Analysis of an Extensive Reading Program

by

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Abstract

This paper seeks to expand on findings from a SILC project undertaken in the 2011/12 academic year, which examined the implementation of an Extensive Reading (ER) program into the EC4 curriculum. Since that time, extensive reading has become an integral element of both the EC3 and EC4 curricula. The expansion of the program since its inception in 2011 has created new challenges and also necessitated continued research to assess its on-going effectiveness. This study will analyse how well the expanded program is supporting established extensive reading principles, and also look at student performance within the program, with a particular focus on data gathered from Moodle Reader.

Key Words：　extensive reading, Moodle Reader

1. Introduction

The value of extensive reading in improving L2 ability has been outlined by a number of researchers; for example, an improvement in comprehension and reading speed was reported by Bell (2001) and Murphy (2007), in vocabulary acquisition by Grabe & Stoller (1997) and Nation (1997), in writing by Tsang (1996) and in grammar by Yang (2001). Extensive reading has also been reported to improve listening skills, reading scores on standardized exams and speaking skills (Elley & Mangubhai 1983; Hafiz & Tudor, 1989; Walker, 1997; Renanda & Jacobs, 2002).

Krashen's input hypothesis (1982), which argued for comprehensible input being the sufficient condition for L2 acquisition, and his reading hypothesis (1993), which explained the positive

effect of extensive reading on such skills as reading comprehension and vocabulary, have provided some theoretical support for extensive reading.

In Japan, a number of studies have been undertaken to estimate the effects of extensive reading programs. Hayashi (1999) looked at the influence of extensive reading on reading skills and vocabulary recognition in a university context in Japan. To assess her students' reading, she required them to write book reports which included the number of pages read, amount of time spent on reading, degree of gratification and interest in the content as well as difficulties in grammar and comprehension. She reported a positive outcome on the extensive reading program. However, while it is possible to draw conclusions from self-reported data, such research would be strengthened by an external assessment of the amount of reading done.

Yamashita (2008) investigated the benefits of extensive reading in the short term. She identified

weaknesses in earlier research by Hayashi (1999) and attempted to identify variables (such as influence of other English classes, or reading done as self-study) which may have adversely affected the validity of previous studies. Yamashita's study also sought to eliminate "the possible contamination from learners' exposure to L2 out of the extensive reading programmes" (2008, p. 664) by surveying participants and removing those who reported voluntary study of English outside the course.

Yamashita relied on book reports written in the participants' L1 (Japanese) to determine the extent of their reading. While removing participants who had obtained English input through voluntary activities strengthens her claim that "we can confidently assume that the reading that these students did during the semester consisted solely of the extensive reading related to the target class" (Yamashita, 2008, p. 668), she does not provide detail on the assessment of the reading reports submitted by participants. Given that students had access to over 500 graded readers of various levels and were permitted to read material from outside the course, it would be difficult for a teacher to assess such reports with a high degree of reliability and validity.

Assessing extensive reading is difficult for many reasons. For example, Day & Bamford (2002) stress that in terms of extensive reading, reading should be its own reward and "is not usually followed by comprehension questions" (p. 138). However, in the next paragraph of the same article, they note that "teachers may ask students to complete follow-up activities" for many valid reasons such as to "keep track of what and how much students read" (p. 138).

One form of assessment is available on moodlereader.org. The module on the website (Moodle Reader) currently has a database of over 2000 quizzes for individual graded readers.

Research utilising the Moodle Reader module may include;

- writing (using the GIFT format), using, and analysing quizzes for new books
- analysing data gathered from Moodle Reader such as the individual score on a quiz, number of words read, class average score etc.
- changing variables, such as time allowed to complete the quiz, percentage allowed for a pass etc.

Research Questions

With this literature in mind, for the purposes of this paper, there is one overarching research question:

Is the EC3/EC4 Extensive Reading program functioning effectively?

Within that larger question, there are three sub-questions;

a. *Do students have access to a wide enough selection of books at an appropriate level?*
b. *Are students reading a sufficient number of words to make satisfactory progress?*
c. *To what extent is Moodle Reader supporting the Extensive Reading program?*

These questions will be addressed separately in the following analyses.

Results and Discussion

Do students have access to a wide enough selection of books at an appropriate level?

When the Extensive Reading program was first introduced in EC4 of the 2011/12 academic year, which was at that time an elective course, only about 130 students were enrolled and approximately 300 graded readers (including multiple copies of many books) were available in

the Self-Access Learning Center (SALC). There was a noticeable lack of books for lower-level students, so subsequently new books were purchased, and by the end of the academic year there were close to 1000 graded readers available.

The success of this initial trial, and the need for a more extended program of reading, prompted the decision to begin extensive reading from EC3 in 2012/13, to run through both the EC3 and EC4 curricula. By this time the courses had become compulsory, and the number of enrolled students leapt to about 700. A survey taken by students in January 2013 indicated that 473 of 540 respondents (88.6%) had actively participated in the ER program during EC4 (students of a very low-level account for most non-participants).

At this time there were 1542 books, with Moodle Reader quizzes, available in the SALC. The number of books per level can be seen in Figure 1, below.
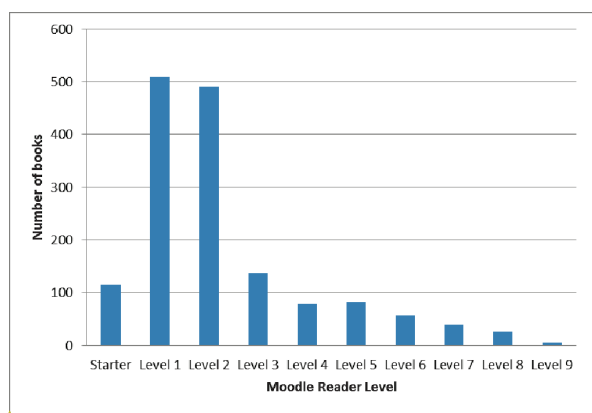

Figure 1. Number of Books in the SALC with Moodle Reader Quizzes, per Level.

With more than three books per student, the total number appears more than satisfactory, and clearly exceeds Bullard's requirement that:

> For a class of 30 students, 50 books is the desirable minimum number of readers, so that there is enough choice left for students wanting to take out another book (2011, p. 57).

However, the rather limited number of books available at the *Starter* Level (n=115) is cause for concern, particularly in light of the information provided in Figure 2, which shows the number of Moodle Reader quizzes taken per book, per level.
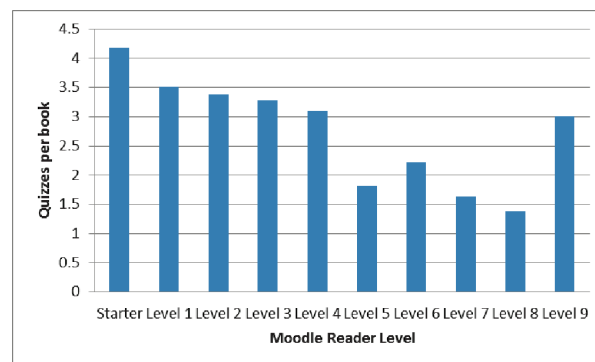

Figure 2. Number of Quizzes per Book per Level

This shows a fairly consistent decrease in the number of quizzes taken per book, as the level, and difficulty, increases. In light of Bullard's assertions (2011) that "it is better for students to start at a level below their own" (p. 58) and "very important that the library has a good range of readers at a low level" (p. 57) more books at the *Starter* Level need to be acquired.

Are students reading a sufficient number of words to make satisfactory progress?

The main aims of this ER program are to build students' fluency, reading speed, general comprehension of reading texts, and to promote an enjoyment of reading in English. Even before looking at empirical data, it can be said with confidence that the program has fostered a habit of English reading in students, and has provided them with a valuable source of English input. This in itself can be termed *progress*. However, for the purposes of this paper, the definition of *progress* is borrowed from Day & Bamford (1998) who define it as when students become "fluent, independent, and confident readers" (p. 9).

For example, data collected from Moodle Reader indicates that on average, each student read 15,412 words throughout the course of EC4; this figure assumes all passed quizzes were accurate reflections of actual reading, and that students did not simply cheat or guess quiz questions for the sake of meeting individual reading targets. Of course, the degree to which students have engaged with the program differs depending on the individual, and as such, there are differing degrees of progress.

Such differences in individual progress are ultimately factors of:

1. reading motivation and attitude
2. encouragement from the teacher
3. appropriacy of reading targets and tasks
4. degree of time given to ER in class
5. whether the ER program is easily understood by students

Similar factors have been discussed by Schmidt (2007), and various studies within the Japanese context (Nishino, 2005, 2007; Takase, 2007; Mori, 1999) regarding progress in ER also tend to support the importance of motivation and attitude. In looking at this particular ER program, the varying degrees of individual progress can be analysed within this general framework. Due to the limited scope of this paper, however, this does assume that all students were motivated by varying factors, whether they were instrumental factors (scoring points toward their final grade, reading to pass quizzes, reading to meet deadlines, etc.), or integrative factors (a desire to have contact with native English speakers, to interact with L2 cultures, to read for pleasure, etc.), and also must take into account progress with respect to such factors as certain intrinsic and extrinsic motivations, reading attention span, linguistic confidence and anxiety, L2 proficiency, L2 learning history and experience, L2 identity issues, and the like. Likewise, the complex theoretical construct of reading attitude is assumed to be different among individual students, and this must

be accounted for in a review of any reading progress. Finally, differences in progress must also be seen as factors of such things as encouragement from teachers (or lack thereof), appropriacy of reading tasks, whether time was devoted to ER in class, and how easy the ER program was to understand. Again, this is assumed to be different for each student and class group.

No pre-test or post-test was administered in this study to try to empirically define *progress*, however certain data can be analysed to extrapolate the effectiveness of the program and whether students read enough to make progress. Such an informal, qualitative study can in fact prove to be a fruitful endeavour in measuring degrees of progress for students.

In trying to determine whether students have become "fluent, independent, and confident readers" (Day & Bamford, 1998, p. 9), it is helpful to look at total words read per student, and how this reading was done. ER studies (Waring, 2009; Waring and Takaki, 2003; Nation, 2001) suggest that large amounts of text must be read in addition to course books for students to not only retain what they know, but to develop it too. Figure 3 below shows the average number of words read for each class group.
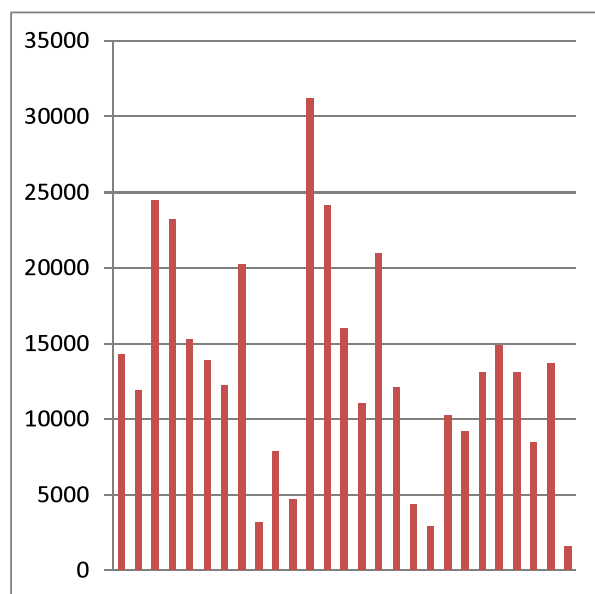

Figure 3. Average Words Read Per EC4 Class Group

Certainly, these figures cannot be said to constitute large amounts of text. Further, as Nishizawa, Yoshioka and Fukada (2010) found in their case study, certain learners need upwards of 300,000 words to reach the threshold where they are able to read fluently without translation, but also to read for enjoyment. The same study also found programs which require students to read less than 100,000 words per semester had little to no effect on learners' long-term affinity for ER. This is problematic, however given our institutional context (where students on the whole can be said to be low-level and low-motivation) is largely unavoidable. It can also be argued that particularly for lower level students, any amount of reading is beneficial and preferable to none, and it should be noted that research is yet to reach any form of consensus on whether a threshold level exists below which learning benefits become negligible.

Given this context, it is also helpful to look at model students' and 'low-performing' students' reading habits in this ER program in order to judge their progress and how different students engaged with the program or in other words, *how* the students read. Such data provides us with an indication of whether the reading was done for pleasure or whether it was done simply to meet deadlines and teacher-set targets. It also allows us to understand whether reading was done sporadically or consistently throughout the semester, again indicating whether reading was done for pleasure or out of obligation.

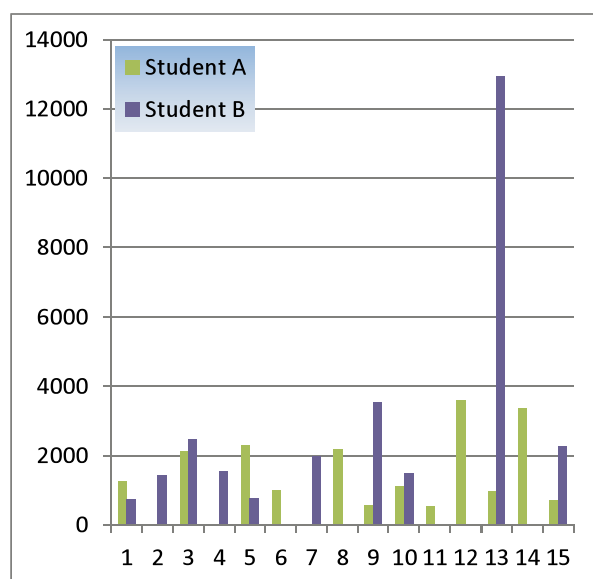Figure 4 shows two separate 'model' students (student A and student B) and their reading habits:

Figure 4. Model Students' Reading Habits Over A Semester

Although both students demonstrate a slight tendency to read more towards the end of the semester, this figure demonstrates that reading was done consistently throughout the semester. The fact that these students also generally read within their level suggests that word-counts were not a consideration in their reading habits.

In contrast, the figure below shows two separate 'low-performing' students (student C and student D) and their reading habits:
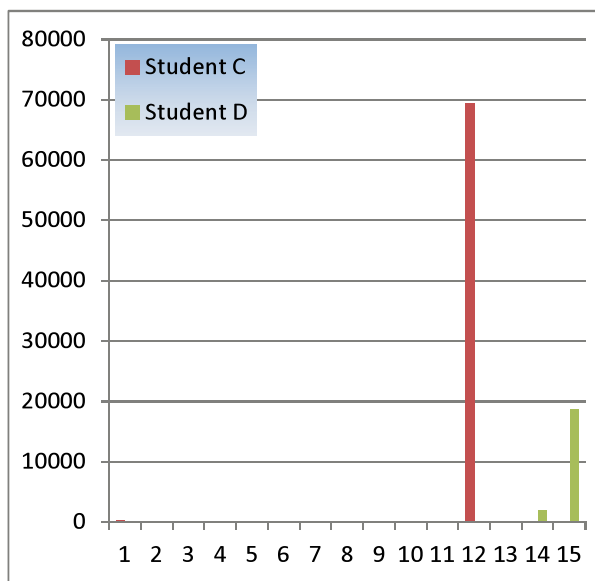
Figure 5. Low-Performing Students' Reading Habits Over A Semester

Figure 6. Average Words Read Per Student In Model Class Group.

This figure indicates that reading was not enjoyable for these students, and thus that progress was insufficient. Reading habits were generally sporadic, and the large amount of reading done towards the end of semester indicates that it was done merely to meet teacher-set targets. Both students also demonstrated a tendency to fail a lot of quizzes, indicating that reading was not actually done, but that they simply engaged in a lot of guessing to pass quizzes.

Entire class-groups also displayed similar reading behaviour. The two figures below show a model class group and a low-performing class group. A telling factor is that the model class group were generally advanced-level and high motivation, while the low-performing class group were elementary-level and low motivation.
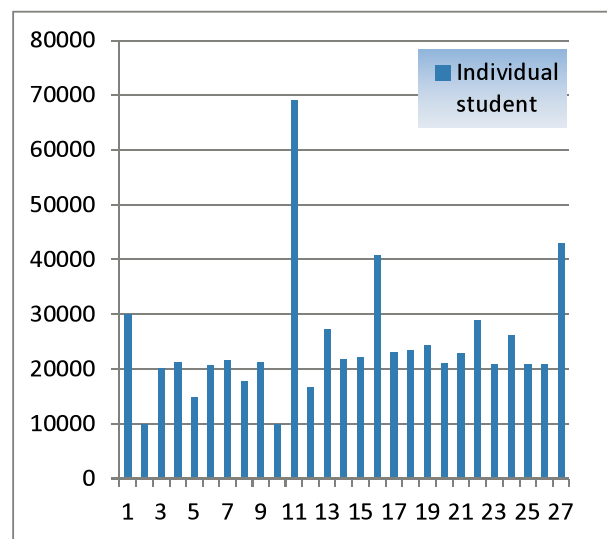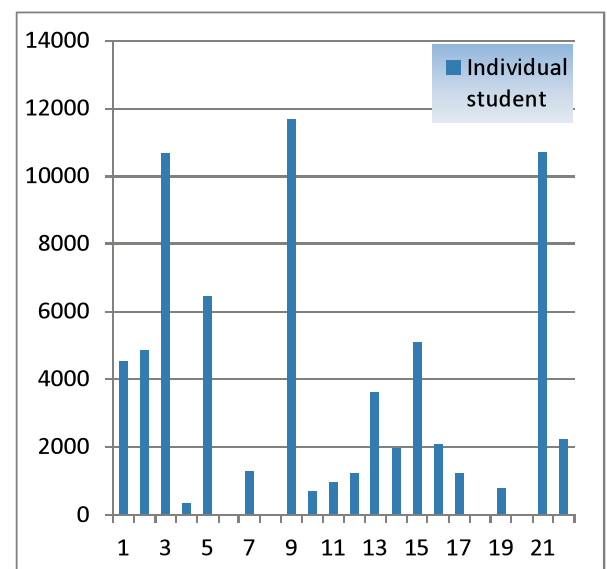

Figure 7. Average Words Read Per Student In Low Performing Class Group.

Other data which is indicative of good reading progress is the percentage of quizzes passed; as previously mentioned, a low failure rate would indicate students were actually reading for enjoyment and taking the quizzes as a supplementary activity. A high failure rate would indicate students were simply guessing quizzes in order to meet their reading obligations. The figures below show a model and low-performing class, as well as the rate for the entire student population:
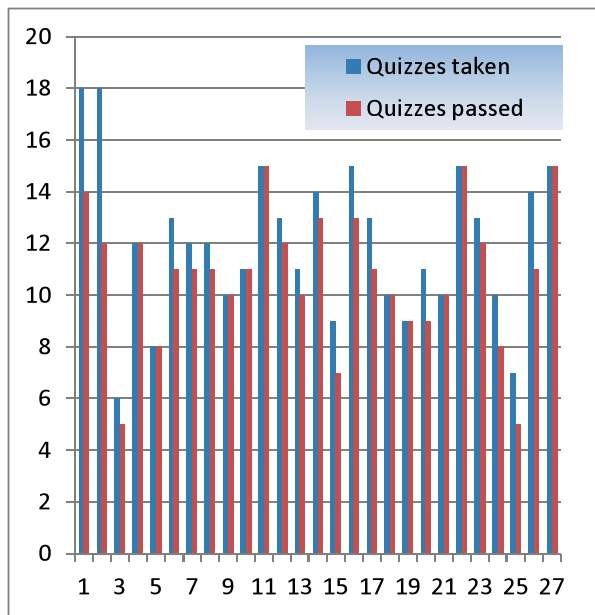
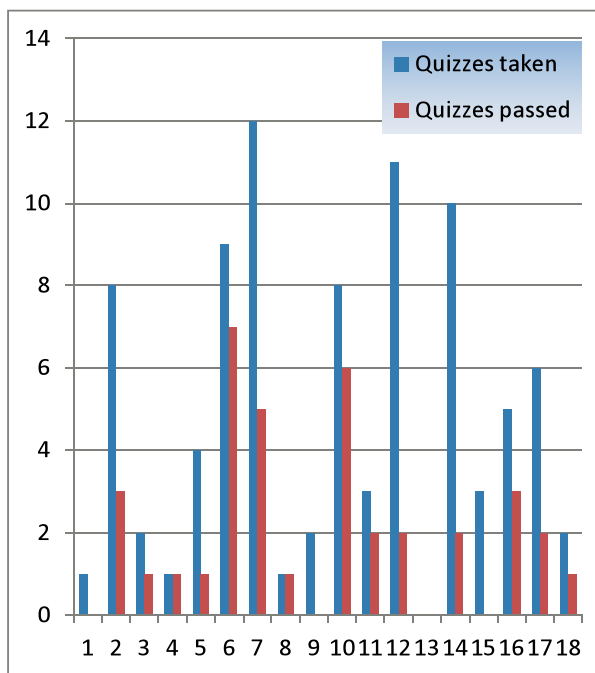Figure 8. Model Class Showing 92% Quiz Pass Rate.

Figure 9. Low Performing Class Showing 50% Pass Rate.
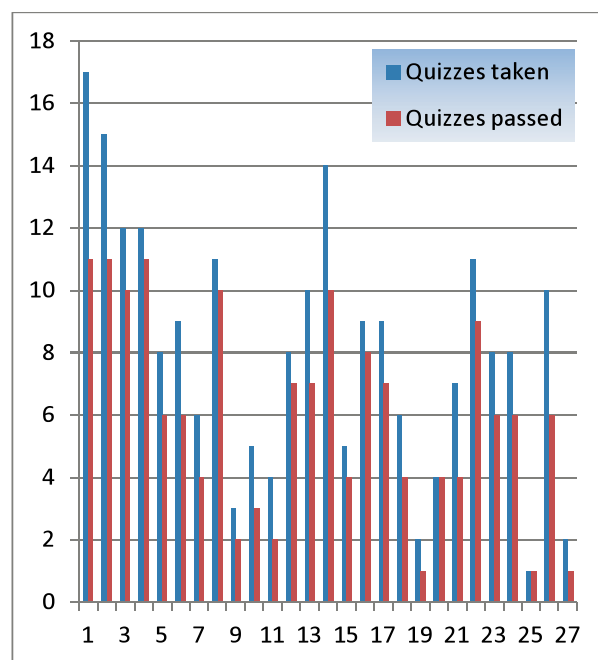

Figure 10. Entire EC4 Population Showing 74.5% Pass Rate.

Overall, students had a pass rate of 74.5%, indicating that on the whole students' reading habits have made for satisfactory progress. This is certainly in accordance with Hedge's (1985) finding that even 1 hour every week or two is enough to exert a positive effect (p.79), as well as Hill's (1992) finding that reading quality (through graded readers) is as important as reading quantity (through free-choice of texts) in judging student progress. Certainly, our students could not be said to have become fluent readers, but hopefully have become more independent and confident in their reading, and are more aware of its benefits and importance as an English learning procedure.

To what extent is Moodle Reader supporting the Extensive Reading program?

Moodle Reader has been used as the major assessment tool for the Extensive Reading program in the 2012-13 academic year. During the year, data on usage has been gathered which will result in recommendations for changes in the 2013-14

academic year.

Currently the site provides quizzes for about 1600 readers, numbers which were supplemented throughout the semester by additions from SILC teachers.

Moodle reader quizzes have randomized questions and a time-limit for completion. Students are able to refer to their books during the quiz while the time-limit is intended to minimize cheating. The site was created with the intention of supporting the Extensive Reading approach to language acquisition.

For students to successfully complete a Moodle Reader quiz, they need to correctly answer a percentage of questions. This percentage is a variable which can be adjusted via the settings on Moodle Reader. The current setting is 55% and the data suggests that students are able to pass quizzes easily even if they haven't read the book. Figure 11 is an example of a student who took 19 quizzes on one day. They could not have realistically read all of the books yet they still passed 17 quizzes. One feature which could prevent this in the future is the *Frequency restriction (days)* setting that limits the number of quizzes students can take in a certain period of time.
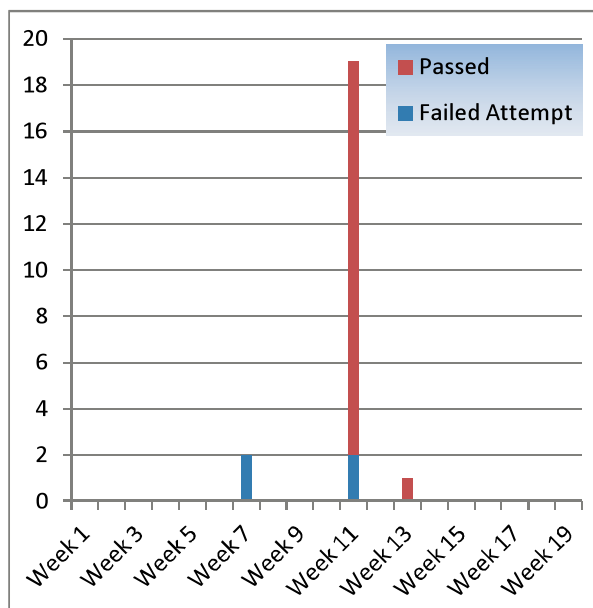

Figure 11. Student A - Moodle Reader Quizzes across 1 semester.

Figure 12 shows a student who has taken quizzes regularly during the semester. This is our idea of a model student who reads consistently throughout the course and takes quizzes accordingly. Even though there is a slight increase toward the end of the semester (i.e. taking 3 quizzes in one week), the data collected from MR is evidence of regular reading.
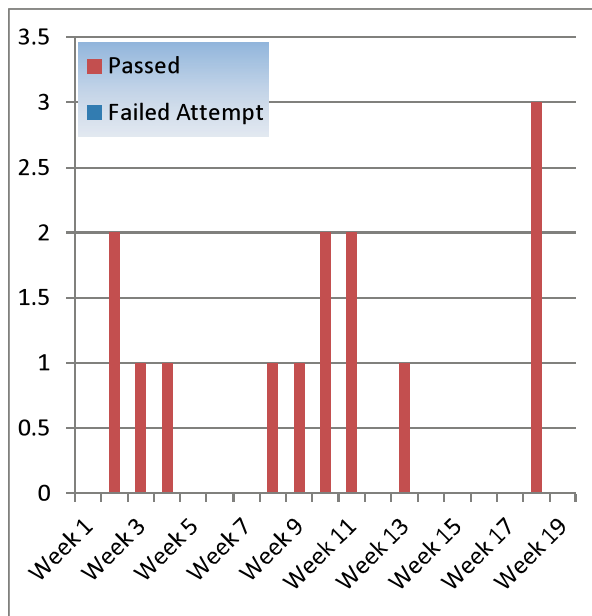
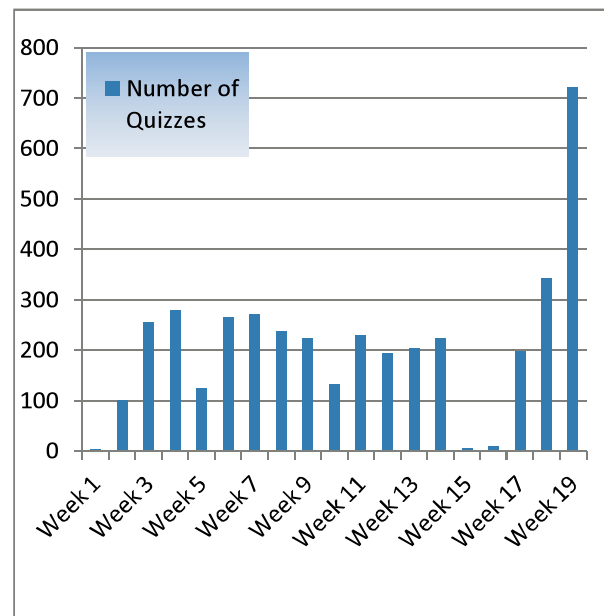Figure 12. Student B - Moodle Reader Quizzes across 1 semester.

Figure 13. Student B - Moodle Reader Quizzes across 1 semester.

Figure 13 shows the number of quizzes taken by all students throughout the semester. The weeks shown are calendar weeks rather than the 15 weeks of the university semester. It is clear from this graph that many students attempted to take multiple quizzes in the last week of term. This is not evidence of reading but rather the customary concern shown by students toward the end of the semester with regards to a pass or fail grade.

Conclusion

Throughout the academic year 2012-2013, the researchers gathered data on interaction between the students and Moodle Reader. In addition to this, feedback was collected from other teachers who were using Moodle Reader in the EC3/4 courses.

The software appeared to be functioning adequately particularly when compared to the previous year. There was a significantly lower amount of technical glitches which had often resulted in students being unable to take or find a quiz. Due to the more efficient functioning, frustration levels amongst both teachers and students was observed to be much lower.

However, there are a number of adjustments which will be made next year to improve Moodle Reader. These adjustments will be made as a result of the analysis of teacher feedback and discussion between the researchers in consultation with the second-year curriculum development committee.

The 'cheat' function was trialed and found to be of minimal value. After consultation with the creator of Moodle Reader, Tom Robb, the function

was switched off. The error message which came up as a result of apparent cheating was grammatically incorrect (*another user already do this quiz*) as a result of the programmer being a second language user of English from the Ukraine. The error message, supposedly informing students that they had been cheating, was also found to be triggered by legitimate use of the software and will therefore be left off for the next academic year.

The number of quizzes permitted to be taken will be reduced to 1 quiz every 3 days. Initially the setting will be left open while students complete the orientation which requires them to complete two quizzes in one lesson. After the first 3 weeks the setting will be changed. This will hopefully prevent students taking 20 quizzes on one day and fulfilling the requirement of taking a certain number of quizzes in a semester while avoiding the reading which is supposed to come before the taking of a quiz.

The book level which students can take quizzes for will also be restricted. Students will be able to take a quiz from a book up to 3 levels above or below their level. This will prevent students taking quizzes from high level books (particularly books derived from movies) and raising their word count by many thousands of words while again avoiding the reading component of the course.

Some students may wish to read books of a level significantly higher than is advisable if they were following extensive reading guidelines. It is hoped that these students will open a dialogue with their teacher or learning advisor and will be sufficiently motivated to do such reading without Moodle Reader.

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