# Using the Flipped Classroom, Blended Learning and Learning Management Systems to Adapt Teaching Processes to Meet the Challenges of the Quarter System

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### Introduction

In the rush to embrace the benefits of global integration in education, many universities across Japan have decided to introduce the quarter system where previously classes were scheduled in 15 week semesters. The stated purpose of this change is to facilitate the movement of students between courses, since the new schedule fits more closely with those of other countries (Yonezawa, 2014). In 2016, Ehime University followed in the footsteps of prestigious institutions such as Waseda University and also made the switch to using quarters.

When thinking about the change for teachers, it is possible to find that there are some significant advantages to teaching using the new quarter system. However, despite this, it is still necessary to adapt instruction and teaching processes to deal with the change. When thinking about the shift from using the longer semesters to much shorter quarters, it is important to consider how the student learning experience will be affected. In anticipating potential pitfalls that may lie ahead, teaching methods can be adapted and materials changed ahead of time to reduce stress for students. This also makes it possible to leverage the strengths of having twice-weekly classes over a shorter length of time, so that learning outcomes are actually improved.

In this article, I want to set out the specific changes that I made for two courses in relation to the shift from semesters to quarters. In each case, I will briefly set out the potential problems that might arise using the quarter system. Following this, I will present blended learning as a highly beneficial teaching approach for this change in circumstances. From here I will describe the teaching rationale behind how these problems can be addressed using blended learning and flipped classroom approaches,

before giving concrete examples from actual teaching materials of how this was achieved, with particular reference to use of Learning Management Systems (LMS), such as Schoology or Moodle.

### Using the Flipped Classroom Model

In many traditional teaching approaches, learners are given instruction during classes and are expected to demonstrate their understanding of this material in exercises or practice activities as part of their homework. In this model, scheduled classroom time is very much the most important part of a course, and other activities such as homework are seen as secondary. However, in recent years this kind of teacher-centric instructional model (Brooks, 2002) has fallen out of favour, especially in classrooms in North America and Europe.

One of the most popular well-established alternatives has become known as the "flipped classroom". As the name suggests, processes that traditionally took place during class are re-allocated as homework, and practice activities once done as homework become the focal point of classes (Lage, Platt & Tregalia, 2000). In this way, the traditional instructional model is "flipped". In the inverted model, there is a great deal of emphasis placed on using a variety of activities during classes that offer differentiated learning opportunities for students in an effort to make their time more significant (Rajesh, 2015).

One popular way of implementing a flipped classroom model is for teachers to record videos of themselves explaining teaching points, requiring students to view these videos online at home. With the advent of sophisticated LMS features and technologies, it is possible to track which students have viewed this videos, and which students have not, thus allowing for accurate tracking of learner engagement. Following these videos,

students are commonly allocated short online tests, written assignments, quizzes, polls or puzzles based on this instruction.

The outcome of structuring out-of-classroom time in this way is that teachers have more freedom to make classes productive for every student. In-class time can be focused on activities that cannot be easily carried out for homework, such as group discussions, questioning the teacher, or practical exercises. In using the traditional teaching model, time for questioning the teacher can be severely limited by the fact that a certain amount material must be covered during the class, meaning that questions often have to left until the end. When using the flipped classroom model, the entire class period can easily be dedicated to questioning the teacher if necessary, which can sometimes be seen as a better use of classroom time.

Since the flipped classroom model is very often accompanied by extensive use of technology, these materials produced for these new kinds of learning processes become easily accessible outside the classroom. In many situations, certain LMS usage has risen precisely because of its portablity and accessiblity to students. In the case of LMS whose developers produced smartphone applications, as in the case of Schoology, it is much easier for students to access learning materials because they are automatically formatted for hardware with smaller screens at the software level.

It is important to note that the rationale behind using a flipped classroom is more important than the means used to achieve it. Bergmann and Sams (2013) see the model as a way to make the best use of scheduled classroom time, rather than defining it narrowly in terms of its methodology. In this way, it may be better to think of the flipped classroom as a teaching philosophy rather than an approach.

In the context of second language learning, deploying the flipped classroom model is attractive, particularly in terms of how it may benefit development of the productive skills, namely, speaking and writing. This model allows for a large increase in time available for practice during class periods, which has particular relevance for practitioners following the ideology of communicative language teaching (CLT), which emphasises learning speaking through interaction, as opposed to learning speaking through writing, as in the grammar translation approach.

# Using Blended Learning in Combination with the Flipped Classroom

Although the flipped classroom model may be appropriate for speaking classes in which students require less in the way of explicit instruction and significantly more opportunities for practice, writing classes may require a somewhat different approach. While CLT has the advantage of de-emphasising smaller mistakes in production, the same benefit does not necessarily accrue to approaches for teaching writing. Indeed, proficiency and competency are commonly under close scrutiny in writing examinations and therefore teaching must reflect this fact.

For writing classes, teaching that incorporates a significant amount of error correction and teacher-led instruction, even to smaller groups has more in common with traditional approaches than a pure flipped classroom. However, this does not mean that students cannot in these classes benefit from materials accessed out-of-class. In this way, the halfway-house of using a blended learning approach becomes a logical solution to increasing practice time in class while retaining necessary teacher-led instructional activities.

### How does the flipped classroom or blended learning help for Quarter System classes?

### **Reviewing Content**

Naturally with the switch from having classes once a week to twice a week, learning becomes a more intensive experience. In the semester system, students had the luxury of a week between classes that allowed them a great deal of freedom to review class content and complete homework. However, when following the quarter system, this luxury is no longer available for students.

For students with classes on the daytime schedule, there are only ever two or three full days to wait before the next class arrives. Students who have classes in the sixth or seventh period on the night-time schedule unfortunately have to keep up with a much faster pace, and benefit from only one full day between classes on Tuesdays and Thursdays. When we take into consideration the fact that students have to follow the quarter schedule for their other classes too, it becomes clear that the opportunities for self-study and review

during the week become more limited.

In this respect, a course that makes use of the flipped classroom model is beneficial because learning material is already made available online for students to process before class, and this means that they can easily review it at any time during the course. One significant advantage of using an LMS here is that it does not matter when students find themselves with time free for review, because the materials are always available. This therefore helps students to schedule their revision work around the commitments of part-time jobs and other activities for example.

### Student Fatigue

Under the quarter system regime, classes are not scheduled on Wednesdays. One of the consequences of this is that the schedule is compacted into four days rather than five under the semester system. This means that the potential for students to be tired when arriving at class is increased, because each day of their schedule is likely to be slightly busier than it would have been under the semester system. This might be further compounded by scheduling of sports events and other activities on class days.

Blended learning allows teachers to mitigate against this affective filter situation by providing students with effective ways of consolidating learning after classes, especially in an interactive manner. Students who attend class with a high level of fatigue are unlikely to retain new information as effectively as those students who were not tired, but use of the blended learning model involves producing LMS content and activities that can serve as a safety net for these learners. Quizzes designed to test understanding after class can be used in conjunction with handouts or sections from textbooks, and can easily be turned into social and competitive activities with classmates, something which becomes especially straightforward when accessing an LMS on a smartphone.

### Student Absence

Unlike the situation for other faculties, the English Education Center has a fairly strict policy, permitting only three unexplained absences, or twenty percent of scheduled class time, rather than 33% elsewhere. Nonetheless, there are always students who need to make full use of this allocation, since events such as weddings or educational trips are not covered by the

permitted absence policy.

While this situation was less of an issue when classes followed the semester system, under the quarter system, it now becomes somewhat more serious. First of all, because classes are scheduled so close to each other, multiple-day absences may now involve missing two classes, where under the semester system it was only one class. What is more, since the pace of learning is accelerated, especially in classes that teach productive processes such as the speaking and writing classes, students may find it harder to catch up with their classmates when returning. In these cases, students can always rely on classmates or the teacher to give them summaries of missed classes. However, this may be considerably less effective than completing activities with the help of the teacher and classmates in class.

However, if students are able to use an LMS in a flipped classroom scenario, it means that they can more easily ascertain what materials they need to absorb to recover from their absence. Furthermore, they can see how the new information fits into structures they have already learned about in previous classes. However, since practice tasks and activities to promote deeper understanding take place in scheduled class time when the classroom is flipped, absentee students are still at a significant disadvantage to their classmates when it comes to the benefits of sustained practice.

Now that it has been demonstrated that the flipped classroom, blended learning and using an LMS can help students in certain difficult situations under the quarter system, I will present two short case studies by way of examples. The first of these refers to the speaking course, which is taken by all first year students in quarter 1. The second study looks at the writing course which is taken by all first year students in the third quarter.

### Case Study 1: Speaking Course

## Preparing content for conversations: using the flipped classroom model

In the speaking course, students terminal assessment is based on their ability to conduct short conversations in English with a classmate, which is scored based on certain criteria primarily relating their use or non-use of proper interactional structures. In this sense, the thrust of the course is not to pay attention to the small details of pronunciation or producing perfect grammar

### Small Talk and Big Talk

**Small Talk** is casual, unimportant conversation. Small Talk topics can include topics like the weather, news stories or TV shows.

**Big Talk** is usually more serious and more important. Big Talk usually includes personal topics like your interests, life (jobs, family, friends) or society (economy, politics, world events).

### Small Talk comes before Big Talk!

This means that it's important that we prepare some Small Talk topics before our conversations.

- A: Hello! How's it going?
- B: Not bad. How about you?
- A: Pretty good. So did you hear about the boss of Fuji TV? [SMALL TALK]
- B: No, what happened?
- A: She was fired!
- B: Incredible! What a crazy situation.
- A: Right. So let me ask you something, what would you do if you got fired from your job? [BIG TALK]
- B: That's a good question. I have no idea.
- A: I think I'd go on a vacation.
- B: Me too.

Figure 1: Example of flipped classroom materials from LMS for speaking course

# PSMALL TALK → Write about your recent life, news and weather. 1-5 keywords. Happy OR sad thing 1-5 keywords Interesting OR exciting thing - 1-5 keywords News story - 1-5 keywords Weather - 1-5 keywords

Figure 2: Example of flipped classroom homework activity from speaking course

in every utterance, but achieving a level of fluency that allows reasonably comfortable completion of a basic conversation. In this sense, the final test loosely follows the tradition of CLT, although students may be initially more influenced by grammar translation methods as a hangover of their junior-high and high school days.

In classes that do not use the flipped model, students are usually expected to prepare content for speaking practice, as well as participate in the practice itself. For example, in a class leading to a speaking activity focused on talking about travel destinations, students might first complete vocabulary tasks related to the topic, then prepare a written "conversation" before finally moving on to the speaking activity.

One of the major drawbacks for this style of instruction it can significantly constrain the amount of time available to students for speaking practice. This may be further compounded by the fact that many students often require or desire to spend copious amounts of time on becoming completely comfortable with their prepared conversations before moving to the speaking activities. This is especially true of students who prefer the methods of junior-high school.

For the speaking course, since practice time is at a premium and the switch to the quarter system makes it difficult to assign speaking practice tasks with classmates as homework, it was clear that flipping the classroom would be the best way forward. Rather than recording videos, teaching items were presented as short one or

two paragraph explanations, marked in the title with "LEARN". These teaching points were accompanied by a sample conversation. It is important to note that teaching items presented in this way were distilled to leave only the most fundamental principles for students to learn, because the focus of many in-class activities allowed them to work out the practicalities of applying these principles for themselves and as part of a team.

In the example of teaching materials presented here on the LMS in use (Schoology), students read a short explanation of small talk and big talk. This is accompanied by transcript of an example conversation, which has the small and big talk elements labelled (Figure 1). In the next stage of their homework, students are then required to generate keywords for different small talk topics on a handout (Figure 2). Note that students are not required to write full sentences, since this would encourage them to simply read their work aloud. Instead, the limitation of keywords only means that fluency development is encouraged.

As students have completed these two tasks, the main practice tasks in scheduled classes can proceed much more quickly than under traditional models of teaching. Students are already familiar with the terms "small talk" and "big talk", and therefore this streamlines the directions necessary to set up longer practice activities in class.

Applying the flipped classroom model to the speaking course is particularly fruitful for increasing the amount of time available for speaking practice with classmates in English. Under a conservative estimate, compared to classes following more traditional approaches, practice time may jump from around 25 minutes to over 50 minutes, and more in certain cases. While there are limitations on the amount of time that can be allocated for practice, such as routines like taking attendance, explaining homework or giving short breaks, students who are absent still benefit. If, for example, a student misses one class not applying the flipped model, they might miss only 25 minutes of practice time, as well as the teacher-led instruction. When using the flipped classroom, they might miss 50 minutes of practice time, but they will still practice longer when all classes are totalled, and they will still be able to follow the instructional materials on the LMS. This amounts to a net benefit on the part of the student even though the quarter system makes the course more intensive.

### Case Study 2: Writing Course

# Previewing class content and testing understanding with blended learning

In the writing course, students are assessed by way of a test of their paragraph writing abilities. Given 45

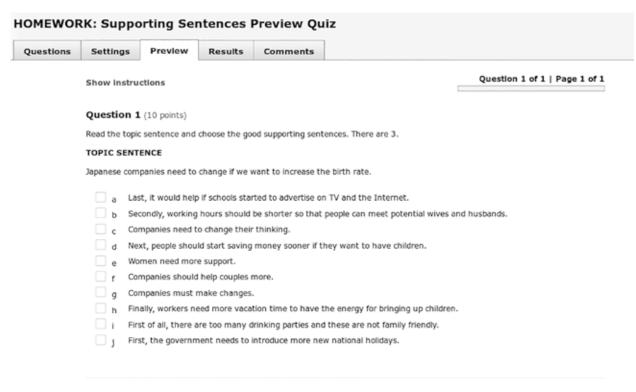


Figure 3: Example of preview quiz for writing course, blended learning model

minutes, students should be able to construct a logical and reasonably grammatically sound eight sentence paragraph. For this test, assessment criteria focus on the structural integrity and development of core ideas, rather than focusing simply on pure grammatical accuracy, the very things to which students may already be accustomed.

Since process writing to achieve the stated end result may be somewhat unfamiliar territory for some students, the course naturally must allow more time for new information to be processed, interpreted and absorbed. There is a significant amount of trial and error that must be seen through before practice inevitably yields the desired results.

As has already been discussed, teaching writing necessitates more intervention from instructors and this is especially true when introducing new structures that students need to learn to follow. This is one of the main reasons why a pure flipped classroom approach would be much less effective and why a blended learning approach in concert with extensive use of an LMS was deployed.

Over the duration of the writing course, students must acquire skills in creating four distinct kinds of sentence, as well a developing critical thinking skills to some extent. This means that students commonly focus on a specific kind of sentence for a class or two before moving on to the next type. This approach is perfectly valid, but if students are absent it may cause problems in following the content of the next class attended, because the new knowledge builds on the old. While this may be troublesome if a traditional classroom approach is followed, instructors using a blended learning model accompanied by well-designed materials on an LMS can avoid students running into problems in that additional learning opportunities are provided to those already available in class. This is also beneficial for those students who find themselves subject to the affective filter at any time.

In the classes under discussion here, students were assigned preview and review activities on the LMS that effectively make a sandwich of the course content presented in class, which is also reinforced with short practice activities. Structuring the course content in this way creates a natural flow, progressing from each kind of sentence to the other, allowing students to understand how their skills are developing towards an end goal. This strategy is also effective because it allows students to review previous content as part of the introduction to

new content.

In the activity presented here (Figure 3), students will have already been learning about the key principles before writing topic sentences, but now have to connect this old knowledge with new information about supporting sentences. Prior to this activity, students are directed to read key information from their textbook, before demonstrating their understanding by selecting good examples of the target language. This content is reviewed with practice activities in class, before an additional review activity which is set for homework.

A key benefit of using activities such as these is the result of reducing pressure on students to find the correct answer in class. Since these preview activities are completed individually for homework, they cannot feel the shame of making mistakes in front of others, and it serves as a "dry run" for similar exercises that are used in class. Reducing the pressure to answer without mistakes becomes important in quarter system, since there is less time between classes for students to recover their pride.

### Conclusion

The application of the quarter system to the scheduling of classes serves up some exciting possibilities for students to study abroad if they so desire, but it should not be detrimental to the learning experience at any point. It is vital that teachers are proactive in anticipating problems and designing their classes, activities and processes to avoid students losing out from the faster pace of learning that the quarter system brings.

In this account I have presented blended learning and the flipped classroom model as having significant benefits if used within the quarter system structure. These models can effectively mitigate against the possible effects of student absence, fatigue and reduced time for review, especially when used in concert with an LMS. In looking at two examples of actual teaching practice, it becomes clear that these models cannot be successfully used exclusively, but rather, instructors may find that it is better to pick and choose elements from both to create the most constructive learning environment for language teaching, especially when considering the productive skills. To this end, I would encourage teachers to think critically about how well their instruction leverages the advantages of the quarter system, and where the possible downsides could be ameliorated using methods similar to those presented here.

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