

ACTION RESEARCH

STUDENT TECHNOLOGY USE IN A SELF-ACCESS CENTER

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Technology has played an increasingly vital role in self-access learning over the past twenty years or so, yet little research has been conducted into learners' actual use of the technology both for self-directed learning and as part of everyday life. This paper describes an ongoing action research project at a self-access learning center (SALC) at a university in Japan. Previous research has mainly looked at resource availability in a self-access setting (see for example Lázaro & Reinders, 2007) or has evaluated the strengths and weaknesses of various technology tools (for example Ruiz-Madrid, 2006; Mynard, 2009). This paper presents an expansive view of technology-based language learning tools that includes materials design, support, and purchasing decisions. The paper shares findings of a qualitative research study involving a questionnaire and interviews with self-access center users. Concrete, corrective actions to remedy issues and improve language-learning opportunities for SALC users are reported. These include: raising awareness of the materials, improving formal and informal support, developing materials based on students' patterns of use, and making more strategic purchasing decisions. Broader implications of the research are that technology deployment and support can be improved by focusing careful attention on the students served by a particular self-access center.

INTRODUCTION

In this paper, the authors provide a description of an action research project based in a self-access learning center (SALC) at a small private university in Japan. A self-access center is a facility which "consists of a number of resources (in the form of materials, activities and support), usually located in one place, and is designed to accommodate learners of different levels, goals, styles and interests" (Cotterall & Reinders, 2001, p. 2). The aims of SALCs can be pragmatic, ideological, or both (Sheerin, 1997). The pragmatic goal is usually to offer ways of individualized learning, and the ideological goal is to promote learner autonomy. Sturtridge (1997) noted that unless SALCs succeed in fostering autonomy, they are not likely to achieve their language-learning goals. Learner autonomy is fostered in various ways. For example, by offering learner development courses, access to advising services, opportunities for individualization, collaboration and interdependence, and through the design and layout of materials. One of the ways in which language learning goals have been supported over the past twenty years is through the use of computer technology. As various technology-based language learning tools (TLLT) and resources have become more readily available, diverse and easy to use, they have become an increasingly important component of SALCs. In this context, TLLT is defined here as any piece of hardware or software that can be leveraged for language acquisition regardless of whether or not it was originally designed for that purpose (see [Appendix A](#), Section C for a list of the TLLT examined in the study).

The researchers were interested in the extent to which SALC users used TLLT for learning and leisure activities. The aim of this study was to investigate the ways in which SALC users currently use technology outside of class and how they might consider using TLLT in the future for self-access language study and practice. Results of this research will assist the SALC team (which consists of managers, learning advisors, and materials developers) in providing and supporting appropriate, technology-rich materials targeted to learners' desires, needs, and interests.

The researchers noticed that TLLT were under-used in an otherwise busy and popular SALC, despite the

reported use of such resources for self-access learning elsewhere (Gardner & Miller, 2010). For example, over a period of one recent 14-week semester, students borrowed only 65 pieces of software. These included stand-alone software and CD-ROMs accompanying books. Considering that the center frequently lends over 300 items per day including books, magazines, music CDs and DVDs, this number is very small indeed. Table 1 shows borrowing records for a typical day in the SALC.

Table 1. SALC Borrowing Records for a Typical Day (Chosen at Random from the Past Year's Records)

23-Jun-10	
Books	218
DVDs	98
Equipment	18
Music CDs	12
Worksheets	8
Video recordings	6
Magazines	2
Total	362

The most popular materials that students borrow are books (around 60% of items borrowed), and DVDs (around 30%). The university subscribes to commercially produced online language learning programs accessible through the SALC Web site. Students are informed about the programs via orientations, classes and workshops, newsletters, and periodic e-mail bulletins, yet access reports indicate that only a handful of students have ever utilized these programs.

The researchers adopted an action research approach to addressing the problem which is illustrated via Coghlan and Brannick's (2010) spiral model of action research (Figure 1). This paper is concerned with Cycle 1 moving into Cycle 2 of Coghlan and Brannick's model.

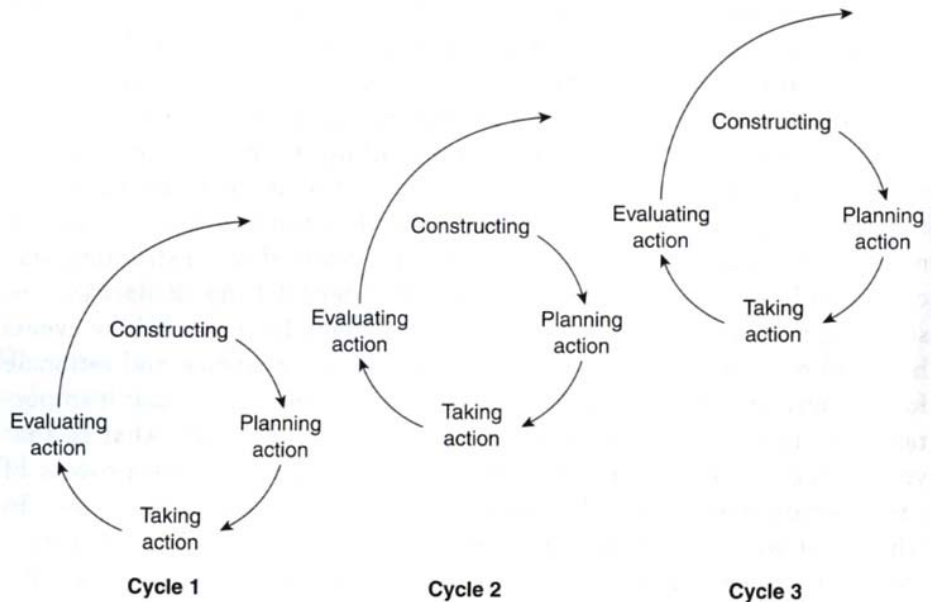


Figure 1. A visualization of Coghlan & Brannick's (2010) spiral model of action research.

Previous Research

The rapid growth of self-access centers particularly in the 1990s has been attributed to the increased number of language learners at universities (Gremmo & Riley, 1995) and the expanding interest in developing learner autonomy. Along with this growth came the provision of the latest technology and equipment (Gardner & Miller, 2010; Lázaro & Reinders, 2006). In an attempt to create a framework to evaluate technology use in SALCs, Lázaro and Reinders (2006) provide results of a comprehensive survey of technology available in SALCs worldwide. After examining forty-six centers in five countries, the authors found that many of the SALCs provided similar technological tools. For example, almost all of the centers employed language learning software, around three quarters of them provided access to Internet resources, and around half contained other electronic materials.

There are a number of reported benefits that TLLT might provide a self-directed language learner. Gremmo and Riley (1995) note that technological developments have provided a variety of opportunities for self-directed learning, even from older technologies such as tapes, photocopiers, TVs and VCRs. In addition, the electronic cataloguing of resources has made it easier for users to find materials of interest. However, new introductions of technology are often coupled with poor pedagogical purpose. The key factors that Gremmo and Riley (1995) presciently alluded to before the rapid digitization of resources “are the learner-training and counseling services they offer” (p. 160). New tools such as smartphones and tablet computers have further increased the richness of resources available to language learners, but their benefits might be thwarted by poor implementation. Murray (2005) discusses how newer technologies, particularly information and communication technologies (ICT) develop new digital literacies necessary for 21st century communication. Murray also describes other research trends on how technologies benefit language learning, particularly through computer-mediated communication and the Internet as an information resource: opportunities to interact with native English speakers, facilitation of language acquisition through student collaboration, identity formation, and increased motivation. However, all previously mentioned research emphasizes that technology by itself does not promote learner autonomy. Moreover, for technology to foster true learner autonomy, it must provide opportunities for learners to take responsibility for their learning and help them to make meaningful choices (Barnett, 1993).

However, when used effectively, technology offers appreciable benefits for language learners and there are many ways that TLLT may be deployed to facilitate self-access language learning. Reinders and Lázaro (2007) describe ten SALCs around the world where technology is characterized as “innovative” according to their framework. In their study, several of the best centers had some common characteristics: a wide range of tools available, and both practical and learner support. For example, all ten centers provided practical support through electronic catalogues and communication, and learner support through language learning materials. However, the study also found that learner training and assessment were lacking in most of these centers.

Choosing Appropriate TLLT for a SALC

The SALC team is tasked with equipping the centers with appropriate materials for language development and practice which appeal to learners with different learning needs, styles and preferences. Resources are likely to include, among others, a combination of print materials, technology tools, audio and video materials, and software.

As an alternative to commercially produced software, authentic Web sites are readily accessible for language learners and may have a number of benefits such as providing engaging and authentic content. Although authentic materials can form useful additions to learners’ study materials, learners can be overwhelmed by the sheer amount of authentic materials on the Web. They are likely to need guidance in finding appropriate sites (Murray, 2005), and also in understanding how to use them for language learning purposes (Mynard, 2009). Potential computer-based learning activities may either leave learners to struggle alone or direct them too much (Barnett, 1993). In directing learners too much, technology can

actually be a threat to autonomy because it simply transfers directive classroom methods onto a machine (Gremmo & Riley, 1995). Barnett suggests providing guided access to the Web sites and activities with multiple entry points and learner training elements so that students do not navigate aimlessly. Programs need to be augmented by introductory and help pages. Ideally, the scaffolding activities will promote learner autonomy by raising awareness to ways in which a learner can source his or her own authentic texts for additional tasks.

Admittedly, the value of technology does not only lie in the range of support it attempts to offer but in the ways that students actually draw on such support for their day-to-day learning. However, the studies mentioned above did not ask students directly what they needed in terms of support. For example, Lázaro and Reinders (2006) looked at the provision of technology, but did not look at its use by learners.

TLLT have the potential to promote learner autonomy if used appropriately (Mynard, 2009). For example, learners should ideally engage in (a) a needs analysis activity prior to selecting the resource, (b) self-monitoring during the task, and (c) reflection after completing the activity. Awareness of these skills can form part of the learner development services offered by a self-access center. TLLT that provide communication opportunities such as blogs, chat rooms, and social networking sites are examples of cognitive tools (Lajoie, 2005) and offer further benefits for learners. Cognitive tools assume high levels of engagement and require learners to “reorganize their knowledge in a manner that results in deeper understanding” (p. 87).

Other research of TLLT in SALCs has focused on resources and student use, attitudes, and expectations. A study conducted in Oman focused on students’ attitudes on technology use: frequency, reason, what they learned, what they liked, and ease of use (Al Saidi, 1991). To remedy a problem in which language learners here underused TLLT, Al Saidi suggested teachers’ feedback was a key factor in determining frequency of use and more training, support, and awareness of materials for learners. Deepwell and Malik (2008) used a case study approach to explore 250 English university students’ expectations of technology, lecturers’ engagement with technology, and how it supported transition from different educational contexts. Results showed that to maximize learners’ experience with TLLT in a self-directed environment, guidance and feedback from lecturers is essential. In Japan, the education ministries have made technology penetration in education a policy priority (Elwood & MacLean, 2009) by equipping schools with the latest technology, although not always in conjunction with appropriate teacher training to use these new tools. Recent surveys of Japanese students have reflected widespread exposure to these tools, although exposure does not always result in increased proficiency or confidence (Lockley, 2011).

In sum, many studies have investigated resources and some have looked into student use. However, an expansive view of TLLT which includes materials design, support, and purchasing decisions along with concrete, corrective actions to remedy issues and improve language learning opportunities for SALC users has not been widely reported.

The SALC

The context for the study is a private university in Japan serving approximately 3,400 undergraduate and 30 graduate students. The university specializes in international studies, particularly in the areas of foreign languages, culture, and intercultural communication. The university’s Self Access Learning Centre (SALC), a purpose-built language learning facility, was established in 2001 to support students in their English study.

The SALC features facilities such as: multi-purpose rooms (MPRs) equipped with a PC, audio and video equipment, and space for six students; *edutainment* booths with DVD players and English satellite-linked televisions; individual study areas; a reading lounge; a writing area; listening stations with MD and MP3 players; speaking booths with English pronunciation and karaoke software; and a free conversation area. The facility is filled with over 11,000 English resources including books, magazines, newspapers,

worksheets, games, DVDs, CDs, and CD-ROMs of language learning software. While some TLLT require students to be on site (e.g., DVDs, satellite television, computer terminals, and other facilities) some are available for use off campus as well (e.g., borrowed CD-ROMs and Internet-based materials accessed at home). The wide availability of such materials may affect their use in the SALC. Furthermore, although some language learning resources are available to students outside the SALC (e.g., DVDs, language Web sites, and English books), the real value lies in the way in which the SALC situates the resources, learner development programs, and advising services within a target language social hub. The English-only environment provides opportunities for students to not only study the language, but also to meaningfully practice communicating in English (opportunities for immersive experiences are rare in Japan).

Research Questions

The following three research questions were formulated:

1. How do SALC users currently use TLLT?
2. How could support for meaningful use of TLLT be provided most effectively?
3. Are there TLLT that the students would like to use in the SALC?

METHODOLOGY

An action research approach was chosen within an interpretative paradigm in order to understand and interpret TLLT use in an in-depth way and to make ongoing improvements. In accordance with the cycles of action research described by Coghlan and Brannick (2010), the research contained the following reflective stages: constructing, planning action, taking action, and evaluating action. In Cycle 1, the initial “constructing” phase began when the researchers observed that although technology could support self-access learning, few students appeared to be using available TLLT. The constructing phase was explored further through dialogue and co-construction. In the “planning action” stage, the researchers developed three research questions in order to learn more about how learners used technology in their lives. The “taking action” stage involved the data collection over a one-semester period. It also included initial actions that the researchers took based on ongoing interpretation of the data. The “evaluating action” phase involved more thorough interpretation of the data and discussions. Throughout these stages, the researchers reflected and speculated on what was being observed—an approach advocated by Burns (1999). Based on the interpretation of the results of the study conducted in Cycle 1, the researchers were able to co-construct the problem areas and continue the work into Cycle 2.

Procedure

Three researchers collected data using the following two instruments:

1. A questionnaire containing some closed-response items and more open-response items (Appendix A). The questionnaire was designed to gather important demographic information and also establish the purpose of the interview.
2. In-depth, semi-structured follow-up participant interviews. Each interview lasted 20 to 30 minutes and probed for more detail on the questionnaire responses.

Participants

Over a two-month period, interviews with 29 SALC users were conducted. For 26 of the interviews, students who were in the SALC at times pre-selected by the researchers were interviewed resulting in a convenience sample relying on “available subjects – those who are close at hand or easily accessible” (Berg, 2001, p. 32).

The researchers individually approached possible participants. Willing participants were then given around fifteen minutes to complete an ice-breaker questionnaire (Appendix A). The researchers then returned to conduct semi-structured interviews, using the questionnaire as a springboard. The researchers kept thorough notes during the interviews, which were later typed and analyzed.

In order to include the voices of other SALC users who may not necessarily be present in the SALC, but could offer other insights, three additional interviews were secured with users who had recently used computer-based resources from the SALC. Two had used installed software in speaking booths and one had recently borrowed a CD-ROM. The participants were selected using a systematic random-sampling method from the list of the semester's borrowing records; every third user was highlighted and contacted by e-mail. The three users who responded were interviewed.

The 29 participants' demographic information, by chance, closely matched those of the university and SALC users. There were twenty female (69%) and nine male (31%) participants. The participants proportionally represented SALC users with nine Freshmen (31%), ten Sophomores (34%), seven Juniors (24%) and three Seniors (11%). The average amount of times that the participants visited the SALC per week was between one and three times. Their self-reported computer proficiency spanned the whole range: *great* (7%), *above average* (24%), *average*, (45%), *below average* (21%), and *poor* (3% - one participant). Because it is a private university, a majority of the students are middle to upper-middle class. Some reside near campus, but most live with their parents in the Chiba or Tokyo metropolitan areas. Many have part time-jobs to earn spending money.

Data Analysis

The closed-response item results were tabulated (Appendix B; Table 2), and the qualitative data collected from the interviews and open-response items were collated. The qualitative data were analyzed by each of the three researchers independently in the first instance, with each researcher identifying and categorizing the data into the agreed ten themes that were explored through the questionnaires and interviews. Next, each researcher identified and coded the qualitative data into emergent subcategories within each theme. The three researchers then met to compare and discuss the ten themes, subcategories, and coded data. Differences in names, definitions, and categorization of items were inevitable, but at the end of the process, agreement was reached. The findings emerged through reflective discussion and exploration of multiple perspectives and interpretations of the data. Through this process, the researchers agreed on the most appropriate way to categorize the data. A summary of the themes and agreed subcategories was created immediately following the discussion and can be found represented in the appendices (Appendix C; Tables 3, 4 and 5).

RESULTS

Research Question 1: How do SALC Users Currently Use TLLT?

Technology Use Outside School

The study investigated whether or not students have a computer and Internet access at home, and which tools they normally use there. The results indicate that a majority of participants do in fact use TLLT at home, echoing similar research by colleagues at the same institution (Lockley, 2011). Students commonly use computers to access tools and Web sites to help them complete homework, to communicate with friends (through Facebook and Skype, for example), and for watching online videos for entertainment (see Appendix C; Table 3, Themes 1-4). This finding was of some interest because there is a belief among many staff that students do not use computers off campus. This belief may stem from teachers' observations of some students' lack of basic computer skills (e.g., start-up and shut-down procedures, search engine basics, and saving files).

TLLT in the SALC

Students indicated that they use a variety of TLLT on a regular basis in the SALC (Appendix B; Table 2). The results indicated that watching DVDs on DVD players is the most popular technology-based activity in the SALC. Moreover, a majority of participants listed watching DVDs as their favorite activity (Appendix C; Table 3, Theme 5). In most cases, learners select a DVD to watch without engaging in any additional tasks. In other cases, learners perform other production tasks such as focused pronunciation practice or note-taking.

The second most commonly reported activity in the SALC was using an MPR. While it is not known exactly how participants used the MPRs, several students mentioned using MPRs as a private space to plan group projects and some students indicated that they often used the same technological tools as in other areas of the SALC.

Using SALC computers for social networking, viewing Web sites and software-based language learning tools were also found to be common activities. Accessing news Web sites was popular and some participants commented that they use many of the Web sites to help them with their homework. A second year male student said, “Actually I use it for my homework. [My teacher] recommends Japan Times. It is good for collecting information about Japan or foreign countries, so I use this one.”

The use of the other tools listed in question 7 on the questionnaire was not so common. One participant (a freshman student) noted that her purpose for coming to the SALC was primarily social and she felt that she did not need computers to socialize with other SALC users. In fact, a recurrent theme that occurred in the interviews was that students tended to view the SALC as a social space—a place for meeting classmates and friends and for social networking both face to face and through the Internet.

Generally, the questionnaire revealed that respondents were more likely to focus on receptive language skills (listening and reading) rather than productive skills (speaking and writing). However, social networking, one of the most popular activities, provides opportunities for both receptive and productive skills.

Research Question 2: How Could Support for Meaningful Use of TLLT be Provided Most Effectively?

Ways of Finding Out about Tools for Learning English

The participants were asked about how they find out about ways to use technology to learn English and the results are summarized in Appendix C (Table 4; Theme 6). The majority of responses included *informal* ways such as asking people (other students, teachers, staff) or just trying something out, or as one respondent said “If I need to find something, I search on the Internet.” Seven participants mentioned formal ways of learning how to use technology for language learning purposes such as in class from teachers, advice from learning advisors, or by attending workshops.

Help with Using Technology

In order for the researchers to understand ways in which learners can be supported in using technology for meaningful language learning, the participants were first asked about how they usually received technology support in general (Appendix C; Table 4, Theme 7). Apart from the three people who said that they either did not ask for help ($n = 1$), or preferred to find out by themselves ($n = 2$), the participants told the researchers that they would usually ask someone such as a friend or teacher to help them.

Increasing TLLT Use in the SALC

Participants were asked for their ideas and opinions about how the SALC team could encourage students to use TLLT and support services for language learning. Twenty-three participants offered ideas and these are presented in Appendix C (Table 4; Theme 8). The suggestions included training, improving

equipment, promotion and guidelines or instructions for TLLT. The suggestions were taken into account in the next stage of the process, but it was interesting to note that many of the students' suggestions such as Web links, information leaflets and workshops, were already available in the SALC. Clearly there is a gap between the support the SALC team is providing and the learners' awareness of these support materials. Therefore awareness-raising should form a major effort of the next phase to close this awareness gap. A small number of participants ($n = 4$) indicated an unwillingness to use TLLT, which is certainly an area that needs further exploration. Negative factors are summarized in Appendix C (Table 4; Theme 9).

Research Question 3: Are there TLLT that the Students Would Like to Use in the SALC?

To get a better understanding of which language learning tools students would be interested in using in the SALC, participants ranked a variety of TLLT, Web sites and programs from *most wanted* to *least wanted*. As not all of the participants fully completed the question, a full analysis of the ranking cannot be given. However, tools that were ranked highly (i.e., 1st, 2nd, or 3rd) are indicated in Appendix D (Table 6). Among the choices provided, links to useful Web sites and language Web sites, and video games were ranked highly by a majority of participants. Students also requested Internet-based language learning programs and recommendations and advice on how to use them. In addition, participants provided further ideas during the interviews. For example, seven students mentioned an interest in learning about mobile technology for language learning, including the iPad. Other tools mentioned were mobile software, karaoke, and worksheet-based activities (Appendix C; Table 5, Theme 10).

DISCUSSION AND ACTION

The results indicated four key areas that need the most attention in the next action research cycle: awareness-raising, support, materials design, and purchasing decisions. Interpretations of the results led to further planning and constructing in these areas. This section will summarize the key issues and describe interventions that have begun as a result of the first phase of the action research.

Awareness-raising

The SALC already offers a wide variety of TLLT, yet the results of this study indicate an awareness gap. Greater promotion of SALC technological materials is needed to avoid appropriate materials being overlooked. This supports the points made in the literature review about students needing guidance in finding appropriate resources (Murray, 2005) and making appropriate choices (Barnett, 1993).

Students recommended promotional materials such as posters and informative e-mails to promote SALC use. The SALC team has begun to take steps in this direction, namely promoting the latest SALC materials, and events to teachers and students with regular e-mail updates which are archived on the Web site. TLLT are also being promoted through the printed SALC newsletter. In addition, TLLT will be featured on the teacher Web site (which is widely accessed by staff). The ongoing orientation activities (described in the next section) should also address this awareness gap, as students will be introduced to various TLLT in class gradually over the course of the semester.

Support

Lázaro and Reinders (2006) observed that learner training is often lacking for TLLT and this seems to be the case in the present study. The participants had several insightful ideas about how to increase the use of TLLT in the SALC, some of which are now being implemented. The most common recommendation was for more formal orientation, training, and workshops to teach students to use technology meaningfully for language learning purposes. Although all freshman English majors are introduced to the SALC in an orientation lesson, feedback indicated that this might be insufficient. Currently, the SALC team is designing a series of interactive worksheets that provide ongoing detailed orientations to online resources. As Barnett (1993) suggests, the worksheets will guide learners and provide step-by-step directions. These

activities are separate from other SALC orientations and will be introduced to students in class later in the semester. Next steps involve uploading these worksheets to the SALC Web site.

In order to be able to use TLLT effectively for learning purposes, users first need a degree of technological competence and confidence. This is relevant to the learning environment described in this study, as participants mentioned that they did not know how to use the equipment found in the SALC. Ideas for increasing this knowledge included providing simpler, clearer instructions and also offering more workshops on technology use. The SALC team has offered workshops in the past, but these were poorly attended, which indicates that a new approach may be needed. Work is already underway to further enhance the SALC's Web site including reviewing the links to online language learning applications (Rubesch, 2010) and researching how users access the site.

Materials Development

This study has provided the SALC team with a deeper understanding of the students it serves: what TLLT they use in the SALC and at home, methods of support, and potential tools of interests. As a result of this study, materials that increase the learning potential of these tools can be created.

Furthermore, based on the research, the SALC team is better able to predict what tools students would be interested in. In this particular context, students may be interested in materials that enrich DVD and online video viewing and social networking language learning experiences. Also, students' interest in social networking sites could be supported to provide language-building exercises. Furthermore, materials that recreate the active social environment of this SALC in virtual worlds might be beneficial to language learners. The SALC team now has an increased focus on developing materials that match student demand and interest.

Purchasing Decisions

A priority for the next stage of this ongoing action research project will be to offer adequate support for the resources that the students are clearly interested in using. Previously, software was purchased with perceived needs in mind. From now on, purchases will be need-driven and always accompanied by a variety of promotion activities and appropriate support for learners. The results of the study indicate that more software might not necessarily be a high priority. SALC users expressed an interest in movie-related resources and social networking, yet did not necessarily exploit the resources for effective language learning potential.

Mobile technology and tablet devices are an emerging area of interest among students, especially since some of the participants mentioned mobile learning explicitly during the interviews. In addition, many learners use the SALC as a place to socialize and it could be argued that mobile technology might facilitate this more effectively than fixed computers (although research is needed in this area).

LIMITATIONS

The researchers acknowledge that involving more participants in the study would have provided more data and represented more students' voices. However, the aim of the study was not to generalize but to gain some insights at the early stages of the action research project through in-depth interviews with the participants. As the project continues, other opportunities for input will be sought. The authors intend to replicate this study annually in order to monitor progress from the initial action research cycle. With the dynamism of modern TLLT, constant adjustments appear necessary for any SALC that strives to provide the best guidance to its learners.

Secondly, although attempts were made to be as unbiased as possible during the semi-structured interviews, an inevitable fact of interpretative research is that researchers will be influenced by personal experience. However, through the data interpretation process, especially the reflective discussions

between the three researchers, this was minimized.

As the focus of this the study was on students who already use the SALC, the researchers did not include non-SALC users in the sample. This could arguably be an appropriate focus at a different phase of the research.

CONCLUSION AND REFLECTIONS

The present study aimed to report on student use of TLLT at a SALC, and, in order to facilitate language learning, how best to deploy them. Results showed an interest in TLLT by SALC users and highlighted that the reasons for the apparent low usage figures may be due to a combination of lack of awareness, lack of learner support, and uninformed purchasing decisions. Language learning might be advanced if a SALC focuses on improving each of these areas, especially if the technology serves as a guide for self-directed learning (Barnett, 1993). Furthermore, creating an evaluative framework based on these areas could ensure that language learning benefits of new TLLT are maximized. Finally, creating materials based on actual student TLLT use and interest could enrich already engaging activities. The results of the study provided direction to the SALC team and the next stage will be to implement some improvements (Cycle 2). A number of interventions have already begun, many of which were suggested by the students, and the researchers continue to work with the rest of the SALC team and reflect on their effectiveness.

Each SALC is unique and, although it is useful to look at what other SALCs are providing, educators will benefit from initiating similar action research projects in their own institutions not only to learn more about what the learners actually use, but also to make appropriate decisions involving resource allocation. In conclusion, the effective use of TLLT requires careful attention to the students served by a particular self-access center. A continuous action research cycle should provide students with well designed and supported TLLT for their own language learning development and autonomous learning needs.

APPENDICES

APPENDIX A. SALC Technology Student Survey

A. BACKGROUND INFORMATION

1. Male or Female
2. Student Year:
3. Major:

B. BASIC INFORMATION

4. What are you doing at the SALC today?
5. How many times a week do you come to SALC?
6. Are you good at computers? Rate yourself 1 (great) to 5 (poor).

C. TECHNOLOGY AT THE SALC

7. Which language learning tools/websites/technologies do you use regularly in English in the SALC for learning or practicing English? (Check all that apply.)

	MD player/recorder		Software/websites for language learners
	MPR room		Online quizzes
	Blogs		Skype
	Nintendo Wii		Podcasts
	Video player (DVD)		Social networking (Facebook, Twitter, MySpace)
	Wikis		karaoke microphone
	Online discussion forums/ Chat rooms		other:
	Chatbots (talking robots online)		other:

8. What's your favorite tool/website/program for learning or practicing English at the SALC?
9. How do you find out about tools/websites/programs for learning or practicing English at the SALC?
10. How do you get help when you use technology at the SALC?
11. What should the SALC do to get people to use more language learning technologies at the SALC?
12. What types of language learning tools/websites/technologies would you like to see MORE of at the SALC?

Please Rank these #1 (most wanted in the future) to #6 (least wanted in the future).

For example, if you would like to see mobile software the MOST, write #1. **#1 is the best!!**

Rank	Tool/Website/Programs
	video games
	links to useful websites
	worksheet activities
	links to language websites
	karaoke
	mobile software (for smartphones/ tablet computers)
	other (if you have your own idea):

D. TECHNOLOGY AT HOME

13. Do you use internet/computer at home?
14. What tool/website/programs do you normally use in Japanese at home?
15. What tool/website/programs do you normally use in English at home?

16. Which language skill would you like to improve most- reading, writing, speaking, or listening?
 17. What skill would you like to improve most using technology at home?
 18. Do you ever use language learning programs at home? on the train? at the SALC?

APPENDIX B

Table 2. Responses to “Which language learning tools/websites/technologies do you use regularly in English in the SALC for learning or practicing English? (Check all that apply.)” (Question 7)

Answer Options	Response Count
Video Player (DVD)	20
*MPR	15
Social networking (Facebook, Twitter, MySpace)	10
Wikis	7
Software/websites for language learners	6
Podcasts	3
Karaoke microphone	3
MD (Mini Disk) player/recorder	2
Online quizzes	2
Blogs	2
Skype	2
Online discussion forums/ Chat rooms	1
Chatbots (talking robots online)	1
Other – Word	1
Other - PowerPoint	1
Other - Moodle	1
Other - Google translator	1
Nintendo Wii	0
TOTAL	78

* Multi Purpose Room - a small room intended to be used for up to six students containing a computer and equipment for viewing DVDs, listening to audio, practicing presentations and working on group projects.

APPENDIX C

The following tables summarize the qualitative data collected through the open-ended questionnaire data and follow-up interviews with the participants according to the agreed themes.

Table 3. *How SALC users currently use technology*

Themes	Subcategories	
1. Use of language learning programs on the train	a. Listening	7
	b. Watching	1
	c. Playing	1
	e. Reading	1
	f. Planning	1
	2. Use of language learning programs at home	a. Listening
	b. Watching	4
	c. Learning sites	2
	d. Reading	1
	3. Tools / websites / programs used in English at home	a. Communicating & Connecting
	b. Entertainment	13
	c. Study	13
	d. News & information	10
	4. Tools / websites / programs used in Japanese at home	a. Information & news
	b. Communicating & connecting	14
	c. Entertainment	13
	d. Study	7
	5. Favorite tool / website/ program for learning or practicing English in the SALC	a. Watching DVDs
	b. EFL websites & CDs	4
	c. Music related	4
	d. Online news/magazines	3
	e. CMC	3
	f. Nintendo	1
	g. Reading books	1

Table 4. *How students learn about technology tools and how they get help with using them*

Themes	Subcategories	
6. Ways of finding out about new tools to improve your language learning	a. Asking teachers/staff	14
	b. Asking friends	5
	c. Online search	4
	d. Workshops/orientations	4
7. Getting practical help with technology in the SALC	a. Ask my friend / someone	11
	b. Ask staff at the desk	7
	c. Ask a teacher	8
	d. By myself / don't ask	3
8. Ideas students had for encouraging technology use in the SALC	a. Formal training	10
	b. Equipment/facilities	10
	c. Promotion	10
	d. Instructions	5
	e. Make easier	2
9. Negative factors associated with technology use	a. Unable to use technology	5
	b. Lack of awareness	3
	c. Unwillingness to use technology	4

Table 5. *What TLLT could the SALC offer in the future?*

Themes	Subcategories	
10. Activities students would like to try	a. Mobile devices / iPad / iPhone	7
	b. Skills development	3
	c. Games	2
	d. TOEIC	2
	e. Excel	2
	f. Skype	1
	g. Twitter	1
	h. Portuguese software	1
	i. Websites	1

APPENDIX D

Table 6. *Items ranked highly as “wanting to see more of” in the SALC (Question 12 on the questionnaire)*

Item	Number of respondents who ranked this item in their top 3 choices
Useful websites	26
Language websites	23
Video games	16
Software	10
Karaoke	9
Worksheet activities	6

ACKNOWLEDGMENTS

The authors appreciate the help of colleagues, the editor, and the anonymous reviewers for their insightful feedback on earlier versions of the paper. We would also like to thank the SALC users for sharing their valuable opinions.

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