EVALUATING A NEW CALL SYSTEM

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Abstract

This paper looks at the results of questionnaires administered to students in the Faculty of Communication at Nagoya University of Commerce and Business (NUCB) over the past two years. The aim of the questionnaires is to gauge student reaction to a new Computer Assisted Language Learning (CALL) system purchased by the university. The system came into use in both the Faculty of Communication and the Self-Access Center (SAC) in April 2009. The questionnaire results give us a clearer picture as to what role this particular CALL system is playing in the enhancement of students' language learning, and independent study in particular. They also help in planning for future development in the language program as a whole.

INTRODUCTION

Universities in Japan have to be continuously conscious of change if they wish to maintain a competitive edge and attract students in an increasingly difficult market. In terms of educational technology, they must be aware of the latest systems that are available and, where appropriate, invest in them in order to stay in a strong position. In the acquisition of anything new, however, there is an element of risk. Once the investment has been made, it is important to evaluate whether the new acquisition is proving worthwhile, and if necessary, adapt or improve actual use. Nagoya University of Commerce and Business (NUCB) has followed this general trend and tried to adapt to changing times. To exemplify this, we give a brief history below of developments in one particular area. We also show how we are monitoring progress so that we can make changes where required in order to improve the overall language learning process.

Technology at NUCB

For the past twenty years at NUCB great emphasis has been placed on the latest technical equipment to support learning, both in the university as a whole, and in the Faculty of Foreign Languages in particular. For example, in the 1990s state–of-the-art Sony language laboratories were installed in two large teaching rooms in the NUCB Language Center. Each laboratory had a seating capacity of up to 60 students and the individual glass-fronted isolation booths were linked to a teacher's console. The rooms were equipped with one large screen for work with an overhead projector. Each individual booth had a small television monitor for viewing video and a cassette recorder for listening and speaking practice. The booths were configured in rows such that all the students faced towards the teacher's console. The content of classes in these rooms included watching videos, answering questions in a video activity book, and then listening to

and recording various exercises on the cassette recorders.

At the start of the new millennium, NUCB already had a number of computer laboratories. Also, Computer Assisted Language Learning (CALL) and the Internet were playing an increasingly important role in language programs throughout the world. As the Sony language laboratories were beginning to age, it was decided to convert the two large rooms that housed them into additional computer laboratories. The isolation booths were removed and new tables were installed, each one accommodating four computers, plus one extra table for two additional computers. There are now a total of fifty computer places in each room. The tables are arranged in the shape of a fan radiating out from the teacher's console. Most of the students can be seen in profile when viewed from the console. At the time of this conversion it was decided to retain the still serviceable cassette players and insert them into the desktops next to the computers. Additionally, stands were installed to hold the headsets. The two rooms could now function as both computer and language laboratories. Moreover, two large screens behind the teacher's console replaced the single screen found in the language laboratories. These are able to function independently of each other and in this way provide the teacher with more possibilities when conducting the lesson. For example, DVDs and material being displayed on the students' individual computer screens can be shown concurrently. The greater technological flexibility has meant that besides the Listening classes both Writing and Computer Applications courses also make use of the rooms.

Self-Access at NUCB

For over a decade self-access language learning has played a significant role in the language programs at NUCB. The history of the founding and development of the university's Self-Access Centre (SAC) and its facilities has been carefully documented over the years (Monk & Ozawa, 2002; Mimura, Monk & Ozawa, 2003; Monk & Ozawa, 2005; Monk, Ozawa & Thomas, 2006). The aim of the SAC has always been to support the learning process in the language classes of the Faculty of Communication, and to encourage students to develop their language skills independently. To achieve these goals the equipment found in the University's Language Center is largely duplicated in the Self-Access Center. For example, listening booths have always been a feature of self-access equipment to support the learning tasks undertaken in the language laboratories. Similarly, computer and DVD booths have been gradually installed to keep pace with the changes in the Language Center.

Introduction of PC@LL

In 2009 NUCB applied to the Japanese Ministry of Education and Science (MEXT) for a grant to help finance replacement of the Sony language laboratories that had by then been in use in the Language Center and Self-Access Center for over fifteen years. It had been increasingly difficult to service the cassette recorders and, although they had given excellent service, it was clearly time to update the technology.

To make a sound choice regarding new equipment, a number of companies were approached to give demonstrations of their systems. The Faculty Technology Committee in conjunction with the university's Computer Department examined the features of each system and the overall cost. It was eventually decided that the Personal Computer Assisted Language Learning (PC@LL) system of Uchida Yoko Co. Ltd. (2007) should be purchased.

The company claims under the "Features and Advantages" of its system that it is easy and simple to use for both teachers and students. The console screen for teachers is described as being well composed and carefully considered so that teachers can operate it easily. Moreover, the company states that students will not find difficulty in working with the software, thus motivation will not be impaired. It is also claimed that the system is flexible and can be adapted to all kinds of use, including the improvement of all four language skills, i.e. listening, speaking, reading and writing. In addition, there is supplementary training

software to improve pronunciation and rhythm, as well as drill programs for the acquisition of the grammar and vocabulary useful for TOEIC, TOEFL, and other international examinations.

The new computers and the PC@LL software were installed in the former language laboratories ready for the start of the new academic year in April 2009. Similarly, in March 2009, 42 PC computers with the PC@LL system were installed in the SAC. A number of training sessions were then arranged for the Faculty academic staff to become acquainted with using the system before the start of the academic year. From 1st April 2009 teachers and students started working with PC@LL.

EVALUATING THE CHANGE

Questionnaires

Since the founding of the SAC, questionnaires have been regularly administered to the students at NUCB to monitor their learning, and also to gauge reaction to any changes in the language program. Similarly, when equipment has been added to or changed in either the Language Center or SAC, questionnaires have been administered to evaluate those changes. Given the investment that was being made in PC@LL both in terms of money and the time that would be dedicated to its use, it was important to have some ongoing data to evaluate student reaction regarding the efficiency of the system. It was also useful to test some of the claims that had been made about PC@LL by the company in terms of ease of use and motivation. Questionnaires were administered in July 2009, January 2010, April 2010, October 2010, January 2011 and July 2011. We give the results of some of the questionnaires below.

Questionnaire results

The first questionnaire relating to PC@LL was administered to 79 second-year students in July 2009. By this time the PC@LL system had been in use in the Language Center and the SAC for four months. As the second-year students had experience of working in the SAC before the introduction of PC@LL, they would be in a good position to judge the difference. The questions were to give us a general feeling of their reaction. The use of percentages to summarize the responses should, therefore, be regarded as impressionistic rather than as totally mathematically accurate. The first two questions that interested us were whether the students considered the system easy to use and how effective they thought it to be. We were then interested in what the students regarded as the most useful aspects and functions of the new system.

Chart 1 gives the responses to a question about user-friendliness. 77% found the system either easy to use or very easy to use. A total of 23% replied that they did not know, or that it was not easy to use or not at all easy to use.

In Chart 2 the responses regarding the effectiveness of the system are given. 56% of the students felt it to be either effective or very effective, 38% replied that they did not know and 6% thought it was not effective.

Table 1 shows the results relating to the question about the useful aspects of the new system. 38% of the respondents felt that the greatest advantage was that they did not need to go to the SAC counter in order to borrow sound materials, 25% thought it easy to find the necessary materials on the computers, 19% liked the fact that there are a variety of exercise functions to improve language skills, and 16% appreciated that it was easy to find the particular part they wanted to do in the listening practice.

Finally, we were interested in the functions that the students found the most useful. Students could choose more than one function if they wished. The results are shown in Table 2. “Repeating” was regarded as the most useful function with 33%. The “Shadowing” function and “Speed control” were both in second place with 22%.

In January 2010 the same four questions were put to 83 students at the end of their first year at the uni-

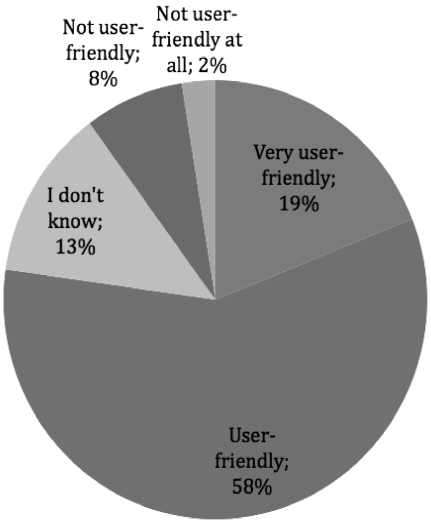


Chart 1 − How user-friendly is the system?
(79 second-year students July 2009)

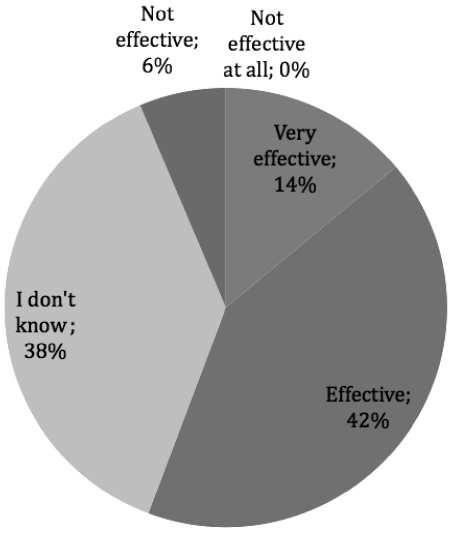
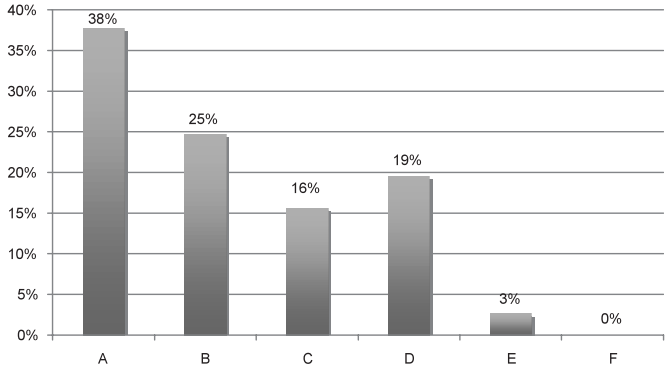


Chart 2 − Effectiveness of the PC@LL system.
(79 second-year students July 2009)

versity. They had been using the PC@LL system for two semesters. Unlike the second-year students they had never known or worked in the SAC without PC@LL being there. Again we were simply trying to get a general feeling of how easy the system was to use and how effective the students thought the system to be.

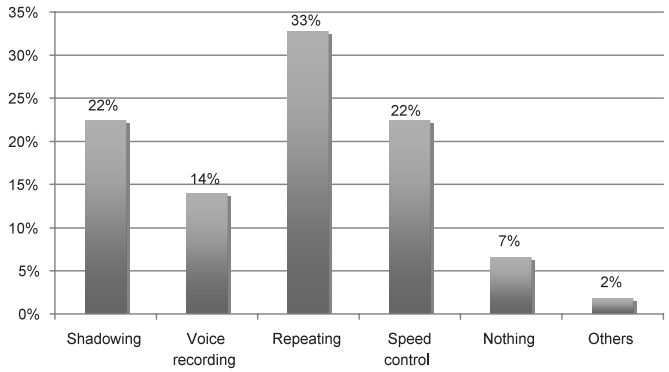
Chart 3 gives the results for the ease of use. 63% of the first-year students indicated that they found the system easy to use or very easy to use. 37% did not know or found the system either not easy to use or not easy to use at all. Clearly, the first-year students were finding the system a little less user-friendly than the second-year students had done, as illustrated above in Chart 1, despite the fact that they had been using it

Table 1 − Useful aspects of PC@LL. (79 second-year students July 2009)



A. I do not need to go to the SAC counter to borrow sound-materials.
B. It is easy to find the necessary materials on the computers.
C. It is easy to find the part I want to do in the listening practice.
D. There are a variety of exercise functions to improve my language skills.
E. Nothing in particular.
F. Others

Table 2 − Useful functions on PC@LL. (79 second-year students July 2009)



for a longer period of time when the questionnaire was administered. Perhaps this difference can be explained by the expectation that students in their second year should be more confident in their use of computers in general, not just when using PC@LL.

In Chart 4 the results for effectiveness are given. Here the first-year students are more positive than their seniors. After two semesters of use 68% of them thought that the system was either effective or very effective. Although this is 12% above the second-year result a semester before, it could be argued that a total of nearly a third of them were still either unsure whether the system was effective or in fact thought that the system was not effective.

Table 3 shows the results of the question relating to the useful aspects of the new system. In this case the students were asked to choose one aspect only. 27% of the respondents chose that it is easy to find the part that they want for the listening practice and 26% chose that it is easy to find the necessary materials on the computers. 21% thought the greatest advantage was that they did not need to go to the SAC counter in order to borrow sound materials. This was 11% lower than the second-year students, but still indicates that

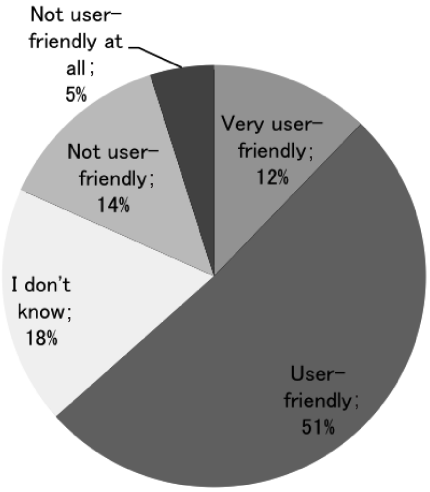


Chart 3 – How user-friendly is the system?
(83 first-year students January 2010)

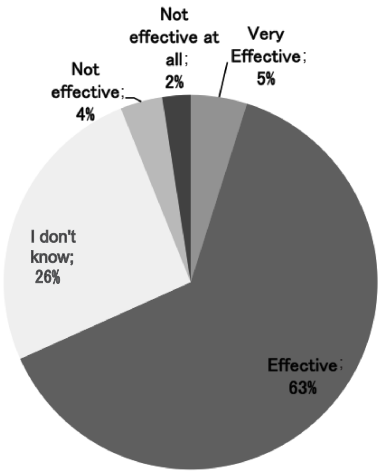


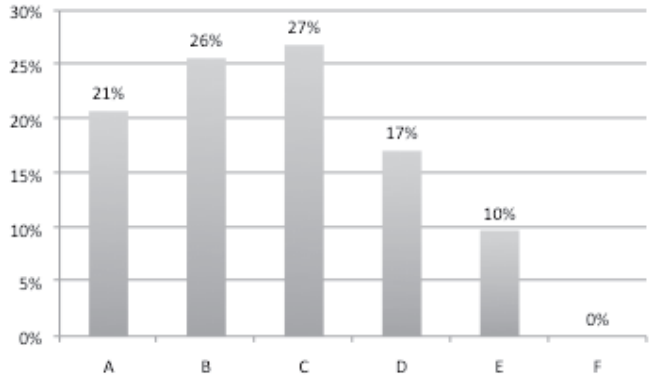
Chart 4 – Effectiveness of the PC@LL system.
(83 first-year students January 2010)

a fifth of the students are more concerned about physical ease in relation to independent study rather than other aspects. 17% of the first-year students chose that there are a variety of functions to improve their language skills.

Finally, we were again interested in the functions that the students found the most useful. They were asked to choose one function only. The results are shown in Table 4. The "Repeating" and "Speed control" functions shared first place at 35%.

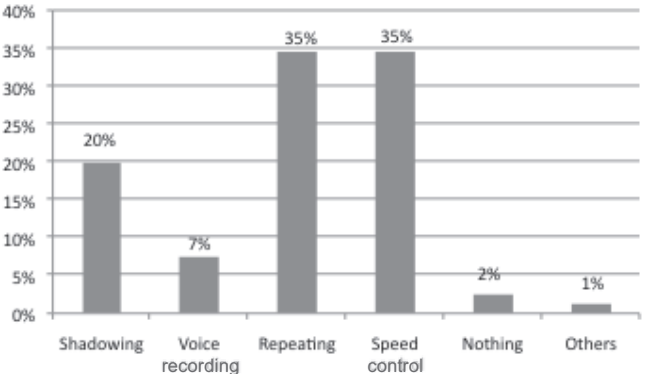
As has been stated, our intention in this initial feedback was only to have a general impression regarding student reaction. This is reflected in the fact that the questionnaires are not particularly sophisticated in their construction. The two initial questionnaires did, however, still give us a general feeling that the students found the system relatively user-friendly and effective, although there were clearly reservations

Table 3 − Useful aspects of PC@LL. (83 first-year students January 2010)



A. I do not need to go to the SAC counter to borrow sound-materials.
B. It is easy to find the necessary materials on the computers
C. It is easy to find the part I want to do in the listening practice.
D. There are a variety of exercise functions to improve my language skills.
E. Nothing in particular.
F. Others

Table 4 − Useful functions on PC@LL. (83 first-year students January 2010)

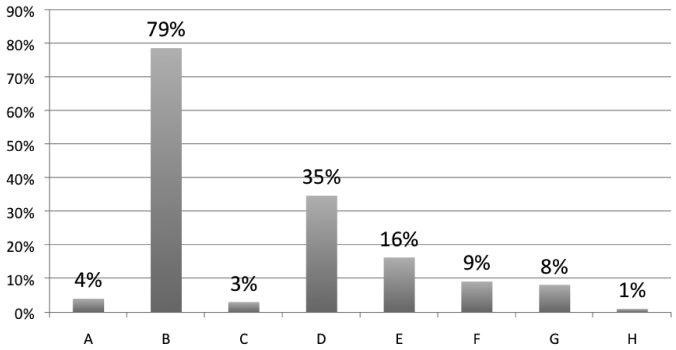


among those asked. The system also seemed to be making life easier in that students appreciated aspects such as not having to go to the SAC counter for materials or that it was easy to find the relevant exercises to practice. Also, certain functions such as repeating, shadowing and the speed control were comparatively popular. This last point mirrored some of the results we had obtained from questionnaires about the Sony language laboratories.

In April 2010 we administered a further questionnaire to 98 first-year students starting their university careers. A question that particularly interested us focused on student concerns related to language study. This question has featured in a number of our surveys over the years. The students were allowed to choose more than one response. Table 5 shows the results. As had been the case in all our previous surveys the most common choice was “I am motivated but do not know how to study”.

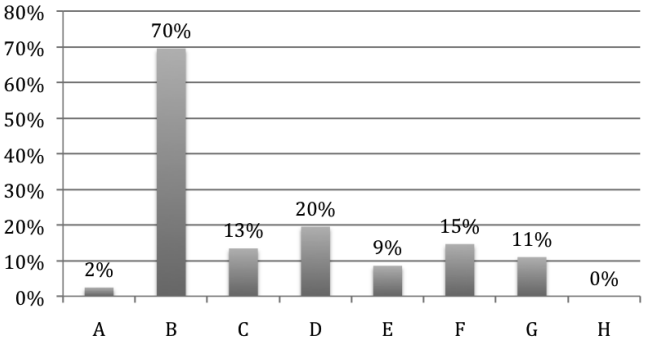
We were interested to see if the new computer system and its regular use would in any way alter responses to this question. Accordingly, in January 2011 the question was again put to the first-year students at the end of their first academic year in the university. By this time they had been using the PC@LL

Table 5 − Concerns relating to language study. Circle all that apply. (98 first-year students April 2010)



A. I don't know why I am studying.
B. I am motivated but don't know how to study.
C. I know how to improve but I am not motivated.
D. I am too conscious about others' scores and ability.
E. Classes are too difficult.
F. I do not have time to study.
G. I do not have any concerns.
H. Others

Table 6 − Concerns relating to language study. Circle all that apply. (82 first-year students January 2011)



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D. I am too conscious about others' scores and ability.
E. Classes are too difficult.
F. I do not have time to study.
G. I do not have any concerns.
H. Others

system on a regular basis in both the SAC and the classroom for two semesters. 82 students completed the questionnaire. Table 6 gives the results. As can be seen, 70% still chose response B. This basically mirrored results in previous questionnaires. Clearly, the PC@LL system *per se* was not having a major impact on this cohort of students in terms of knowing how to study. Interestingly, there was an increase of 10% in those choosing "I know how to study but am not motivated". The "Others" option had fallen away com-

pletely to zero.

In the next sets of charts and tables we look at other responses given by the 82 first-year students at the end of their first academic year in January 2011. We compare these with 89 of our current first-year students at the end of their first semester in July 2011, in other words, two successive first-year cohorts.

In charts 5 and 6 are the responses to how many hours students spend per week using PC@LL in the SAC. The majority of students in both groups spend only the minimum amount of time working with the system, as quantified by zero to two hours. The responses from the January group show that they spend slightly longer working with PC@LL than the July group. On average then the majority of students in both cases spend well below an hour per day working with PC@LL in their independent study.

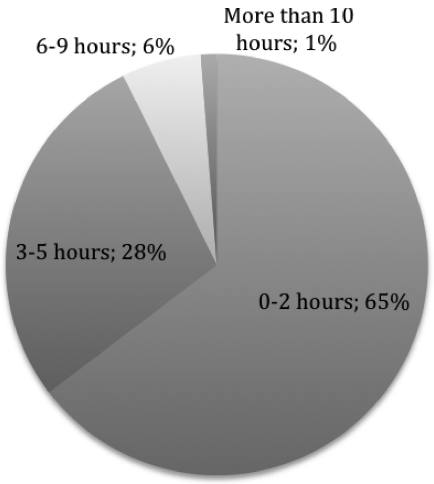


Chart 5 – Approximately how many hours per week do you use PC@LL in the SAC? (82 first-year students January 2011)

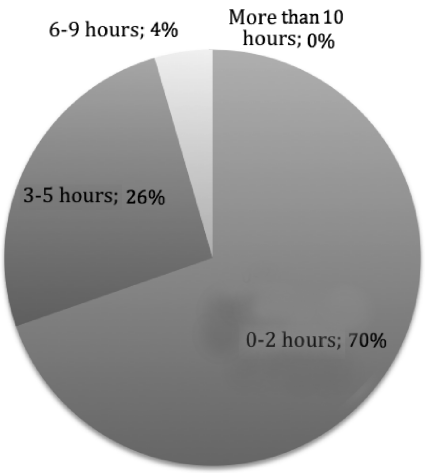


Chart 6 – Approximately how many hours per week do you use PC@LL in the SAC? (89 first-year students July 2011)

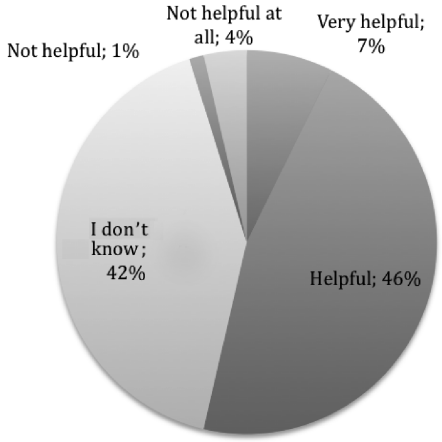


Chart 7 – How helpful is PC@LL in improving your English language skills? (82 first-year students January 2011)

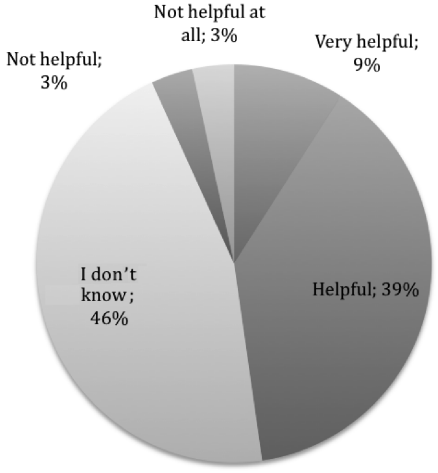


Chart 8 – How helpful is PC@LL in improving your English language skills? (89 first-year students July 2011)

Charts 7 and 8 give percentages to illustrate students' feelings about how helpful PC@LL is in improving English language skills. The responses for helpful or very helpful are hovering around the 50% mark in both charts, with the July group at only 48%. These results seem relatively low with no clear majority in either group feeling that the PC@LL system is really helping them to improve their language skills. This result, however, does seem to fit into the pattern of previous years where students say that they are motivated but do not know how to study. It also underscores the point made above that the PC@LL system in itself does not seem to have resolved this particular area of concern.

Can we extrapolate then from charts 5 to 8 that, since the students are unsure whether the system is helpful in improving their language skills, they do not spend time using it, or conversely, because they do not use the system enough, they are unaware of how helpful it can be? It is possible to conjecture either

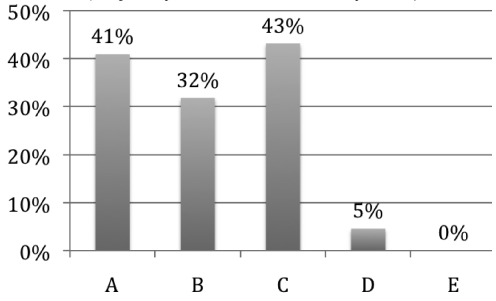
way from the results in this particular questionnaire. In general, however, we can summarize the feedback by saying that at least half the students questioned spend the minimum amount of time working with the system and a good proportion of those questioned are not sure whether it is helpful in improving their language skills.

Tables 7 and 8 look at the functions of PC@LL, the materials available, access to machines, and so on. The January group was allowed to make more than one choice. By contrast, the July group was asked to choose only one. In both cases, however, the availability of machines was the principal choice, with the functions of PC@LL coming a strong second in the January group. The quality of the materials came third in both cases.

Tables 9 and 10 look at the skills that the students thought they had improved by using the PC@LL system. Again the January group was allowed to make more than one choice whereas the July group was asked to choose one only. In both cases, however, Listening was the skill chosen by the majority, with Speaking in second place.

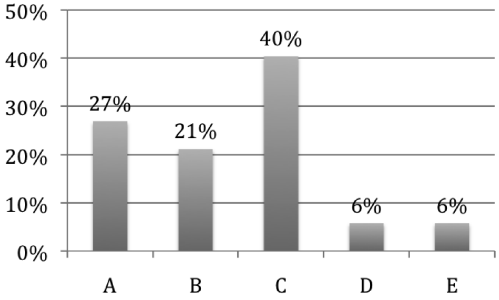
In Tables 11 and 12 we give the responses to the question about the functions that the students find most useful on PC@LL. The January group puts Speed control in first position, with Repeating second. The July group reverses that order by a small margin. Shadowing is placed third by both groups. It should be added that the students have in general enjoyed being able to record and listen to their own voices, and also compare their recorded versions to the original on the system.

Table 7 − Why do you think PC@LL is helpful in improving your English language skills? (82 first-year students January 2011)



A. Functions of PC@LL are excellent.
B. The materials available on the PC@LL are excellent.
C. Machines are easily available.
D. I do not know.
E. Others

Table 8 − Why do you think PC@LL is helpful in improving your English language skills? (89 first-year students July 2011)



A. Functions of PC@LL are excellent.
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Table 9 – Skills that you think PC@LL helped you to improve.
(82 first-year students January 2011)

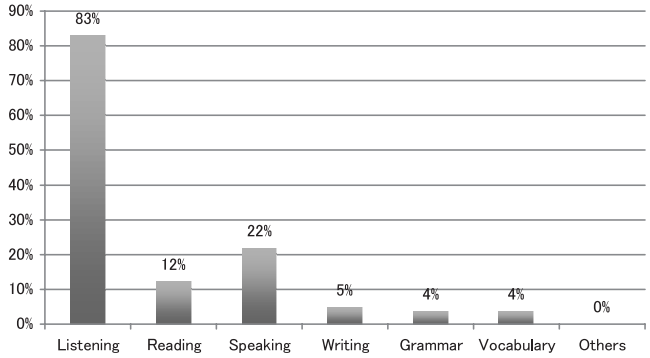


Table 10 – Skill that you think PC@LL helped you to improve.
(89 first-year students July 2011)

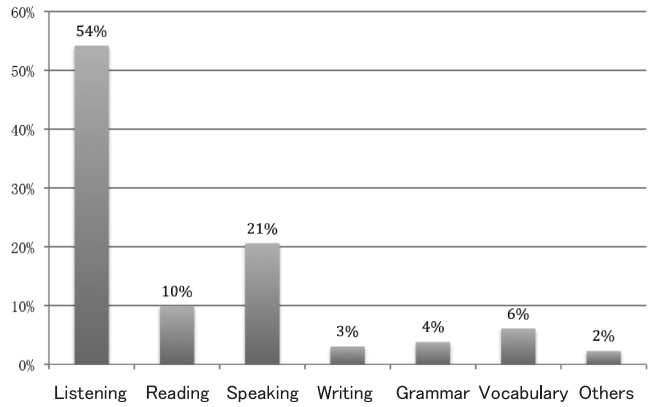


Table 11 – Useful functions on PC@LL.
(82 first-year students January 2011)

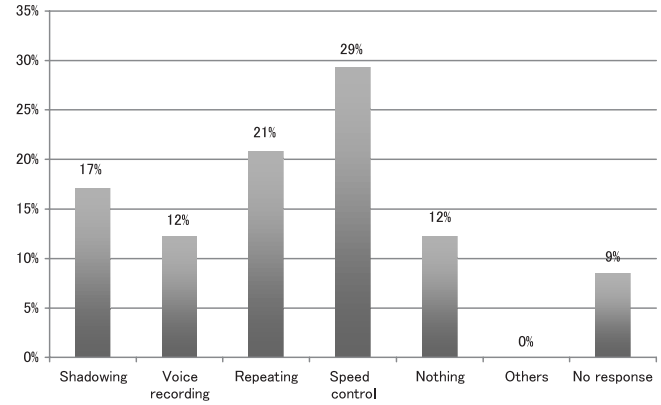
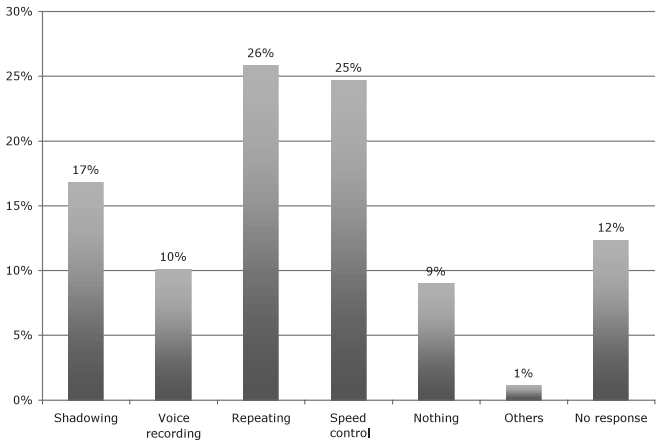


Table 12 − Useful functions on PC@LL.
(89 first-year students July 2011)



In Charts 9 and 10 the responses to a question about PC@LL's influence on TOEIC improvement are given. The January 2011 group gives a score of 71% to influential and highly influential. The July group gives 64% for these options. This slight difference might be because the July group has been studying in the university for only one semester and has taken fewer TOEIC tests. The January group has been study-

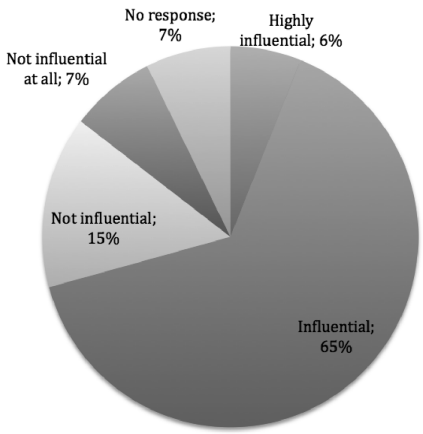


Chart 9 − How influential is PC@LL in improving your TOEIC score?
(82 first-year students January 2011)

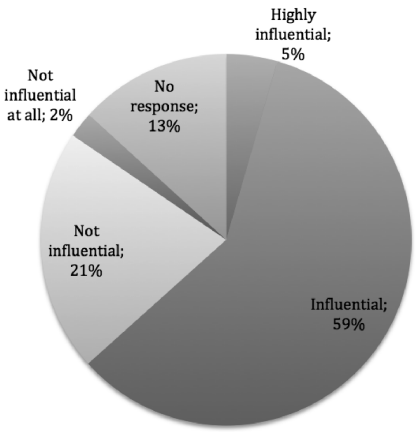


Chart 10 − How influential is PC@LL in improving your TOEIC score? (89 first-year students July 2011)

ing for two semesters and thus would probably be more aware of any influence. In the responses to this particular question there is clearly a majority who think there is an influence. This contrasts with the earlier question about PC@LL being helpful in improving English language skills where the results had been more equivocal.

CONCLUSION

The PC@LL system now plays a major role in many of the classes in the Faculty of Communication. It is also used on a regular basis in the Self-Access Center. Moreover, from the questionnaire results it is clear that many students have become aware that it can have a positive influence on improving their TOEIC scores. Paradoxically, however, a large number of students still do not feel that the system is in fact helpful in the improvement of their English language skills. Many of them spend the minimum amount of time working with the PC@LL system in self-access. Although it is important not to be dominated by the technology itself and that actual usefulness should determine the level of exploitation, it is also true that we are not fully exploiting the many possibilities that the system boasts.

As White (2011) points out it is important for us to give the correct ongoing training and support to both teachers and students when introducing a new CALL system. Our strategy should be to ensure that teachers are adequately trained in the various possibilities that the system has to offer. They should then choose the most effective to motivate their students both in the classroom and also in the Self-Access Center. Following on from this, additional materials need to be created for both the classroom and self-access to reach specific goals, and ensure that students achieve the expected learning outcomes. We should then monitor with more sophisticated survey instruments progress that is made. In this way, we would hope to have more confident use of the system in the classroom and self-access, and more positive feedback overall from both teachers and students.

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