Investigating The Effective Use of Online Course Tools for University Athletes in Japan

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Abstract

University athletes tend to achieve lower academic performance, often due to their extensive commitment to their sport club activity (Cosh & Tully, 2014; Adler & Adler, 1985). The authors of this study believe that online course tools are useful for supporting university athletes academically if both teachers and students use these tools effectively. Thus, in this study, the authors try to encourage university athletes to use one of the online course tools, manaba+R, in their English classes. The aims of this study are 1) to explore to what extent university athletes use manaba+R for their study and their attitude towards using this tool and 2) to discuss how teachers can support university athletes' study with manaba+R. This study mainly used quantitative analysis with some qualitative analysis. As for the quantitative analysis, a questionnaire was used. Then the data were discussed qualitatively. A total of 81 university students (first and second year students) majoring in sports and health science at a private university in Japan participated in this study. The results showed that while the majority of the university athletes had positive attitude towards using manaba+R, they failed to utilize this tool effectively for their study. In particular, the results revealed that they did not effectively use the useful information or material provided on manaba+R for completing their assignments because of their insufficient time for study, lack of time management skills, and low motivation to get higher marks. In light of these findings, practical implications for teachers were discussed.

Keywords: university athletes, online course tools, manaba+R, EFL

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Introduction

The integration of sports and education has remained highly demanding for university athletes, which often results in their lower academic performance and lower motivation to study (Adler & Adler, 1985; Simons, Rheenen, & Covington, 1999; Lucas & Lovaglia, 2002). The authors of this study teach English at a private university in Japan; and many of the university athletes they teach also struggle academically. In order to support these university athletes, the authors of this study believe that online course tools such as Moodle, blackboard or manaba+R can serve as an effective academic support as many past studies have explored the benefits of these tools in education (Hung & Zhang, 2008; Dabbagh & Kitsantas, 2005; Swanson, 2007). Thus, they encourage university athletes to use one of the online course tools, manaba+R, in their English classes. Useful course information, homework and additional material are provided on manaba+R to assist them with their study. However, the authors of this study realize that university athletes do not seem to use manaba+R effectively. Thus, in order to investigate the effective use of this tool for university athletes, this study aims to 1) explore to what extent university athletes use manaba+R for their study and their attitude towards using this tool (compared to university non-athletes) and 2) discuss how teachers can support university athletes' study with manaba+R.

Literature Review

Academic performance of university athletes

University athletes tend to have lower motivation to study and lower academic achievement due to a number of factors. In particular, insufficient time for study has been considered as one of the significant barriers to their academic success (Adler & Adler, 1985; Cosh & Tully, 2014; Simons et al., 1999). Adler and Adler (1985) revealed that a lack of time to study due to athletic participation affected university athletes' motivation to study as most of the university athletes in their study aimed to get only the minimum GPA. Similarly, in Cosh and Tully's (2014) study on Australian student athletes, most athletes felt that they had no control over time to study due to their daily sport commitments, resulting in setting "just doing enough to pass" as their academic goals. Because of the restricted time to study, they regarded academic success as ideal in principle but impossible in practice. In addition, as an athletic participation requires an extensive commitment to physical energy, fatigue has also been considered to have a great influence on their academic achievement (Simons et al., 1999; Yamada, Mizuno, Ebara, & Hirosawa, 2010; Adler & Adler, Simons et al. (1999), for example, claimed that fatigue from athletic 1985). participation affects university athletes' academic performance as it often interferes with their concentration to study.

University athletes in Japan also experience a similar academic problem. According to the survey conducted by Asahi newspaper and Japanese Association of University Physical Education and Sports (as cited in Kimura, 2015, p. 12), achieving academic success has remained challenging for most university athletes in Japan. The survey results showed that 70.7% of the Japanese universities which participated in the survey felt the need to provide some academic support systems specifically designed

for university athletes. In other words, a number of university athletes in Japan are considered to have difficulty in studying. Yet, nearly 30% of the universities answered that they had not provided any specific support for their university athletes. Nagakura (2016) pointed out that most university athletes in Japan are expected to be responsible for their own academic success even though daily practice and frequent participation in tournaments, training camps or overseas competitions make it extremely difficult for them to have enough time and energy to study. Nagakura (2011, 2016) claimed that it is crucial for universities to provide proper academic support for these university athletes in Japan.

Online course tools in education

Online course tools, often known as Learning Management Systems (LMS), are one of the academic support tools now widely used in tertiary education worldwide. They enable teachers to register students in a certain course, upload course material and assignments, post important information, provide discussion forums, and keep track of students' work online. Some of the online course tools used in Japanese tertiary education are Moodle, blackboard, and manaba+R. Because they can be accessed through any web browser, these online course tools make students' access to learning material possible anytime and anywhere.

According to a number of studies, these online course tools play a significant role in students' learning and their academic success. For example, Hung and Zhang (2008) found that students' active participation in online course tools (e.g. access course material, post messages and/or read messages posted, and attend online discussion) resulted in their high academic performance. In addition, because these tools can be accessed wherever the internet is available, many studies claimed the benefits of online course tools accessibility and portability in facilitating students' learning (Okada, Kainosho, Tamaki, & Ikegashira, 2015; Cavus, 2011). Okada et al. (2015) found that online course tools accessibility and portability enabled students to study through smartphones and to acquire a habit of studying every day. Cavus (2011) also found that most students in her study were motivated to use LMS through mobile phones because of its flexibility of time and place. Furthermore, past studies also reported that online course tools can assist students to engage in self-regulated learning, which refers to the degree to which students actively participate in their own learning process (i.e. set clear goals, plan how to achieve goals, monitor and evaluate their own learning) (Kitsantas, 2013; Dabbagh & Kitsantas, 2005). In Dabbagh and Kitsantas (2005), a variety of LMS tools supported students' self-regulated learning and led to their improved learning. For example, communication-related LMS tools such as discussion forums assisted the students with goal setting while tools related to administration helped them monitor their learning. These studies claim that the proactive use of online course tools clearly contributes to students' learning and their academic success.

However, not every student benefits from these online course tools (Lust, Vandewaetere, Ceulemans, Elen, & Clarebout, 2011; Miyazoe, Anderson, & Sato, 2012; Adzharuddin & Ling, 2013; Swanson, 2007). Lust et al. (2011) found that students' control in using online course tools cannot be taken for granted as most students in their study did not actively use discussion board or practice quizzes provided with their online course tools. Miyazoe et al. (2012) also claimed that in

online discussion forums, low participation is often observed as students tend to not contribute to posting information but only retrieve useful information posted by others for their study. They pointed out that when making a contribution requires much time and effort, but does not guarantee direct rewards, students may become passive participants. Regarding the discussion board in online course tools, even if students are willing to join them, a lack of immediate feedback may discourage them to continue to participate (Adzharuddin & Ling, 2013). Swanson's (2007) study also showed that not every student profits from online course tools as some students in his study did what was necessary and logged out immediately. He claimed that it is necessary for teachers to train students to be a better user of online course tools since the goal of this type of tool is to enhance students' autonomy in learning. Although students' active participation and autonomy are crucial in the learning environment which involves an online learning process, these studies reveal some critical issues as to how students utilize online course tools, which requires teachers to consider the effective use of these tools for students' learning.

Research Questions

In order to investigate how teachers can support university athletes academically with one of the online course tools, manaba+R, this study aims to address the following research questions:

1) To what extent do university athletes utilize manaba+R for their study and what are their attitude towards using this tool?

2) How can teachers support university athletes' study with manaba+R?

Methodology

Participants

This study was conducted in the fall semester, 2015. The participants were the first and second year students (51 male and 30 female) majoring in sports and health science at a private university in Japan. They were grouped as university athletes (n=33) and university non-athletes (n=48) for this study. University athletes in this study were considered as participating in the university sports clubs. They accounted for approximately 40% of the participants. University non-athletes, on the other hand, referred to students who did not join university sports clubs (i.e. students who joined cultural organizations, a special athletic trainer program, athletic organizations other than sports clubs, or those who did not join any organization in university). They comprised of nearly 60 % of the participants.

English class

All participants took two required English classes throughout the semester: skills workshop and project-based English. The data for this study was collected from the project-based English class in which students worked on their own projects in English either individually or in a group. Class participation, weekly homework, presentations, and a final paper were assigned and evaluated for this class. Throughout the semester, weekly homework as well as useful course information and

additional material were provided on manaba+R; and students were encouraged to use this information for completing their presentation and paper assignments.

Data collection

A questionnaire was used for data collection for this study (See Appendix). It was written in Japanese and consisted of 13 questions on the students' usage of manaba+R in project-based English class and their attitude towards using this tool. The questionnaire was distributed online at the end of the fall semester, 2015. After the data were collected, the questions and all answers were translated into English by the authors of this study.

Results

Below are the results of the questionnaire regarding the students' usage of manaba+R in project-based English class and their attitude towards using this tool. There are nine figures and one table in total in this section.

Figure 1 shows the students' TOEIC scores. It indicates that the English proficiency levels differed greatly between the two groups. The average TOEIC score of university athletes was 332 while that of university non-athletes was 463.

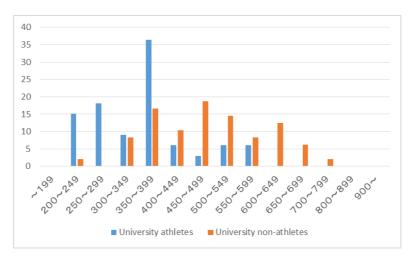


Figure 1: Results of Q4 (What is your TOEIC score?)

Figure 2 shows how frequently students brought their PC into class. Overall, students in both groups frequently brought their own PC to class. Approximately 80 % of both groups answered "every time" and 12 % of them answered "almost every time."

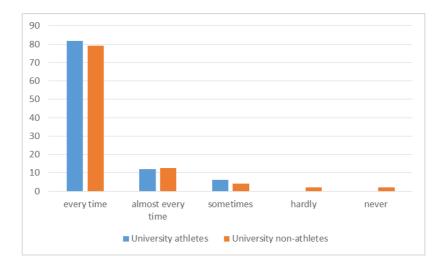


Figure 2: Results of Q5 (How often did you bring your PC into class?)

Figure 3 shows how frequently students used their PC in class. As most students in both groups brought their PC into class (See Figure 2), the high ratio of using a PC in class was seen in both groups as expected. However, university athletes used their PC in class slightly more than university non-athletes as more than 80% of them answered "every time."

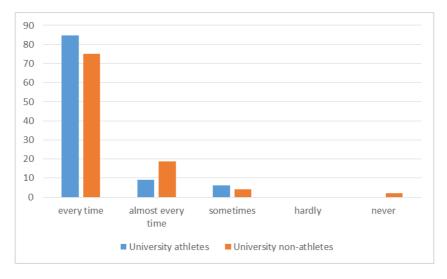


Figure 3: Results of Q6 (How often did you use your PC in class?)

Figure 4 shows the frequency of using manaba+R. Students in both groups used manaba+R frequently as approximately 80% of both groups answered "every week" and 15% of them answered "almost every week."

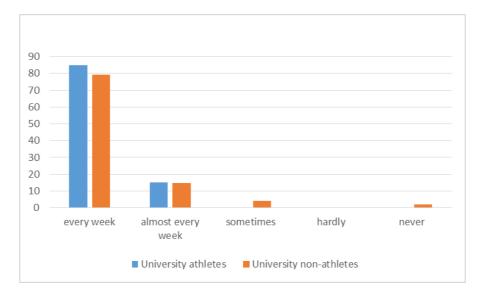


Figure 4: Results of Q7 (How often did you use manaba+R?)

Figure 5 shows whether students think manaba+R is useful for their study. Students in both groups gave positive responses to this question as approximately 95% of them found online course tools useful for their study. 55% of university athletes answered "strongly agree" and 42% of them answered "agree." Similarly, 52% of university non-athletes answered "strongly agree" and 42% of them answered "agree."

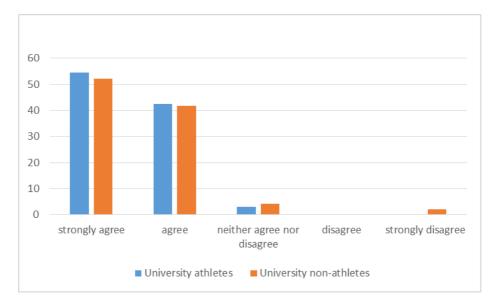


Figure. 5: Results of Q8

(Do you think that online course tools like manaba+R are useful for your study?)

Figure 6 shows which page(s) on manaba+R students often checked. There are mainly three pages on manaba+R where the class information and material were posted for the project-based English class: PROJECT, CONTENT, and BOARD. The authors of this study uploaded weekly homework in PROJECT. In CONTENT, guidelines for assignments (i.e. presentation and paper), useful English expressions and additional material were uploaded. In BOARD, important notices about the class were posted when necessary. Thus, students could choose more than one answer for

this question. The results indicate that students in both groups checked PROJECT quite often as 94% of university athletes and 90% of university non-athletes chose this page. However, the percentage checking CONTENT was low, as less than 50% of both groups checked this page. The percentage checking BOARD was much lower as only 18% of university athletes (n=6) and 35% of university non-athletes (n=17) checked this page frequently.

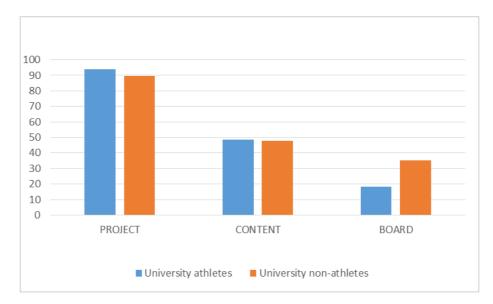


Figure 6: Results of Q9 (Which page(s) on manaba+R do you often check?)

Figure 7 shows what information on manaba+R students found useful for studying. In project-based English class, a variety of information besides homework was often provided on manaba+R. The information here included "guidelines for assignments (i.e. presentation and paper)," "useful English expressions" and "tips for writing a paper." Thus, students could choose more than one answer for this question. 76% of university athletes thought "guidelines for assignments" and "tips for writing a paper" were useful and 67% of them found "useful English expressions" helpful. As for the university non-athletes group, the popular answers were "guidelines for assignments" and "useful English expressions" as about 80% of them chose these answers while 63% of them found "tips for writing a paper" useful.

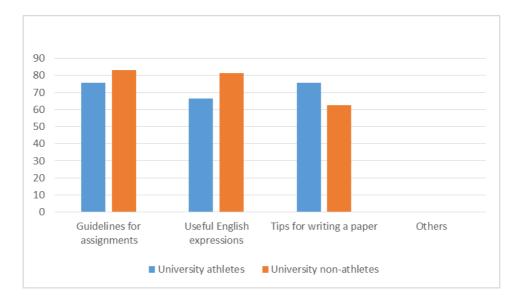


Figure 7: Results of Q10

(What information on manaba+R did you find useful for your study?)

Table 1 shows the information students want to see on manaba+R for their study. Not all students answered this question, however, different preferences were seen between the two groups from their answers. Most answers from university athletes indicate that they wanted to see information related to assessment, messages about the class, or basic course material. On the other hand, the responses from university non-athletes suggest that they preferred to have tips or advice on making a good presentation or paper.

Table 1: Results of Q11 (Other than the information listed in Q10, What kind of information do you think should be posted on manaba+R for your study?)

	Comments
University athletes	Detailed criteria for assessment
	Assessment of assignments
	Important messages about the course
	Copies of handout
	Examples of English expressions
University non-athletes	Articles or papers recommended by a teacher
	Advice on papers
	Tips for making an effective presentation
	The section where students can ask questions easily

Figure 8 shows where students usually checked manaba+R. Although they often brought their PC into class (See Figure 2), only about 6% of university athletes checked manaba+R in class. Instead, the majority of them (70%) checked manaba+R at home. Interestingly, even though manaba+R could be accessed anywhere as long as the internet is available, only 24% of university athletes checked it outside of class on campus. Moreover, none of them made use of this tool on a bus or a train. The

similar findings were seen for the other group as the majority of university nonathletes (58%) checked manaba+R at home. However, the percentage of those checking manaba+R outside of class on campus (27%) or on a bus or a train (8%) was slightly higher than university athletes.

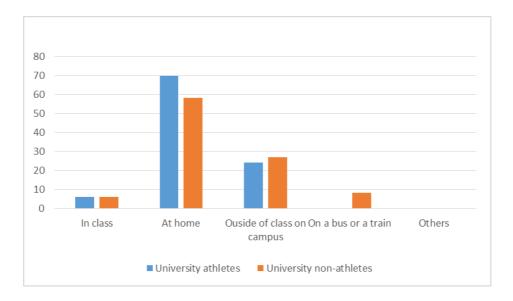


Figure 8: Results of Q12 (Where do you usually check manaba+R?)

Figure 9 shows whether students think manaba+R is useful to communicate with their teacher. Most students in both groups gave positive answers to this question. The total of 78% of university athletes (30% for "strongly agree" and 48% for "agree") and 73 % of university non-athletes (25% for "strongly agree" and 48% for "agree") found online course tools useful to communicate with their teacher.

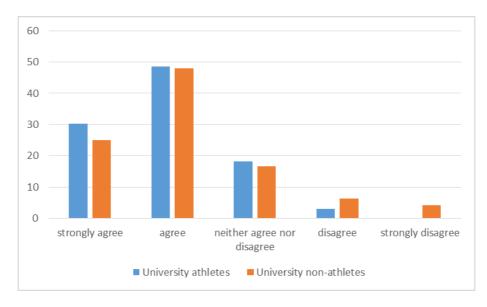


Figure 9: Results of Q13 (Do you think that online course tools like manaba+R are useful to communicate with your teacher?)

Discussion

Based on the results of the questionnaire, this study now turns to discuss 1) to what extent university athletes utilize manaba+R and their attitude towards using this tool and 2) how teachers can support university athletes' study with manaba+R. First, two main findings regarding the first question are discussed below. Then, in light of these findings, two implications for teachers are discussed.

1) To what extent university athletes utilize manaba+R and their attitude towards using this tool

Less hours to study and lack of time management skills

As the results of the questionnaire revealed, university athletes in this study did not tend to utilize manaba+R as much as the authors expected although university athletes showed positive attitude towards using this tool (See Figure 5 and Figure 9). There are two main reasons for it. The first reason is their insufficient time for study and lack of time management skills. As noted earlier, university athletes tend to have less time to study due to their extensive commitment to sports (Cosh & Tully, 2014; Adler & Adler, 1985). In particular, those who have higher achievements in sports tend to be busier as they are expected to participate in a tournament or go on an overseas expedition tour occasionally, and hence are likely to miss classes (Nagakura, 2016). Thus, even if they were motivated to study, it is possible that university athletes in this study were too busy with their sport club activity to make use of manaba+R.

In addition, as the results of Q12 (Where do you usually check manaba+R?) showed, university athletes in this study did not have good time management skills to use manaba+R for their study. In the university where the participants of this study were enrolled, free Wi-Fi is provided so that students can access manaba+R anytime and anywhere on campus. However, only a small number of university athletes made use of class hours to check manaba+R despite the fact that the majority of them brought their PC into class every week (See Figure 2). Even outside of class, most of them failed to make the most of their free time on campus to use manaba+R. In addition, unlike some of university non-athletes, university athletes did not take advantage of their commuting time though manaba+R could be accessed through their mobile phones. Instead of making use of class hours, free time on campus or commuting time, the majority of them used manaba+R at home, presumably after a hard day of class and after-school practice when they were likely to have fatigue. As some past studies showed that fatigue from an athletic participation makes devotion to study very difficult (Yamada et al., 2011; Simons et al., 1999), university athletes in this study clearly did not have good time management skills to use manaba+R for their study, for they mainly used it when they were likely to feel fatigue, instead of effectively using their class hours or free time. Thus, because of their lack of time management skills, most of the university athletes in this study failed to make use of manaba+R effectively.

Low motivation to get higher marks

The second reason is their low motivation to get higher marks. As the results of Q9 (Which page(s) on manaba+R do you often check?) and Q11 (Other than the information listed in Q10, what kind of information do you think should be posted on manaba+R for your study?) suggest, university athletes in this study tended to utilize manaba+R to just satisfy the minimum requirements to pass the course. Though they answered that they used manaba+R frequently (See Figure 4), the results of Q9 revealed that most university athletes only checked PROJECT to see their homework. Only a small number of them frequently checked CONTENT or BOARD where important information to support their study was posted (See Figure 6). For university athletes whose English levels were rather low (See Figure 1), "useful English expressions" uploaded on CONTENT could have been particularly helpful for getting a higher mark on presentation or paper assignments. However, the low percentage of university athletes who answered CONTENT for Q9 clearly indicate that they missed the chance to make use of this information for their study. This finding indicates that they tended to focus on just doing what was necessary to pass and failed to utilize other useful information to perform better in their assignments. The results of Q11 also suggest their concern for passing as the answers from university athletes mainly referred to the information related to assessment and basic course information. On the other hand, the answers from university non-athletes were mainly related to advice on paper or presentation which would be helpful for completing their assignments. Thus, both results of Q9 and Q11 indicate that most university athletes in this study were not motivated to perform better academically to get a higher grade. This finding is in line with the results of past studies (Cosh & Tully, 2014; Adler & Adler, 1985) which showed that university athletes' primary academic goal tended to be just doing enough to pass due to their substantial commitment to sports. Based on these reasons, university athletes in this study did not tend to make use of manaba+R effectively despite their positive attitude towards using this tool for their study.

2) How teachers can support university athletes' study with manaba+R

Based on the findings above, there are mainly two implications as to what teachers can do to support university athletes academically with manaba+R. First, teachers can encourage university athletes to make use of the information on manaba+R for their study by grading their active use of this information as part of the course requirements. As the second finding indicated, most university athletes in this study only checked homework on manaba+R and did not utilize other useful information for presentation or paper assignments. However, information such as "useful English expressions" or "tips for writing a paper" would be of great assistance to them in working on these assignments, contributing to their higher academic performance. Thus, to help them achieve academic success, it is important for teachers to raise university athletes' motivation to study through manaba+R and make sure that they use the information initiatively for their assignments. For this purpose, grading their active use of information on manaba+R should be effective for two reasons. First, as the results of Q9 and Q11 suggested, university athletes in this study were motivated to pass the course as they were trying to satisfy the minimum requirements. In addition, some past studies found that students are likely to utilize online course tools

actively when participation in online activities is graded or important information related to their grades is posted (Rovai, 2003; Yamamoto & Usami, 2015). Therefore, if, for example, using "useful English expressions" or additional material on manaba+R was required to complete their assignments and was evaluated as part of their grade, it is possible that the number of university athletes who become more motivated to make the best use of the information on manaba+R and evaluating their providing useful information to support their study on manaba+R and evaluating their proactive usage of it, teachers will be able to facilitate their learning more through manaba+R.

Second, teachers can support university athletes' study by instructing them to have good time management skills. As the first finding showed, university athletes in this study did not tend to effectively use their class hours or free time to study with manaba+R. Past studies also showed that time is often considered as a significant obstacle to academic achievement for university athletes (Cosh & Tully, 2014; Adler & Adler, 1985). However, developing time management skills can be the key to their academic success (Yusof, Chuan, & Shah, 2013; Cosh & Tully, 2014; Miller & Kerr, 2002). Yusof et al. (2013), in their study on Malaysian university athletes, found that having good time management skills was one of the factors that positively influenced university athletes' academic performance. Cosh and Tully's (2014) study on Australian student-athletes also showed some cases in which athletes flexibly controlled their time to succeed academically. Similarly, Miller and Kerr (2002) reported that multiple responsibilities as a student and an athlete enabled some university athletes to be good at controlling time and to focus more on studying during their sports seasons.

To help university athletes develop time management skills, manaba+R should be useful because of its accessibility and portability. However, as most university athletes failed to use their time effectively to study through manaba+R, it is important for teachers to instruct them how and when to use this tool properly. For this purpose, teachers can first encourage university athletes to make better use of the class hours. They can upload useful information for each week's lesson or homework in advance, have students access this information on manaba+R in class as part of a class activity, and evaluate their participation. As Cavus (2011) suggested that the use of online course tools via mobile devices facilitated students' learning process, teachers should also instruct university athletes to access manaba+R on their mobile phones and strongly encourage them to make use of their free time on campus and commuting time. In addition, it should be effective if teachers upload information or material that can be easily checked and used even on a mobile phone's small screen. For example, if teachers post a link to a TED Talk presentation or a useful YouTube movie, university athletes can easily watch them on their mobile phones while on a bus or a train. If teachers set up an online discussion page, it would be easy for university athletes to participate in information exchange about their assignments or class discussion at any time. Even when they missed a class, this type of page would enable them to catch up on their work. As Kitsantas (2013) suggested, it should also be useful to upload weekly, monthly, and semester schedules at the beginning of the semester to assist them in making an effective study plan. Encouraging them to check their own portfolio on manaba+R would also be useful for them to understand their These types of information and instruction will help them pay study progress. attention to an overall course schedule and assignment due dates, leading to the improvement of their time management throughout the semester. If they could develop time management skills, they can make a clear study plan, make use of useful information provided, and manage to perform better in every assignment. Thus, it is important for teachers to carefully consider what and how to offer on manaba+R and strongly encourage university athletes to make use of their time.

Conclusion

This study aimed to investigate the effective use of online course tools for university athletes in Japan. The results of the questionnaire revealed that university athletes had positive attitude towards using manaba+R for their study. However, the results also suggested that because of their insufficient time for study, lack of time management skills, and low motivation to get higher marks, most of the university athletes in this study failed to make use of manaba+R effectively for their study.

In order to support these university athletes academically, this study suggests two implications for teachers. First, this study suggests that in order to encourage university athletes to make use of information on manaba+R, teachers should grade their active use of this information as part of the course requirements. Second, this study strongly encourages teachers to help develop university athletes' time management skills with manaba+R. Because of its accessibility and portability, manaba+R can serve as an effective academic support tool for university athletes who tend to have insufficient time for study. If teachers instruct them to study with manaba+R in class and provide useful information that can be easily checked even through mobile devices, university athletes can be more self-regulated and be better at controlling their time to study even when they are busy with sports.

Although this study shed some light on the effective use of online course tools for university athletes in Japan, several limitations should be noted. First, this study focused only on university athletes with majors in sports and health science, most of whom entered university for the purpose of doing sports and studying about sports. Gathering data from university athletes whose academic majors differ from those in this study should enable us to explore our research questions more in depth. Second, this study used only questionnaire for data collection. In order to further research how university athletes use online course tools, online data on manaba+R such as the number of log-in, message posting, and homework submissions should also be taken into consideration. Last, though the sample size of this study (n=81) was not too small, future research with a larger sample size will give us more insight into the effective use of online course tools for university athletes.

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Appendix

Questions on the questionnaire (English translation):

Q1. What is your gender?

Q2. What grade are you in?

Q3. Do you belong to any organization in the university?

Q4. What is your TOEIC score?

Q5. How often did you bring your PC into class?

1 every time, 2 almost every time, 3 sometimes, 4 hardly, 5 never

Q6. How often did you use your PC in class?

1 every time, 2 almost every time, 3 sometimes, 4 hardly, 5 never

Q7. How often did you use manaba+R?

1 every week, 2 almost every week, 3 sometimes, 4 hardly, 5 never

Q8. Do you think that online course tools like manaba+R are useful for your study?

1 strongly agree, 2 agree, 3 neither agree nor disagree, 4 disagree, 5 strongly disagree

Q9. Which page(s) on manaba+R do you often check?

1 PROJECT, 2 CONTENT, 3 BOARD

Q10. What information on manaba+R did you find useful for your study?

1 guidelines for assignments, 2 useful English expressions, 3 tips for writing a paper, 4 others

Q11. Other than the information listed in Q10, what kind of information do you think should be posted on manaba+R for your study?

Q12. Where do you usually check manaba+R?

1 in class, 2 at home, 3 outside of class on campus, 4 on a bus or a train, 5 others

Q13. Do you think that online course tools like manaba+R are useful to communicate with your teacher?

1 strongly agree, 2 agree, 3 neither agree nor disagree, 4 disagree, 5 strongly disagree