

# USING SELF-REFLECTION AND BADGES IN MOODLE-BASED MEDICAL ENGLISH REVIEW COURSES FOR ENHANCING LEARNERS' AUTONOMY

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## ABSTRACT

English has become increasingly important for Japanese medical professionals in Japan. However, the curricula at medical schools in Japan are so extensive that the time allocated for English classes is usually very limited, which means those classes often do not have the depth or scope to improve the English communication skills of medical students to the level necessary for their future career. Therefore, language teachers are expected to not only improve English curricula but also offer effective and attractive review courses for students' autonomous study. The authors of this paper have created Moodle-based English courses to improve the English curricula by integrating 'blended-learning' in class. They also have started to provide ongoing access to a range of review courses to help their students' autonomous study. This paper outlines how the authors integrated a self-reflective framework and a badge function in the review courses they created. It also illustrates how the framework will help learners find the suitable course at the right level and how issuing badges will help motivate learners to engage with the module or the course they have chosen.

## KEYWORDS

Self-reflective framework, Badges, English education, Moodle, Motivation

## 1. INTRODUCTION

In this globally connected world, English has become increasingly important for Japanese medical professionals. There is growing need for them to understand and use English at conferences and/or workshops and there are ever increasing opportunities to communicate with other medical staff and patients in English (Telloyan et al, 2008). Unfortunately, due to the existing extensive curricula of medical schools in Japan, English classes are usually scheduled only for the first 2 to 3 years of a 6-year-long programme of study. This limited exposure to English is insufficient to improve the English communication skills of students to the levels necessary for their future career. Therefore, language teachers at medical schools have been required to review their pedagogical approaches, strategically plan their English curricula, and organize how they should engage their learners to fully maximize the impact of the time allocated for English teaching.

Since 2008, the authors of this paper have been evaluating their current teaching practices and modifying the structure and content of their English classes to provide maximum benefit for their students. As part of this reflection, they have designed and deployed a range of Moodle-based courses, firstly to introduce the concept of 'blended-learning' to students (Iwata et al, 2011), secondly to offer review courses and mobile learning content, expecting that they would help their autonomous study. While students evaluated the 'blended-learning' model in class as effective and motivating for their English study (Iwata et al, 2012), review courses have not been used as frequently as authors had expected. Clearly the courses needed to be reviewed and redesigned for learners to engage with them to constantly review and practice their skills to improve their level of English language. Through this reflection, the authors have started to create review courses which suit students' needs and levels and help motivate their self-study by investigating new strategies and techniques which:

- (1) will help learners identify and engage with the suitable level of information and in appropriate level of activities, and
  - (2) will encourage learners to engage with the review materials identified and participate autonomously in practice activities.
- The following sections outline how the authors integrated the self-reflective framework and a badge function in the English review courses they created.

2. THE SELF-REFLECTIVE FRAMEWORK

The concept of reflection has been widely discussed in educational circles for a number of decades (Kreber, 2004; Brockbank & McGill, 2007). Reflective practice is thought to be dependent on individuals making meaning from their experiences through reflection (Sugerman et al, 2000).

The authors designed a self-reflective questionnaire to engage their students in reflection on their competencies or confidence in relation to defined language skills or standards, aiming at helping them in finding which skill or level is suitable for their review study.

2.1 Self-Reflective Framework

The self-reflective framework which consists of a series of questions relating to the objectives of the course and learners’ competencies, is placed on the top of the Moodle course along with the course outline as shown in Figure 1. Learners are asked to reflect on the target skills and then respond to the questions. A sample framework for *Medical English Terminology (Level 1)*, which is designed by using Moodle ‘quiz’ function, is shown in Figure 2.

This framework provides learners with not only overall feedback, but also specific advice on which module(s) to review and which competencies they need to develop as illustrated in Figure 3.

Course outline

- Course name: **Medical Terminology (Level 1)**
- Targeted students: first-year (freshmen) medical and nursing students
- Course objectives:
  - to help students build up (or review) basic terminology of medicine (prefix, suffix, body parts, symptoms)
- Course details: This is a review course for basic medical terminology. This course consists of 10 modules. In each module you learn basic medical terms which are frequently used and are keys to better understanding of up-to-date information about health-related issues, medical conditions, diseases, symptoms and treatments. There are several types of quizzes in each module to check your vocabulary about a specific topic such as the cardiovascular system and the urinary system. You have to take all the short quizzes in each module and pass them. If you have successfully completed the tests, you will be awarded a module 'badge'. When you have received all the module badges in this course and passed the final test, you will be awarded a course 'badge' which means you have successfully completed this basic medical terminology course.
- Course level:
  - lower-Intermediate - Intermediate (TOEIC450-650, IELTS 4.5-5.5)
- Self-reflection: The following personal competency assessment tool (CAT) enables you to determine your current level of competency in medical terminology. The outcome of your self-assessment can be used to guide which module is suitable for your study.

Self-reflection

News forum

Following questions about Medical Terminology help you to select which module is suitable for your study.

I have a good understanding about basic structures of medical terms, prexies, word roots and suffixes.

Select one:

☐ a. Strongly agree

☒ b. Agree

☐ c. Partially agree

☐ d. Disagree

I can recognize basic body parts.

Select one:

☐ a. Strongly agree

☐ b. Agree

☒ c. Partially agree

☐ d. Disagree

Figure 1. Course outline and self-reflective framework

Figure 2. Self-reflective questions

<b>Started on</b>	Wednesday, 21 August 2013, 2:12 PM
<b>State</b>	Finished
<b>Completed on</b>	Wednesday, 21 August 2013, 2:15 PM
<b>Time taken</b>	2 mins 58 secs
<b>Feedback</b>	You seem mostly competent in terminology, but I recommend you have a review in this course and try an upper level course later.

**A general feedback**

Information  
Flag question

Following questions about Medical Terminology help you to select which module is suitable for your study.

Question 1  
Complete  
Marked out of 1.00  
Flag question

I have a good understanding about basic structures of medical terms, prefixes, word roots and suffixes.

**A specific feedback**

Select one:

☐ a. Strongly agree

☒ b. Agree You can skip module 1 and try other modules. If you are a little concerned about your understanding, module 1 would be suitable for review.

☐ c. Partially agree

☐ d. Disagree

Question 2  
Complete  
Marked out of 1.00  
Flag question

I can recognize basic body parts.

Select one:

☐ a. Strongly agree

☐ b. Agree

☒ c. Partially agree I advise you try module 2 for review.

☐ d. Disagree

Figure 3. A feedback from the self-reflective questions for Medical Terminology course

In essence, engaging with this self-reflective framework assists learners in the creation of an individual and customized learning plan and it is expected to help them become self-regulated and autonomous learners (Clayton, 2011).

## 2.2 Awarding Badges

A portfolio can be regarded as the purposeful collection of a learner's work that can be structured to exhibit the learner's efforts and achievements over time (Kim, et al, 2010). Portfolios are increasingly seen to be a valuable tool for assessment of competencies and are used in many professions such as nursing, medicine, and teaching (McColgan & Blackwood, 2009). In accreditation environments, digital portfolios can provide a space where learners' evidence of their competencies and achievements can be stored and systematically evaluated (Fiedler, et al, 2009).

The authors implemented the idea of issuing 'badges' to students by using the badge function of Moodle. Each badge awarded acknowledges the successful completion of individual module/course. The badges learners have earned are designed to be displayed in a learner portfolio, which increases personal satisfaction and functions as a rubric to demonstrate to their teachers and peers what they have learned, rather than what was taught. It is anticipated that this use of badges will help them to be motivated to study autonomously.

Sample badges awarded for successful completion of some modules for *Medical English Terminology (Level 1)*, which is designed by using Moodle 'badge' function, are shown in Figure 4 and an email message the learner receives is shown in Figure 5.




Image	Name	Description	Criteria	Issued to me
	Badge for course completion	This is for successful completion of Medical Terminology course.	Users are awarded this badge when they complete the following requirement: o Users must complete the course "Medical Terminology (Level 1)"	
	Badge for Module 1	You have successfully completed module 1 of this course.	Users are awarded this badge when they complete the following requirement: o ALL of the following activities are completed: o "Quiz - Short test for module 1: Matching" o "Quiz - Short quiz for module 1: Matching a"	Date: 19/08/13 ✓
	Badge for Module 2	This badge is for successful completion of module 2.	Users are awarded this badge when they complete the following requirement: o ALL of the following activities are completed: o "Quiz - Short test for module 2: Matching" o "Quiz - Short test for module 2: Matching a"	Date: 19/08/13 ✓

Figure 4. Badges a learner was awarded in the course

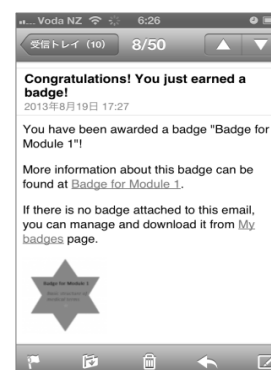


Figure 5. The message sent to a learner

### 3. CONCLUSION

This paper has presented an argument on the unique challenges Japanese English language teachers at universities are facing. It illustrated how the authors have applied a self-reflective framework and use of badges in their Moodle-based English courses designed for their learners' review and self-study.

The self-reflective framework, where learners are able to make meaningful connections between their current skills/levels and the learning activities offered on available courses, is expected to help them identify which course/module is the most suitable for their self-study and help them work not only independently but also autonomously. The use of badges, which helps learners confirm their achievements they have had on the courses they studied, is expected to motivate them toward further autonomous study.

The authors are conscious that further investigation on how self-reflective frameworks actually help learners identify the skills required and the appropriate course/module level and how the use of badges helps them to be motivated to study autonomously is required. However, the authors believe further practice of the use of self-reflective framework and badges and development of measures for evaluating these practices would be valuable in monitoring the effectiveness of the review courses, enhancing learner autonomy and then finally helping them improve their English skills required for their future professions.

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