q9 でそのように回答した理由は何ですか。

Your answer _____

Q10. Do you feel studying in the ARC helped you improve your English ability? *

ARCでの学習は英語力向上に役立ちましたか。

Yes

No

Q10.1. If you answer "yes" on Q10, how? (e.g. increased TOEIC score, listening, speaking, reading, etc.)

Q10で"Yes"と回答した方は、どの様に英語力が向上しましたか。(TOEICスコア、スピーキング、リスニング力など)

Your answer

Q11. (Only for those who were instructed to come to the ARC as an assignment from your English class.) Are you going to visit the ARC during the fall semester even without teachers' suggestions?

Englishクラスの課題の一部として先生からARCに行くようにと促された学生への質問です。(現在1年生の学生) 次学期も先生からの指示が無くてもARCを利用すると思いますか。

1. No, I am definitely not going to

2. No, I am not going to

3. Yes, I am going to

4. Yes, I am definitely going to

Q11

Q11.1 Why did you answer so on Q11?

Q11の解答について、それはなぜですか。

Your answer

Q12. What would you want to change to improve the ARC? (If any)

ARC改善のためにどのような事が必要だと思えますか。(もしあれば)

Your answer

Q13. Would you recommend others to regularly visit the ARC?

ほかの学生にもARCの利用を勧めますか。

Yes

No

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