Exploring Learner's Patterns of Using the Online Course Tool in the University Classes

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Abstract
Online course tools such as WebCT or Manaba+R are popularly used in university classes and enhance learners' understanding of their course contents. In addition, teachers try to utilize these online course tools for their students such as giving their students online discussions, providing students with additional materials and so forth. However, based on the authors' observation of students, students often do not see these additional materials and messages on Manaba+R. The authors encourage their students to use it and, in fact, they put a lot of additional materials of the course or useful messages for their students on Manaba+R. The aims of this study are here. Firstly, this study investigates what extent students actually use Manaba+R through the semester. Secondly, it tries to find suggestions of how teachers can promote their students to maximize making use of Manaba+R. To collect the data, coding actual access to Manaba+R by students and questionnaires were used. The total of 335 responses of questionnaires were collected and total of 380 were coded for actual access to Manaba+R. The questionnaire results show that many students showed positive attitudes towards using Manaba+R. The results of coding numbers of access reveal that using Manaba+R was part of their assessment of their course, students tended to use it.

Keywords: online course tools, university education

Introduction

Thanks to rapid growth of technological devices such as smart phones and tablet devices, these technological devices are widely used in university classes. Online course tools such as WebCT, Moodle or Manaba+R are often used for many courses at university. These online course tools provide both teachers and students with a better learning opportunity when they are used effectively (For example, Harris,1999: Mende,1999: Morss,1999 and Burgess, 2003). Although online course tools are useful for both teachers and students, several studies report problems with these tools such as lack of student's motivation (Ngai, Poon and Chan, 2007) and technical problems which make student's access unavailable for using online course tools (Petrides, 2002). The authors of this study encourage their students to use Manaba+R in their classes. They also post some messages and homework on Manaba+R. However, the authors of this study realize that some students often access (delete word) Manaba+R but other students hardly access to it throughout the semester. Thus, there are two aims of this study. Firstly, this study investigates to what extent students actually use Manaba+R throughout the semester. Secondly, it tries to find ways teachers can promote the use of Manaba+R to their students so they maximize its use.

Literature review

Past studies of use of online course tools for university students explains several advantages of these online course tools. For example, Ngai, Poon and Chan (2007) explains that online course tools such as WebCT allow students to access learning tools such as discussions boards, chat rooms and course content management. Hagler (2004) suggested the benefit of WebCT is like building rapport with other students through discussions and chart features. Picciano (2002) also claims the advantage of using online course tools for students. They provide students with a sense of being in and belonging in their course, and the ability to interact with their classmates and their lecturers outside a face-to-face class. Willette (2002) points out the flexibility of using online course tools. For example, if students cannot come to the class or if they miss things in class, then they can access online course tools to check lecture notes anywhere online access is available. Also instead of using Emails or phone calls, if a lecturer thinks a question by one of students is useful for other students, then the question and answer can be posted on bulletin board at anytime. Petrides (2002) found that online discussion rooms provide students with an opportunity to discuss more details with other students than face-to-face interactions.

However, online course tools sometimes do not work effectively for students. Ngai, Poon and Chan (2007) found that their student's attitude towards online course tools was important for them to use online course tools. They conclude that their students used WebCT because their lecturers told them to use it as a specific subject requirement. Therefore, if lectures do not ask students to use online course tools, then students may not show their interest in using online course tools. In addition, Ngai, Poon and Chan (2007) point out that using online course tools should be easy for students to use. If those online course tools are too difficult for students to use, then students loose their interest in using them. Further et al. (2002) argued that unless a Web-based learning tool was professionally developed, implemented, maintained and administrated, the positive support to learning could go in a different direction.

Petrides (2002) found that some students were disadvantaged due to technical problems. Some students had slow modems at home which made it difficult for them to participate in online discussions. Other students were only able to access to the Internet outside of the class at their workplace and thus it was difficult for them to use online course tools outside of the class.

Methodology

In order to collect the data for this study, the authors used questionnaires for their students and counted numbers of views of Manaba+R by participants. All questions on questionnaires are listed below.

Q1: How often did you bring your PC in class?
1: every time, 2: almost every time, 3: sometimes, 4: hardly, 5: never
Q2: How often did you use your PC in class?
1: every time, 2: almost every time, 3: sometimes, 4: hardly, 5: never
Q3: How often did you use Manaba+R?
1: every time, 2: almost every time, 3: sometimes, 4: hardly, 5: never
Q4: Did you have homework through Manaba+R?
1: every time, 2: almost every time, 3: sometimes, 4: hardly, 5: never
Q5: Did you read messages on Manaba+R?
1: every time, 2: almost every time, 3: sometimes, 4: hardly, 5: never
Q6: Reasons for Q5
Q7: Do you think Manaba+R is useful for your classes?
1: Strongly agree, 2: agree, 3: not really, 4: never
Q8: Where do you normally look at Manaba+R?
1: in class, 2: at home, 3: outside the class but on campus, 4: on a bus or train,
5: others
Q9: Do you think Manaba+R is useful to communicate with your teacher?
1: strongly agree, 2: agree, 3: not really, 4: never

Participants in this study are mainly both 1st and 2nd year students at a private university in Japan who are majoring sport and health science and economics. Due to repeating the same course, 3rd year students are included in Economics department classes. Each department has different programs. In the sport and health science department, two English subjects: project-based English and skills workshop are offered for students. The data is collected from all project-based English subject. In economics department, there are English classes covering the four skills, such as Listening, Reading, CALL and Communication & Writing. The data is taken from Listening and CALL classes. In addition, the data is also collected from the Introduction of Economics in English 1 (for 2nd year students).

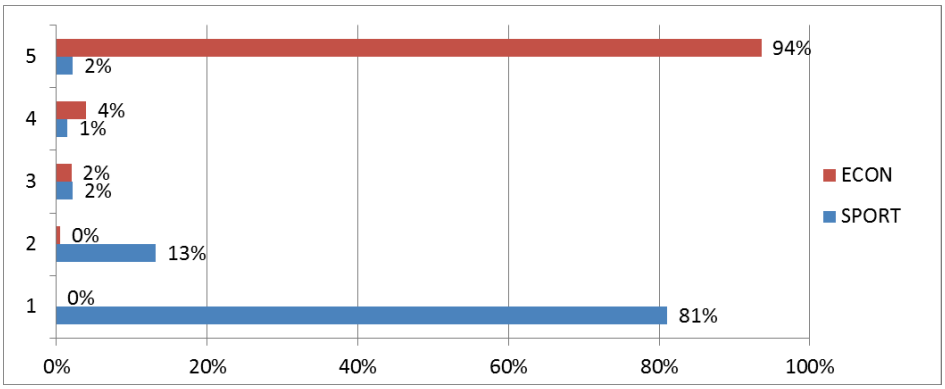
A total of 380 responses to questionnaires were collected. Questionnaires were distributed to students who belong to both the Sport and health science department, and the Economics department. The authors of this study coded numbers of the total access to Manaba+R. The total of 159 (80 first year students and 79 second year students) students of Sport and health science department and 220 (121 first year students, 61 second year students and 38 third year students) Economics department were coded. The total of 379 students from both departments were coded to show the numbers of actual access to Manaba+R.

Results

Results of questionnaires

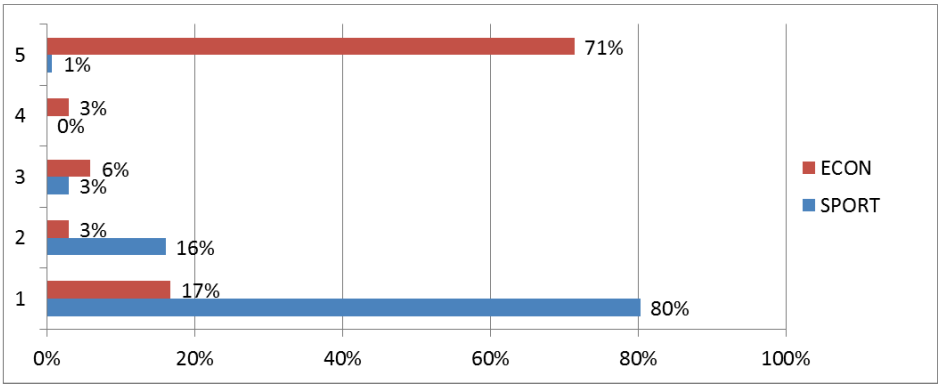
Results of all questions are put into graphs below. Here after, SPORT for Sport and health science department, and ECON for the department of Economics are used.

Graph 1 (Results of Q1)



Graph 1 shows the results of Q1 (how often did you bring your PC in class?). It shows a significant difference between the two departments. Most of those who belong to SPORT brought their PC into their class. 81 % of students answered every time and 13% of students answered almost every time. On the other hand, most of those who belong to ECON did not bring their PC into their class. 94% of them answered that they never brought their PC in their class and 4 % of them answered that they hardly brought their PC.

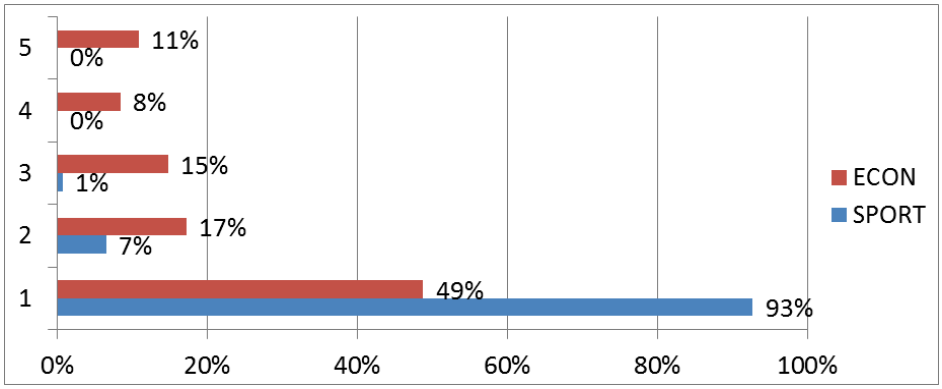
Graph 2 (Results of Q2)



Graph 2 shows the results of Q2 (how often did you use your PC in class?). The results of this question links with the results of Q2. SPORT students used their PC a lot in their class. 80% of them answered every time and 16 % answered almost every time. Since SPORT students answered 94% brought their PC into their class in Q2, the ratio of using PC in class was very high. As opposed to ECON students, 71% of them answered they never used their PC in class which is linked with their answers in Q2. In Q2, 94% of them never brought their PC into their class which made them unable to use their PC in class. However, there is an exception for ECON students in Q2. 17% of them answered that they used PC every time. This is because these

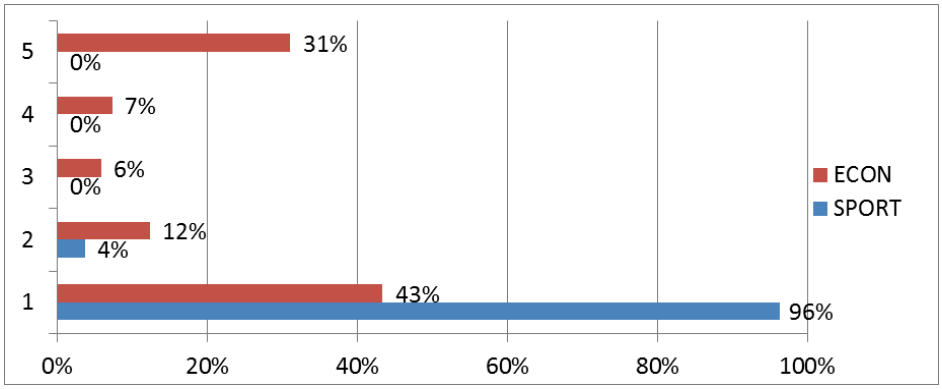
students were in CALL classes where each student accessed a PC provided by their university.

Graph 3 (Results of Q3)



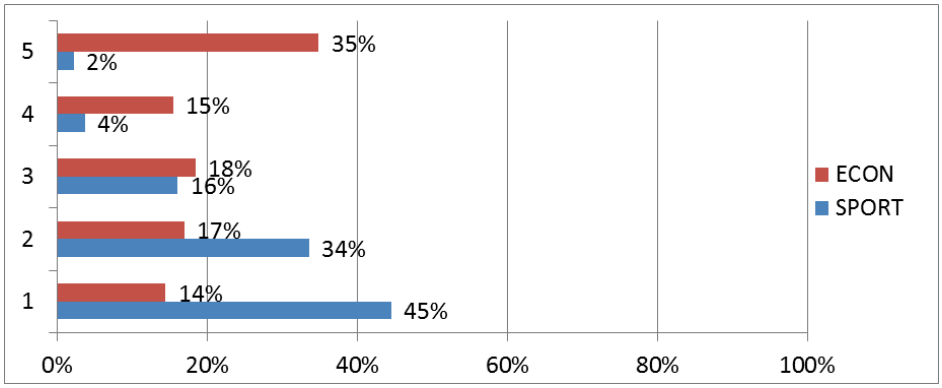
Graph 3 shows the results of Q3 (how often did you use Manaba+R?). Similarly to the results of both Q1 and Q2, SPORT students lead ECON students in Q3. 93% of SPORT students answered every week. However, positive results for ECON students are seen here. 49% of ECON students answered every week and 17% of ECON students answered almost every week. Over 66% of ECON students checked Manaba+R frequently through the semester.

Graph 4 (results of Q4)



Graph 4 shows the results of Q4 (did you have homework through Manaba+R?). Once again, 94% of SPORT students answered every time and only 4 % of SPORT students answered almost every time. There is an interesting trend for ECON students. While 43% of ECON students answered every time, 31% of ECON students answered never. This depends on English classes. Some English classes for ECON did not require students to do homework and thus students did not have to do their homework on Manaba+R. As for SPORT students, homework was assigned every week on Manaba+R and thus a quite high ratio of positive answers were seen in this question.

Graph 5 (results of Q5)



Graph 5 shows the results of Q5 (did you read messages on Manaba+R?). 45% of SPORT students answered every time and 34% of SPORT students answered almost every time. In total, 79% of SPORT students frequently read messages by their teachers on Manaba+R. Messages for SPORT students on Manaba+R were something important for their study, such as some tips for their assessments and feedback for their presentations and homework by their teacher. As for ECON students, 35% of ECON students answered never and 15% answered hardly. Thus 50% of ECON students negatively answered this question. This is because their teacher did not often post messages on Manaba+R as Table (shown earlier) in the section of coding actual access shows.

Table 6 (Q6: reason for Q5- Sport)

SPORT		
Positive		
# of comments	%	
44	42%	The teacher put useful information for this class
19	18%	It shows some important tips for assignments in this class.
9	9%	Everyweek, there is homework on there
9	9%	To make sure if there is any message or homework
6	6%	I didn't understand some parts in class but Manaba+R expianed them
6	6%	To download lectuer notes
5	5%	It shows about presentations which I have to do
2	2%	If I don't check it, then I'll be in trouble later
Negative		
5	5%	It made me annoyed to check it, I was being lazy.
		It was too much messages for me and I was being lazy
		Explanation in class was enough for me without chekcing Manaba+R
		I don't really know how to use it
		I was being lazy
TOTAL 105 comments		

Table 6 shows that reasons for Q5. The total of 226 reasons were written (SPORT: 115 and ECON: 121 comments). SPORT students tend to answer positive reasons more than negative reasons. For instance, 42% of SPORT students said "the teacher put useful information for this class". 18% of SPORT students said "It shows some important tips for assignments in this class". These two reasons suggest that Manaba+R helped student's study. 9% of SPORT students answered "every week,

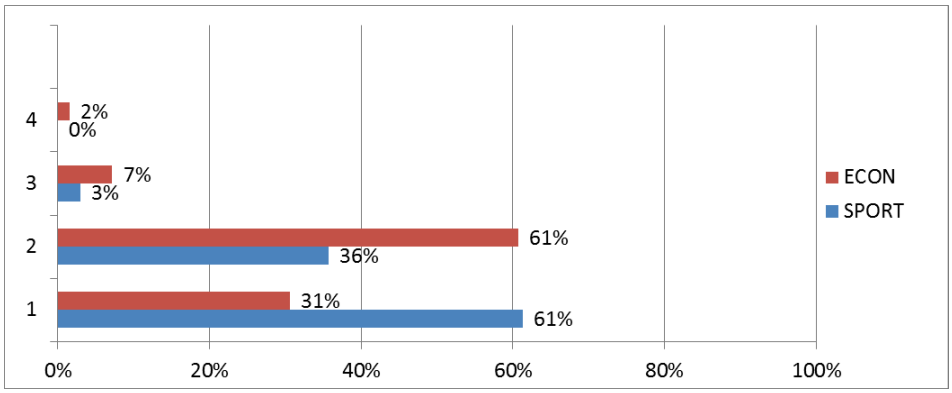
there is homework on there". This reason suggests student's external motivation to check Manaba+R. 6% if SPORT students answered "to download lecturer notes". There are also negative reasons from SPORT students. Mostly they showed their laziness on their answers. For example, "it made me annoyed to check it, I was being lazy", "it was too much messages for me and I was being lazy".

Table 6 (Q6: reason for Q5- Sport)

ECON		
Positive		
# of comments	%	
21	17%	To check the class information.
14	12%	To check test score.
12	10%	I must submit homework through Manaba+R
3	2%	Important information was posted on the Web.
Negative		
15	12%	I didn't know how to use it, what to do.
14	12%	No chance to use Manaba+R
14	12%	No need to check it.
11	9%	No information was posted.
Comments		
17	16%	Others
TOTAL 121comments		

As for ECON students, there are both positive and negative reasons. Concerning positive reasons, 17% of ECON students answered "to check the class information". This is a similar answer to SPORT student's "the teacher posted useful information for this class". 10% ECON students answered "I must submit homework through Manaba+R". 12% of ECON students answered "to check test score" which was not seen among SPORT students. This is because SPORT students did not have any test type assessments through their subjects. On the other hand, there were negative reasons among ECON students. 12% of ECON students said "I didn't know how to use it, what to do". 12% answered "no chance to use Manaba+R" and 12% answered "no need to check it". 9% answered " no information was posted". There were some reasons such as "I can't use computer in class" from ECON students, "I didn't know how to use Manaba+R" from both departments.

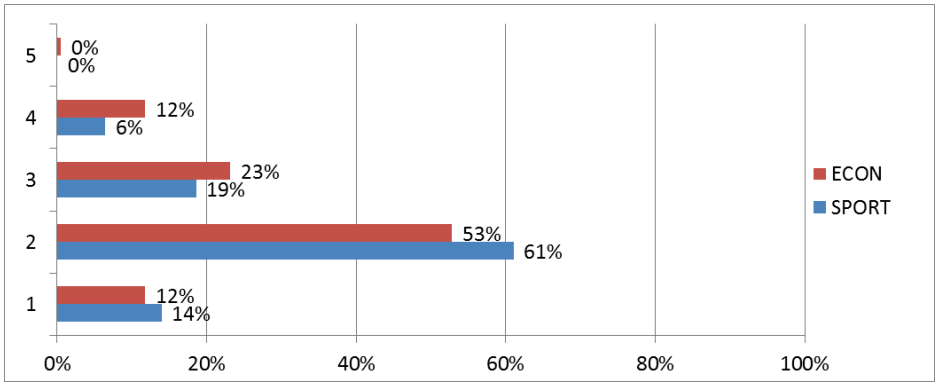
Graph 7 (Q7)



Graph 7 shows the answer for Q7 (do you think Manaba+R is useful for your class?) Both SPORT and ECON students gave positive answers. The total of 97% (61% for

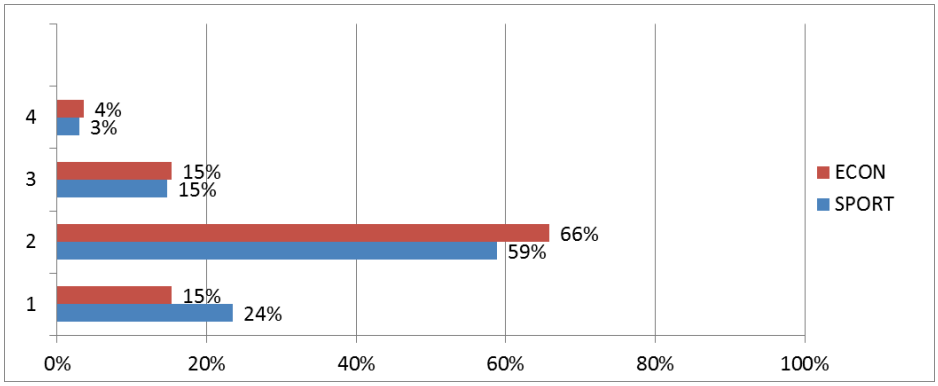
strongly agree and 36% for agree) of SPORT students answered this question positively. As for ECON students, 92% (31% for strongly agree and 61% for agree) answered this question positively. Thus based on the results of this question, students think online course tools are useful for their study.

Graph 8 (Q8)



Graph 8 shows the answer for Q8 (where do you normally look at Manaba+R?). Interestingly, both SPORT and ECON students checked Manaba+R at home the most. 61% of SPORT students and 53% of ECON students answered at home. As for SPORT students, most of them brought their PC in class as seen in graph 1 they tend to check Manaba+R at home at most. In addition, 19% of them checked Manaba+R outside of their class while only 14% of them checked Manaba+R in class. This result suggests that although students were able to access to Manaba+R in class, they did not check it in class. As for ECON students, because most of them did not bring their PC in class as seen in graph 1, the result of this question makes sense.

Graph 9 (Q9)



Graph 9 shows the results of Q9 (Do you think Manaba+R is useful to communicate with your teacher?). Both SPORT and ECON students answered this question positively. The total of 83% of SPORT students (24 % for strongly agree and 59% for agree) see Manaba+R as a useful communication tool with their teacher. Also a total of 81% of ECON students (15% for strongly agree and 66% for agree) see it as the same way as SPORT students do.

Coding numbers of actual access to Manaba+R by students

Table explains names of subjects which the authors used for this study. For Sport and Health Science department, although there are only two kinds of subjects, there are seven classes in total (P1: 3 classes and P3: 4 classes). For the Economics department, three kinds of subjects were examined but the total of six classes are examined (L1:3 classes, CALL1: 1class and Economics in English: 2 classes)

Table 1

Name of the subjects	Department
P1 (Project English 1 for 1st year students)	Sport & Health Science
P3 (Project English for 2nd year students)	Sport & Health Science
L1 (Listening English 1 for 1st year students)	Economics
CALL1 (for 1st year students)	Economics
Introduction of Economics in English 1 (for 2nd year students)	Economics

Table 1 summarizes actual access to Manaba+R by students. First of all, there is a trend that when teachers posted messages on Manaba+R, students tend to access to manaba+R more than when teachers did not post messages (seen as P1:A, B, C, P3:A, B, C, D, E(EEb and EEd)). Messages on the tables were something which were useful for students to get higher marks on their assignments.

Secondly, when teachers posted homework which was as a part of assessments, students tended to access to Manaba+R more compared to when teachers did not post homework on Manaba+R (seen as P1:A, B, C, P3:A, B, C, D, E(EEb and EEd)).

Figure 1

	Total Access	Access rate of one person/ semester	The number of message posted on the web	The number of test score posted on Web	The number of homework through Web
P1A	18373	680	16	0	16
P1B	22010	847	14	0	15
P1C	18343	679	14	0	15
P3A	9367	446	16	0	15
P3B	11213	561	16	0	15
P3C	7771	409	15	0	15
P3D	9566	503	15	0	15
D(L1B)	994	36	0	22	0
E(English ECON -A)	10290	165	3	25	14
D(L1A)	994	40	0	23	0
CALL(LL)	17323	541	0	53	69
E(English ECON -B)	5761	156	3	23	12
D(L1B)	819	24	0	23	0

Figure 1 shows the rate of access to Manaba+R per student through the semester. Students who access the Internet in class tend to check Manaba+R frequently. For instance, those who are in classes such as P1:A, B, C, P3: A, B, C, D and CALL, access Manaba+R over 400 times through the semester. In these classes, teachers encouraged students to use computers in class. However, those who are in classes

such as D:L1A and B, and EEd did not access Manaba+R frequently. In these classes, students did not have an opportunity to access their computer in class.

Discussions

First of all, Manaba+R tends to support student's study, as results of Q6 (reasons for whether students read messages on Manaba+R?) show. There are positive reasons such as "the teacher put useful information for this class" and "It shows some important tips for assignments in this class". These positive answers suggest that Manaba+R helps student's learning and it was effectively used by students.

On the other hand, there were negative answers such as "I didn't know how to use it" and "I can't use the computer in class". The authors of this study explained how to use Manaba+R at the beginning of the semester in class and also students should have had an opportunity to learn how to use it over orientation week. In order to make sure whether every student understands how to use online course tools, teachers need to confirm every student knows how to use it at the beginning of the semester and try to encourage them to use it through the semester. As for the reason "I can't use computer in class", it can be a problem for students to use online course tools. Fortunately, the university where the authors of this study work offers both students and staff free WIFI connection everywhere on campus. Therefore, when those who have a device to access online, they can use Manaba+R anywhere on campus. However, some universities do not offer such an environment which discourages students to use online course tools. As a result, in order to encourage students to use online course tools, it is important for educational institutions to provide an environment for students where they can easily access online course tools.

Secondly, based on the results of the numbers of access to Manaba+R by students, there are some trends of student's access to Manaba+R. Students tend to access Manaba+R when something, which is related with their final grades, was posted on Manaba+R. For example, when homework, test results, quizzes and important messages for their assessments are posted on Manaba+R by their teachers, then students tend to check Manaba+R. This result is a similar result of Rovai's study (2003). Rovai (2003) found that when online discussion was adopted as a part of final grades, students were motivated to post their discussions. He emphasizes the importance of students' motivation to engage in online discussions. As Rovai explains, students in this study also showed their motivation to get higher scores or to pass their subjects by checking Managba+R.

On the other hand, the results of numbers of access Manaba+R showed, when students' external motivation is lost, students tend to miss their opportunity to use these modern technology devices for their study. In addition, the results of Q7 (Do you think Manaba+R is useful for your classes?) show that students see the value of usefulness of online course tools for their study. However, once again, the numbers of access to Manaba+R showed, they only tend to use these online course tools when something which was a part of their final grades was posted by their teachers.

Thirdly, there is another trend that when Manaba+R was not effectively used as a part of course assessments, students did not tend to check it as much as they were expected. As both figure and table of actual access to Manaba+R showed, when the teacher posted more important messages, more access to Manaba+R by students was

seen. More homework was posted on Manaba+R, more access to Manaba+R by students was observed. Thus, based on our results, students' external motivation to use online course tools was important for them to use online course tools. As Sánchez's (2004) claimed, the teacher can be a determining factor for utilization of WebCT. In other words, it is important for teachers to use online course tools effectively and frequently. In particular, as the results of coding numbers of actual access showed, when teachers use online course tools as a part of course assessments, these online course tools tend to be used effectively by students.

Fourthly, there was a trend that when computers are available for students in class , where either, computers are provided in class or students are encouraged to bring their own computer to class by their teachers, students tend to check Manaba+R more than those who do not access computers in class. The results of Q8 on our questionnaires (Where do you normally look at Manaba+R?) shows that many students in this study are able to access Manaba+R outside of the campus. This is probably because many students own their mobile phones which allow them to use internet almost anywhere as long as internet is available. However, the results of Q 8 also suggest that both SPORT and ECON students tended to miss opportunity to use online course tools in class. In particular, most of SPORT students had their own PC in class but they did not see much online course tools.

In addition, the university where the authors of this study work, offers both staff and students free Wi-Fi anywhere on campus. Therefore, students can connect to Internet on campus as long as they have access to computers. As the results showed, in the environment where free Internet connection is available, when teachers encourage students to use online course tools in class, students tend to use online course tools. Thus, it is important for teachers to utilize the environment where online course tools are available in order to encourage students to use them.

Conclusion

This study investigated the use of online course tools by Japanese university students. In order to collect data, both questionnaires and coding numbers of actual access to the online course tool were used. There were two aims of this study. Firstly, this study investigated what extent students actually used Manaba+R through the semester. Secondly, it tried to find suggestions of how teachers could promote their students to maximize making use of Manaba+R. Results of both questionnaires and coding numbers of access to Manaba+R give answers for the aims.

The results of questionnaires showed many positive answers by participants in this study. Many of students answered that Manaba+R was useful for their subjects and was a useful tool to communicate with their teachers. In particular, many of SPORT students in this study answered that messages on Manaba+R were important for their assessments and therefore they read those messages.

Coding numbers of access to Manaba+R showed some interesting results. First of all, when teachers posted messages which were useful for assessments of the course, students tended to read these messages. However, when teachers did not post those messages on the online course tool, students did not tend to check them. Secondly, when homework which was part of the assessments towards the final grade, students

tended to access Manaba+R. However, when homework was not posted to Manaba+R, then students did not tend to access to it. As a result, to use online course tools effectively for the class, it is important for teachers to extract students' external motivation. It is also important for educational institutions to create an environment for students where they can easily get access to online course tools.

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