Shared Identities: Our
Interweaving Threads

# An online system for assessing extensive reading

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This paper will introduce an online system which has been developed to addresses challenges facing extensive reading (ER) programmes such as assessment and the development and maintenance of in-class libraries. The system provides a record of what books students have borrowed, what they have read, whether and what they enjoy reading, and the level of books they can read easily. The system can involve the students in a reading community transcending the walls of the classroom, in which they can share their ideas about books.

多読教育が直面している課題として、成績評価や教室内の図書の管理という問題がある。オンラインシステムを利用すると、学生がどのような本を借りたか、どのような本を読んだか、読書を楽しんでいるか、その本が読みやすいレベルであったかどうか、といった記録を見る事ができる。このシステムではクラスの枠を超えて、読書コミュニティを立ち上げることができ、その中で本に関する情報の共有等を行うことができる。

**A**ssessment is a central issue in the implementation of ER across institutions, and in the justification of ER in individual instructors' pedagogies. An online system (ERS, which stands for "Extensive Reading System") has been developed to facilitate this, as well as addressing other issues facing ER practitioners, such as motivation of students and maintenance and management of class libraries.

In this paper, we will first investigate how assessment relates to ER. Next, we will introduce the online system we have developed, suggesting ways in which it can be used and improved in the future. Finally there is a discussion of some practicalities in the system's implementation in the classroom.
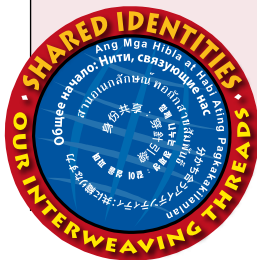
## Assessment of ER

Based on Krashen's input hypothesis (1992) many ER theorists say there should be no assessment. For example, Sakai's three rules are: "no testing", "no teaching", and "no dictionaries" (2008). Assessment theory is equally discouraging. Brown (2004) asserts that assessing reading is impossible; we can only assess it indirectly through some output activity (p. 186). However, most instructors in a position to implement ER are required by their educational institutions to allocate grades to students. In the increasing number of cases where institutions have ER programmes, some form of assessment is likely to have been implemented, not only to measure students' performance but also to provide incentives for instructors. The assessment of ER affects both curriculum developers working with instructors unfamiliar with, or unconvinced by ER, and instructors working within institutions that do not endorse ER. Another need for assessment in ER is the validation of student reading data. All proponents of ER wish to demonstrate the success of ER, while its critics seek proof that other strategies are more effective.

Using Helgesen's (2005) definition of ER as "students reading a lot of easy, enjoyable books," we have three fundamental measurements of ER. First, how much have students read? Second, how easy was it? Third, did they enjoy it? Let us focus on the first of these questions. While all practitioners agree that ER entails students reading a lot, the practice varies among instructors (e.g., Fenton Smith, 2007; Rosszell, 2007) and the interpretation of "a lot" can range widely from a handful of class readers to, for example, a million words (Furukawa, Itoh, & Sakai, 2005). If, for example, an institution were to set a semester target for students to read 100,000 words, which seems simple, suitable and attainable, there should be some way of checking if this goal has been met. If it is impossible to be sure how much students have read, any conclusions about the effectiveness of the technique become blurred. Here ER poses a dilemma. Practitioners want to know how much students are reading, but if we assess them on word counts, they may exaggerate while if we do not, they might not tell us how much they have read.

There are several kinds of written and spoken activities related to ER that may be assessed. Comprehension quizzes are also possible. Before we say that any of these assessments can be equated to assessing ER, there are three considerations. First, do they show that students have read the book? Second, as Mason and Krashen (2004) have asked, is time better spent on these activities than on reading? Third, will the assessment encourage students to read more? If we are not careful, written reports may fail to ensure that any kind of reading has been happening and they may not encourage the kind of fluent reading that we want. In searching for an ideal way to assess ER, the best conclusion is perhaps that there is no "best method" (Alderson, 2000, p. 203). The right thing to do at the end of a book is likely to vary from instructor to instructor, from student to student, and from book to book. If the goal is for students to read a lot, the most important thing students should do after finishing a book is to read another one. Let us not forget that in the real world, students do things because teachers ask them to, and, until the ideal autonomous reader has been created, a student's reading is a function of a relationship between two people. A range of different assessment

strategies is clearly appropriate, particularly before and after what Von Sprecken, Kim, and Krashen (2000) termed the "home-run book"—the reading event that turns a student into a reader—and a system is therefore necessary that will allow a variety of responses and activities, and will process and distribute whatever data is created.

The term "assessment" must be addressed in both its narrow and broad sense. In the narrow sense, we require some numerical measures of our students' performance and proficiency. In the broader sense we need a range of information so that instructors can help their students and so that the institution can help them all. Much of this information is qualitative, addressing questions ranging from practical issues to those of motivation. For example:

- Are students enjoying reading?

- Are students reading at the right level?

- Which book should the student read next?

- What books does the institution need more of?

- Do students understand the rationale behind ER?

- How are students reading?

Next we will describe an online system that attempts to address these issues, the additional problem of managing books in class libraries and the challenge of motivating students.

## The online Extensive Reading System (ERS)

An online system was developed to track student reading, making information available to instructors, course developers and to other students as appropriate. The system uses three databases. One database contains information on students, a second contains information on books, and a third records each time a book is read by a student. We will first describe how students use the system to input information about the books they are reading; next we will show how instructors and students can see information about students and books. After that we will look at interactive features and finally we will look at future and on-going developments of the system.

### *Input*

When students begin reading a book, they search for it in ERS. As well as being able to search by publisher, level, title, or genre, students can use a quick-search function into which they type a part of the title. Photos of covers accompany book entries to allow recognition by another mode (see Figure 1).

If the book is not in the system database, users can search for it by ISBN. This will add the book to the database, automatically filling in fields for the title, author and publisher, and adding a cover photo. The new book will be flagged as an unconfirmed book and a message will appear on all instructors' top pages with a link to a list of unconfirmed books. Any instructor may then access the book and add other data: the word count, the genre and the level. New books frequently appear on the ER market and unfamiliar old books appear on book trucks. With a paper-based system, any list of word counts will become outdated as soon as it is printed. Some publishers have begun to print word counts on their covers, which is helpful. To serve the
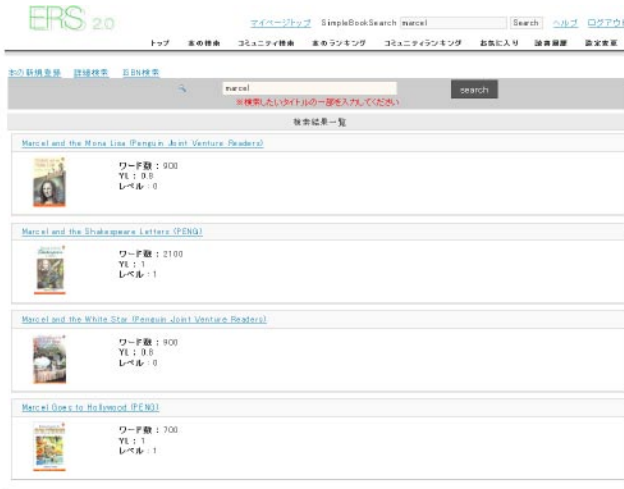
**Figure 1. Search results for "marcel"**

previous paper book-reporting system, some instructors have encouraged their students to write the word counts inside the back covers of each book they finish.

Selecting a book from a search list will take users to the book's page (see Figure 2). When students click on a book, the system asks for confirmation that they have begun reading it (see Figure 3). Also, the system asks when they started reading (allowing a date within two weeks) and where the book came from (whether bought in the university shop, borrowed from the classroom, borrowed from the university library or borrowed from an instructor's library outside the classroom). After this, the cover of the book appears in the student's top page.
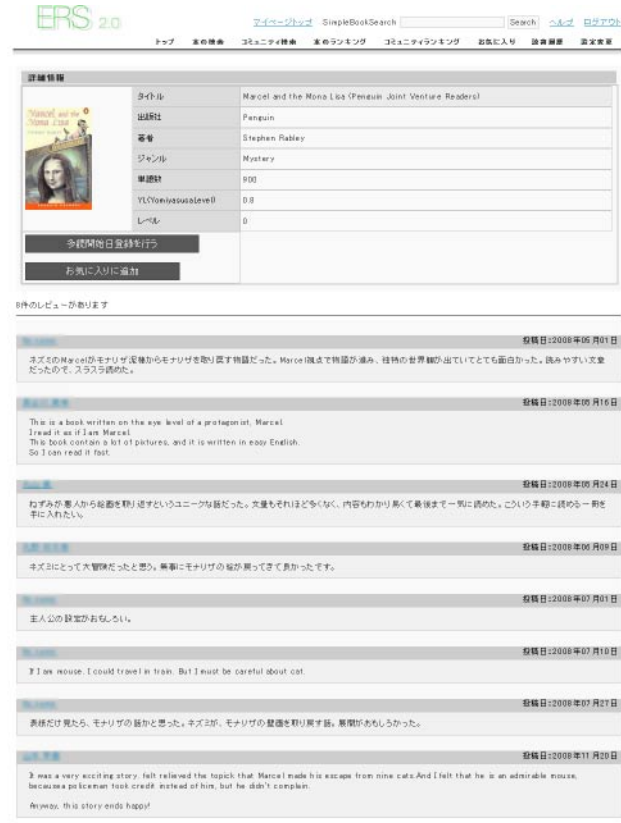
**Figure 2. Search page for a book, showing other students' reviews**

**Figure 3. "Confirm borrowing" dialogue box**

When students finish reading a book, they click its cover in their top page, and then the system asks:

- when they finished reading, this time allowing a date within two days;

- how much of the book they read, whether the whole book, half the book, a few pages or one page (it is important to give students the option of abandoning dull or difficult books);

- how interesting they found the book on a scale of 1 to 5;

- how easy they found the book on a scale of 1 to 5.

There is also an option to write a review of the book, which can then be published or kept private at the student's discretion, or depending on the instructor's instructions. Students are also asked whether they have returned the book, and if not, the book will remain on their top page as unreturned. This enhances the systems' functionality in managing class libraries. In future, a short quiz about the book will be available at this point (see Figure 4).



**Figure 4. Report-writing box after finishing reading book**

### *Output*

When instructors access the system, a list of their classes appears on their top pages, along with any messages (see Figure 5). Clicking one of these classes will show a list of students (see Figure 6). Information on the reading progress of the class is thus available to instructors, so that student progress can be quickly and easily monitored. For example, at the early stages, instructors may want to see which students have not yet logged into the system, and which have not started reading. Later, instructors may want to know which students are taking a long time to read books, and which are regularly reporting that their books are difficult

**Figure 5. An instructor's top page showing classes**

or uninteresting. A range of factors may be considered for assessment. The system is currently set to send a score based on student word counts into the university's moodle course management system for each class. Data is also available on books, such as a ranking of the most popular books.

Clicking one of the students will show their top page, so that the instructor can see what that student is reading and has read, view their reviews, and see their graphs, which will show whether they are reading regularly, sporadically or frantically towards the end of the semester (see Figure 7).



**Figure 6. An instructor's class list showing some statistics for the students**

**Figure 8. How the tree graphic changes every 10,000 words the students read**

information to potential readers as they browse (see Figure 2). In a similar way, students may also see the top pages and reading records of other students, by clicking their name on a book review or in a community.

The ERS also allows communities. Users can join or create their own communities where they can discuss common interests. This makes possible virtual book circles where students can compare ideas and opinions across classes, faculties and campuses. Online booksellers and music sites make (and derive income from) recommendations based on the buying patterns of similar users. Using information about what books students like, the ERS will identify similar users and recommend books that they enjoyed.

### *Future developments*
While possible developments to online systems are almost unlimited, the following improvements are being implemented or investigated:

- bar-code readers to speed in-class access;

- mobile-phone input;

- links to on-line graded reading;

- links to audio files to give students access to extensive listening materials;



**Figure 7. A student top page showing graphics**

When students access the system, their top page also shows the graphic representations of their reading shown in Figure 7. This includes a tree which grows as they read more (see Figure 8) and graphs that show their reading pace and cumulative word count. In addition there are links to any communities to which they belong, and messages from each community.

While paper-based systems usually entail instructors collecting work from all students, online systems allow that information to be seen by other students. This is ideal in the case of a book review. Reviews written by students appear below the books on the search pages, to give more

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- customisable top pages for instructors and students;

- automatic grade calculation, customisable by instructors;

- video input of oral book reviews.

Work is also underway to add comprehension tests to the system. With the ever-growing list of extensive readers offered by publishers, the biggest issue here is perhaps the sheer number of titles. A great deal of work has already been done on paper-based and online systems (Reed & Goldberg, 2008; Robb, 2008; Stewart, 2008). The availability of a battery of tests is clearly a major and ongoing task that will be fulfilled with cooperation and collaboration within a framework that takes into account different approaches to ER and its assessment.

The ERS interface was originally in Japanese. As their L1, this is easier for most of the students, but misses an opportunity for exposure to and practice of the target language, perhaps, for example, discouraging some students from writing reviews in English. The interface is now also in English and it is hoped that an intelligent bilingual interface can be developed to minimise student confusion and anxiety and maximise the opportunity to acquire and use screen English.

As more students read more books, and indicate how easy they find them, we can make estimates of the reading level of each student. If student A reads book X and finds it easy, then we can say that student A is probably reading at, or above the level of book X. Because of the idiosyncrasies of readers and books, it is impossible to be sure of their level on the basis of one book, so a level of uncertainty (an error) is attached to the student's reading level. If several books at a particular level are read with ease, the error will diminish. Such an approach may then be used to confirm the level of the books. Empirical reading levels of students are likely to be useful to instructors, to the students themselves in choosing and recommending books and also for writers, publishers and researchers of graded literature.

With detailed records of which books students read, there is potential for lexical research into words or phrases contained in books that particular students have read, rather than the often-artificial reading situations that are created to test hypotheses of vocabulary acquisition.

## Classroom implementation

Rather than being seen as a panacea, computer technology is sometimes seen as an inconvenience or even an enemy. If instructors are uncomfortable with a technology, they are likely to have problems encouraging students to use it. This is part of a broader issue well beyond the scope of this paper, although a vital consideration in the implementation of any online system. Additionally there is an issue of a digital divide. Even within a university in technologically-advanced Japan, access to computers may be very inconvenient for many students. While computer rooms exist, they may not be available during an ER lesson.

Systematic research has yet to be conducted on attitudes towards our Extensive Reading System. However, the following encouraging response was given in a questionnaire for instructors about ER:

- オンラインのシステムを利用したので大変楽でした。もっと多くの先生が活用すれば先生方の苦痛が減ると思います。

- [ER] was made very easy by using the online system. If more teachers use this, their lives will become much easier (authors' translation).

In the context of calculating word counts for grades, ERS clearly saves a great deal of time. Additional information comes from the classroom experiences of one author of this paper and anecdotes from colleagues.

Even the best computer systems will not work if users cannot access them. Access requires a computer, the ability to find the system online, and a user name and password. Our system uses existing user names and passwords issued by the university for its own email and online system. Especially in the early stages, incorrect user name or password are common reasons why a computer system "does not work" and we are fortunate that this is somebody else's responsibility. While they have been issued this information, accessing the ERS may be the first time that students are obliged to use it, making the English instructor an agent of the university's IT infrastructure. One colleague has commented that regular use of an online system is good for student experience and discipline. Computer literacy would be a reasonable requirement for students at the tertiary level; as English is a compulsory subject, English instructors are well-placed for implementation of this across the university. However, English instructors may not be well disposed to the duty of teaching computer skills. Other instructors responding to the ER questionnaire have requested instruction on how to use the system, and how to show their students what to do.

The ER practitioner must, of course, explain to students how to access the system. It has been found that this is most successful if the class is taken to a computer room where all students "get their hands dirty" by actually logging on and recording the book in front of them. Slightly less successful is demonstrating access in class with a computer and projector. Although still effective for most students, least successful is simply writing the URL on the board and telling students what to do. The forthcoming edition of the in-house course text book (Adams et al., 2009) includes an explanation of the procedure with screen shots of each step.

When students are regularly reading, borrowing and returning books in class, ideally they should be able to access ERS, so they can record books they start and finish reading in real-time. While conducting classes in a computer room may be ideal for students to access ERS, it may be less conducive to their reading, and less convenient for any other activities. Bringing a lap-top computer to the classroom has proved useful.

## Conclusion

As ER is practiced on a larger scale, assessment becomes increasingly important for practitioners of ER and curriculum developers wishing to implement that practice across a course or institution. An online system can provide a basic reading record and allow a range of activities and practices that can motivate students and help instructors in assessment. Not only does this system show how much students have read, but also how regularly they are reading, whether consistently over a semester, or sporadically and then frantically towards the end. As a platform, the ERS can accommodate a range of functions from quizzes to reading journals. As well as providing information on students, ERS can provide data on the books students read, helping identify

which books are most popular to help maintain and manage classroom libraries.

ERS allows student comments, reviews or summaries of books to reach other students who may be encouraged to read those books. In addition to providing assessment data, the system can help meet a deeper aim of the ER programme by helping to build a community of readers (Schmidt, 2007, p. 13) in which students can connect and interact with other readers at similar levels and with similar tastes. It is hoped this will allow reading to break out of the physical confines of the classroom and the temporal constraints of the course.

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