Extensive Reading Using an E-Book System and Online Forum

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Extensive Reading Using an E-Book System and Online Forum

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ABSTRACT: This paper presents an extensive reading project conducted on an e-book system. We use picture books and comic books as reading materials, and provide an online forum where students can share and discuss their impressions of these. As initial results of the project, we show students' reading patterns, the influence of the online forum on reading amounts, and the influence of reading amounts on performance. The results indicate that the forum may stimulate students and encourage them to continue doing extensive reading. We also observed moderate correlations between the reading amounts and exam scores.

Keywords: extensive reading, e-book, language learning

1 INTRODUCTION

Extensive reading is defined as independent reading of a large quantity of materials for information or pleasure (Renandya et al., 1998)—different studies, such as the one by Nishizawa et al. (2010), have reported that it is effective in the acquisition of a second language. In recent years, digital books (i.e., e-books) have been introduced in schools in different countries. E-book system activities are recorded as learning logs that are used for learning analytics. This paper presents an extensive reading project conducted on an e-book system—we use BookRoll (Ogata et al., 2015). BookRoll is a web application that provides digital learning materials (e.g., textbooks and slides) on students' devices (e.g., tablets and laptops). We use picture books and comic books as reading materials for extensive reading, and students can share their impressions of these on an online forum. As initial results of the project, we show students' reading patterns, the influence of the online forum on reading amounts, and the influence of reading amounts on performance.

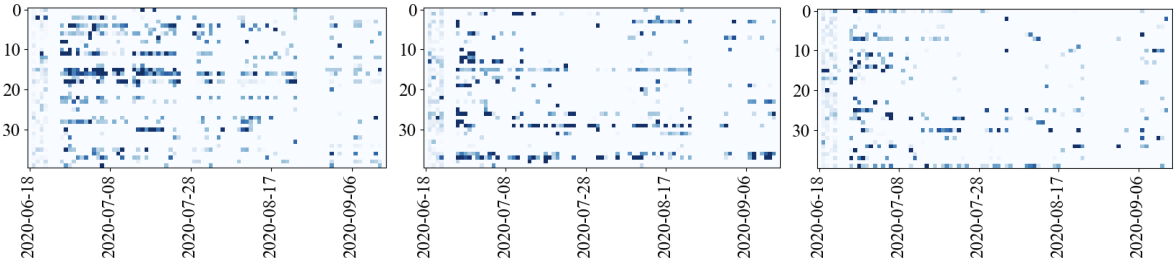
2 THE EXTENSIVE READING PROJECT

The extensive reading project began in June 2020. It focuses on 120 first-year students in three classes at a junior high school in Japan. As reading materials, we provide picture books and comic books, as Hafiz and Tudor (1989) reported that shorter books place less strain on learners' concentration, and are thus more likely to be preferred. Before starting the project, the lecturer showed a short movie on the principles of extensive reading (e.g., "learners choose what they want to read") (Day & Bamford, 1998), and as a starter, recommended a series of comic books. The project provides an online forum where students are encouraged to share and discuss their impressions of the reading materials. All three classes are provided the same reading materials and instructions.

3 INITIAL RESULTS

3.1 Reading Patterns

Figure 1 shows students' reading patterns for each class. The x-axis and y-axis correspond to the date and student, respectively. Each cell represents the number of pages read by a student on the given date, with dark colors indicating a larger number of pages. We can see that students in Class A read the materials more frequently and extensively than those in the other classes.

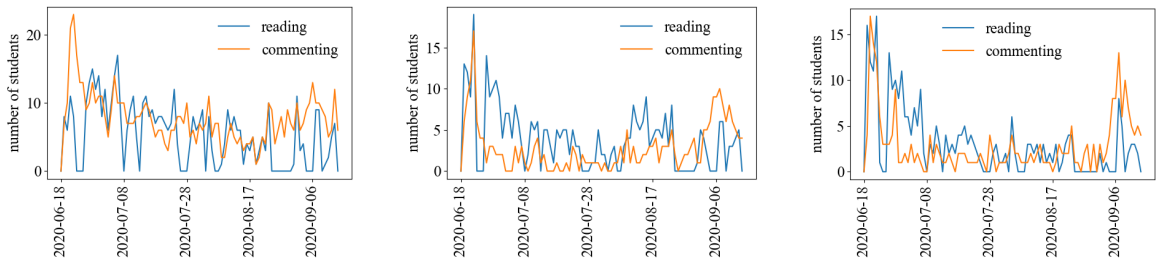


(a) Class A (b) Class B (c) Class C

Figure 1: Reading patterns

3.2 Influence of the Online Forum on Reading Amounts

As described in Section 2, the project provides students with an online forum to share and discuss their impressions of the reading materials. Figure 2 presents the numbers of students who did extensive reading (blue line) and who posted a comment on the forum (orange line) on the given date. We can see weak or moderate correlations between them ($r=0.26$, $p=.01$ for Class A; $r=0.33$, $p<.01$ for Class B; $r=0.45$, $p<.01$ for Class C). Figure 2(a) shows that the number of students posting a comment is continuously high for Class A. According to the lecturer, Class A students have shown greater inclination to continue doing extensive reading, indicating that the forum may stimulate the students and encourage them to continue doing extensive reading.



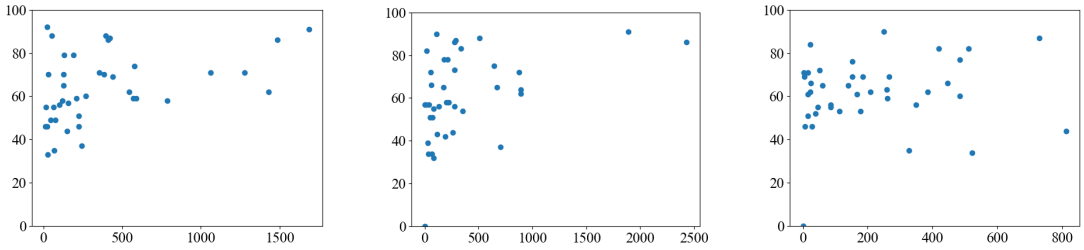
(a) Class A (b) Class B (c) Class C

Figure 2: The numbers of students who did extensive reading and who posted a comment on the online forum

3.3 Influence of Reading Amounts on Performance

We analyzed the influence of reading amounts on the students' language learning performance—an English exam was conducted on September 30, 2020; its content was not related to that of the

reading materials. Figure 3 shows the correlations between reading amounts and the exam scores. Each plot in Figure 3 corresponds to each student. The x-axis and y-axis indicate the number of pages read by a student and the exam score, respectively. In addition, we calculated the Pearson correlation coefficients that demonstrated moderate positive correlations (r=0.40, p=.01 for Class A; r=0.41, p=.01 for Class B), with Class C (r=0.14, p=.38) being the exception. Figure 3 shows the students who have low exam scores even though they read many pages. In the future, we would like to investigate how to improve these students' learning, and how to motivate those who did not extensive read and received low scores.



(a) Class A (b) Class B (c) Class C

Figure 3: Scatter plot showing reading amounts (x-axis) and exam scores (y-axis)

4 CONCLUSION

This paper presents the initial results of an extensive reading project on an e-book system. While students do extensive reading independently, sharing their impressions of the reading materials with their peers may contribute to promoting extensive reading. We will continue with the extensive reading project and reveal factors that contribute to the acquisition of a second language.

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