

Using social bookmark sites for independent reading projects

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Using the internet and new technologies may change the way L2 instructors implement independent reading projects. While traditionally students have read printed material and recorded what they read on paper, having students read articles on the internet and share what they have read using online social bookmarks has several potential advantages. Using social bookmarks could increase learner interaction and could lead students to find more interesting and relevant articles. Social bookmarking could also assist the instructor in managing the out-of-class reading. This paper discusses and evaluates a project where a university-level L2 reading class in Japan read articles on the internet and summarized the content on a group bookmark page. Though there were some difficulties in the project, the results confirmed many of the potential benefits of social bookmarking.

Introduction

Reading is considered one of the most valuable ways to increase one's proficiency (Smith, 1983; Nation, 2001), and many programs currently implement extensive reading (ER) programs (Jacobs, Renandya, & Bamford, 2000). ER has traditionally utilized graded readers since it is widely believed that the text must be comprehensible to allow for incidental acquisition, the reinforcement of previously learned language, and fluency development. Nevertheless, some L2 educators are advocating using the internet as an option for more proficient learners (Pino-Silva, 2006), with the main advantage being that the web has an enormous amount of content to choose from compared to graded materials. Learners

with adequate language proficiency, internet access, and web skills are bound to find reading material online that matches their needs and interests.

Another potential evolution in **ER** concerns how learners record and share what they have read. Traditionally, language instructors have had students complete a reading log sheet or write summaries and reactions in a notebook to record what they have read, and some teachers have had students meet in groups or give presentation to share their book or article. However, using new technologies online may allow for more cooperation among students and better management of the project for the instructor. One way this could be done is to use social bookmarking websites, such as Delicious.com or Diigo.com. Social bookmarking sites allow users to save links to articles as online bookmarks on their personal page, which is accessible from any computer with an internet connection. Users' online bookmarks can also be made accessible to specific groups or to the public at large. Under each bookmark link, users may choose to summarize the article, take notes, and/or write a reaction to it. This technology makes it easy to instantly share articles of interest and to have an online discussion about the content with a wide number of peers.

Though social bookmarking has been introduced in higher academic settings (Alexander, 2006; Bryant, 2006; Franklin & Van Harmelen, 2007), in **L2** contexts it has not been widely implemented despite the fact that other Web 2.0 technologies, especially blogs, have become widespread in writing classes. This paper explores the potential benefits of having **L2** learners read articles on the internet and then using social bookmarking sites to summarize and discuss what they have read online. Relevant research will be discussed before describing an action research project at a Japanese university.

Literature review

The Internet as a source for independent reading

While the main focus of this paper is to discuss social bookmarking, the feasibility of using authentic online articles for **L2** learners must first be established since most researchers recommend less proficient learners to read graded materials to build their receptive vocabulary before transitioning to authentic texts (e.g., Laufer, 1997; Nation & Wang, 1999; Nation & Waring, 1997).

Research has often supported the efficacy of extensive reading of simplified materials (e.g. Iwahori, 2008; Lai 1993; Pitts, White, & Krashen, 1989; Waring & Takaki, 2003). With adequate lexical coverage, learners can make use of context clues needed to infer the meaning of unknown words from context (Laufer & Sim, 1985; Liu & Nation, 1985). It has long been suggested (West, 1926) and more recently supported (Laufer, 1989) that learners need at least 95% or 98% coverage of the text to comprehend texts. However, these coverage levels, which are often noted by researchers and educators, may be considered too strictly. In Hu & Nation, 2000, some learners below 95% coverage displayed some comprehension of the text, and in another study (Prichard & Matsumoto, in press) intermediate-level learners with less than 95% knowledge of the words in a text used dictionaries to increase their coverage and comprehend the passage. These studies suggest that learners do not need to wait to reach an advanced level before they start to read authentic articles, such as those on the internet.

Reading on the internet offers several advantages. The first is that the internet offers

pages are currently indexed and searched by web engines such as Yahoo and Google (De Kunder, 2009). While the number of graded readers is ever increasing, obviously there is no comparison to the amount of material available on the web. Learners are bound to find articles related to their needs and interests on the web, which may increase their motivation to read. Furthermore, web content is frequently updated, meaning the learners can access more relevant information.

Another advantage of **RO** is the use of text links (Pino-Silva, 2006) and the ability to open up other browser windows to instantly search for related content. When reading an article, users can to access links or search for related articles to get background information, to read more detailed content, or to access to an article that more closely meets the interests and needs of the learner. Traditionally, learners had to visit a library, search a database, and track down the relevant material on the library shelves.

Another potential advantage of **RO** is that readers can make the use of online dictionaries, glosses, and translation tools. Utilizing new technologies such as online dictionary links or electronic glosses takes much less time and distracts the reader to a lesser degree (De Ridder, 2002; Koyama & Takeuchi, 2004). Though many studies concerning the use of glosses did not show significant comprehension gains, a meta-analysis of 18 studies demonstrated that glosses can increase comprehension (Taylor, 2006).

Lastly, **RO** provides a smooth “transition from learning to read to reading to learn” (Pino-Silva, 2006). Learners may build computer skills that they will need in the academic and professional world, not to mention for social and personal uses. Reading more challenging materials may build reading strategies and further increase learners’ confidence to challenge other authentic texts.

There are also certain disadvantages to reading online. First, not everyone has access to computers or a reliable internet connection. Some learners may not have access outside of school, meaning they need to go to a lab to do the work. There is some concern that the amount of content online may overwhelm or distract the learner and reading on a screen may cause visual discomfort or damage. Moreover, the ability to cut-and-paste may increase the temptation to plagiarize when learners are supposed to summarize what they have read (Pino-Silva, 2006). Finally, reading on paper may be faster than **RO** (Al-Othman, 2003). Certainly, many learners may prefer to read printed texts.

Reading authentic texts on the web differs greatly from reading graded readers, and **RO** may not be considered extensive reading at all considering that the texts are more challenging and intensive in nature. However, the advantages of **RO** may outweigh the drawbacks for intermediate to advanced learners, making **RO** a viable option for these students.

Social bookmarking sites for ER

As mentioned above, instructors traditionally have recorded what they have read through filling out a reading log, taking notes in a journal, and/or giving an oral presentation. With the development of online technologies, however, some L2 teachers have transitioned to electronic formats. Pino-Silva (2006) used Yahoo Groups to have students record what they read online. Learners had access to each other’s work, but were not encouraged to interact or work cooperatively. Students reported several advantages, including the ability to turn the homework in at any time and more frequent feedback from the teacher.

While Web 2.0 sites such as Yahoo Groups, Blogger, or Facebook, could also be used to record and share what learners have read, social bookmarking sites have been specifically **117**

designed for this purpose and may be more effective to use for both students and the instructor. As mentioned above, on these sites, users save links to articles they have read as online “bookmarks” on their page (see Figure 1). To bookmark a site, users log in to their bookmark page and enter the **URL**, or in the case of sites such as Delicious and Diigo, users can download a bookmark button to their browser toolbar. After bookmarking the article, users can add a tag or make a comment on the article.

If a user’s bookmarks are made public or made available on a group page, peers can click on the link and read the article or just read the summary. Peers can also add a comment or click on a “like” button if they find the content interesting. Social bookmarking is considered a web 2.0 technology in that users are involved in organizing online content with tags and users can collaborate and/or socialize online (Franklin & Van Harmelen, 2007).

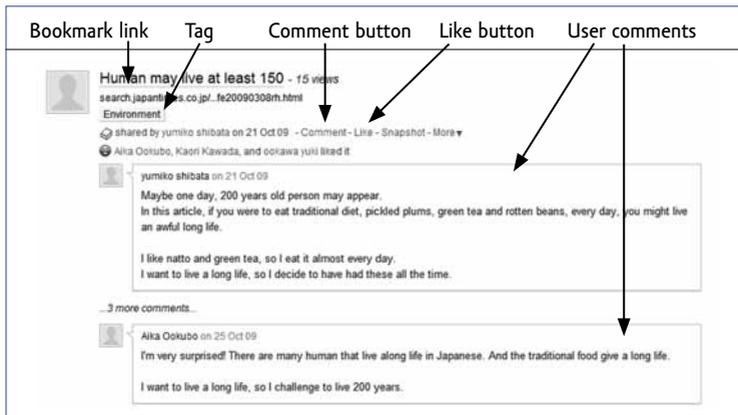


Figure 1. A Social bookmark entry on Diigo, with user comments

Educators have begun to recognize the potential of social bookmarking in higher education (Alexander, 2006; Bryant, 2006; Franklin & Van Harmelen, 2007). Alexander writes that the “pedagogical applications stem from their affordance of collaborative information discovery,” and he offers five possible advantages of social bookmarking. The first is the possibility to save links that could otherwise “be lost to time, scattered across different browser bookmark settings, or distributed in emails, printouts, and Web links.” Second, learners and educators can find peers with similar interests, which could potentially “magnify” one’s research sphere through new collaborations. Furthermore, users may analyze the various tags given to a link, which could add new perspective to the linked article and one’s research in general. Moreover, the use of group bookmark pages could greatly aid collaborative projects, as group members save relevant sites from their own computers and make tags and comments on the content. Finally, following students’ bookmark sites can allow instructors to observe students’ progress, and students can also follow their professor’s online reading.

Universities and individual professors have begun to use social bookmarking because of its potential. As two examples of academic sites which make use of social bookmarking, Alexander (2006) lists **H2O** from Harvard (<http://h2obeta.law.harvard.edu/>) and PennTags from University of Pennsylvania (<http://tags.library.upenn.edu/>). As for its use in individual courses, Bryant (2006) cites a case in which an instructor from the College of William

and Mary used the social bookmarking site Delicious to have students bookmark and comment on articles related to the course topic.

While many of the benefits of social bookmarking for higher education mentioned above go beyond the scope of the average L2 class, many of the potential uses are relevant. First, social bookmarking may increase the amount of interaction with classmates. Indeed, in the communicative language classroom, a supportive class atmosphere leads to more trust and less hesitation to communicate and work collaboratively. Moreover, rather than turning in the assignment only to the instructor, it may be more motivating for learners to share what they have read with their peers. This adds an authentic communicative purpose to the assignment. While there are other ways to share what one has read with peers, such as book reports or exchanging reading journals, social bookmarking allows learners to share with a wider audience at any time.

Having learners read online and share with others what they have read may lead the students to read even more. When learners share an article they find interesting, others may choose to read the article as well. If learners are reading high-interest articles, they will likely have motivation to read even more. On many bookmark sites, group bookmarks can be listed by popularity or by tags, which makes it easy for students to find articles of interest. Moreover, as learners find and share articles, they may improve their web skills and their ability to read articles on the internet. For students who will advance to further academic studies, they may become accustomed to online tools which are gaining wider use in higher education.

Using social bookmarking sites can also make it easier for the teacher to manage and supervise the students. Teachers can access all the students' bookmarks on a single group page, and the teacher can supervise student work throughout the semester rather than waiting for the assignment to be turned in. The instructor is also freed from carrying home a stack of notebooks from the students, with pressure to hand them back by an appropriate time.

Many of the potential benefits mentioned above have been shown to be true in L2 writing classes. Instructors are increasingly having learners publish their written work online (e.g. Smith, 2000; Lowe & Williams, 2004; Bloch, 2007), and doing so seems to "stimulate investment... and engagement" and is seen as public and "playful" (Lowe & Williams, 2004). Many studies have suggested that blogging may increase learner interaction, autonomy, and fluency (Pinkman, 2005; Alm, 2006). While blogs have become extremely popular in L2 writing classes, to the author's knowledge, no studies have examined social bookmarking, which could become the reading equivalent to blogging. This paper hopes to confirm whether the potential benefits of social bookmarking sites can be fulfilled.

Method

In an intermediate-level English reading class in Japan, students used a free social bookmarking site for their semester-long independent reading project. Usage data and learner surveys were analyzed to determine the efficacy of the project. These results were compared with a notebook-based project done in the same class in the previous semester to consider how online social bookmarking sites might facilitate second-language reading instruction.

Participants

The class consisted of 23 intermediate-level English learners in the second semester of their second year. The learners were English majors at a private university in Yokohama, Japan. As English majors, most students seemed to somewhat motivated, but a few seemed to be considerably less so. The class had previously read graded readers for their out-of-class reading assignment, and summaries were recorded on paper.

Procedures

In the previous semester with the same instructor, the students were to read at least 200 pages of graded readers and turn in summaries of the books they read. During one class period, the students met in groups to share their books. Reading graded readers was a program requirement, and they had also done so in the previous year. The students were told that they would read articles online for a change and to introduce another form of independent reading.

Before the semester, the instructor set up a group page on the social bookmarking site Diigo.com. During the second class (the class met once a week for 14 weeks), the students were introduced to the Diigo site and shown how to sign up for the group page (see Figure 2; <http://groups.diigo.com/group/meigaku-readers>).



Figure 2. Screenshot of the group page

The class was then given the instructions for the project. Every week, the students were to read two or more articles found on their own or by a classmate. If found on their own, the students were to summarize each article in two or three sentences and write their reaction in two or more sentences. They were also asked to add a tag, such as "sports", "Japan",

or “health”. If the article was one that was previously bookmarked and summarized by a classmate, they were to comment on two new facts from the article and to write a reaction. In this case, they were asked to indicate or demonstrate to the instructor that they had also read the article.

The class was also instructed to comment on at least one person’s summary and “like” at least one bookmark by clicking on the “like” button. In these cases, reading the article was not required. This part of the assignment was intended to provide a more authentic social experience online. It was hoped students would feel a real purpose for sharing what they read and interacting without being forced to read each bookmarked article. Giving the option of reading the article also gave the instructor the opportunity to see how often students chose to read articles on their own volition.

The students were told they would be graded based on the above instructions. Though their summaries were to reflect comprehension of the article, the class was told that they would not be graded on their English use. In fact, to put the focus on reading rather than writing, the class was given the option of writing in Japanese, though no students actually chose to do this. To encourage them to put effort into finding interesting articles and to enjoy the project more, extra points were given to students if many classmates “liked” or commented on their article. However, as one of the research goals was to determine the students’ motivation to read, the students were not told that they would be given extra points for doing more than the required work.

It became clear that many students were not used to using the internet, especially in English. Signing up for the site took longer than expected due to the fact that some students could not even access their email account to verify their Diigo account. During the third class, the students again met in the computer lab. On this day, they practiced searching for web pages by doing a web search hunt activity. Using a Diigo “topic” post on the group page (<http://groups.diigo.com/group/meigaku-readers?type=topic>), the class was also introduced to eleven web sites that were expected to be of interest to the students, including The Japan Times, MSN Lifestyle, CNN, BBC, and Yahoo Odd News web pages. The students then had time to make their first bookmark, and it was felt that the students would be well on their way to reading on the web in English and using Diigo.

Student progress was monitored online, but the following class sessions were held in a traditional classroom and consisted of textbook-based reading activities. During the eighth class, the class again met in the lab. News vocabulary and summary writing were reviewed since it was clear that some students were having trouble comprehending the articles and many were not writing effective summaries. Many comments did not summarize the article thoroughly or accurately (though summary writing was not the main focus). The students received a tentative participation score. The project continued until one week after the last class, with the teacher continuing to moderate student work.

On the last day of the semester, the students anonymously completed a 20-item survey instrument on their opinions about the project. Most items contained four-point Likert scale response choices. The class was also asked to write their comments freely at the end of the survey.

Analysis

To determine the effect of reading online and using the social bookmark page, four research questions were formulated and analyzed using students' usage data on the social bookmarking site and feedback on the survey instrument:

1. *Would the reading on the internet and using social bookmarking site increase the motivation of the students to read?*

This was analyzed by looking at the number of articles the students chose to view and read. Diigo provides data, showing the number of times each site was viewed and the number of comments by each group user. Reading more or less than the required two articles per week may indicate students' motivation to read online. Survey questions were also formulated to judge the students interest and motivation to read online and use the bookmarking site.

2. *Would the social bookmarking project lead to increased interaction and cooperation?*

The students had the choice of reading an article they found on their own or one that was previously bookmarked by a classmate. Choosing to read an article bookmarked by a classmate was considered a sign of interaction, so the frequency at which this was done was examined. Moreover, the number of comments on classmates' bookmarks was analyzed. Survey questions were also formed considering the social aspects of the project.

3. *Would reading on the internet and using Diigo improve the students' reading proficiency, language development, and computer skills?*

These questions are difficult to analyze without testing, but the learners' development was judged based on observation and student surveys.

4. *Would the site make the independent reading project easier to manage for the students and the instructor?*

This was determined based on the experiences and observation of the teacher and student surveys.

Results and discussion

Overall, the students seemed to enjoy the project. On the four-point Likert scale, with "1" representing strongly agree, the mean response for the usefulness of Diigo project was 1.77, which was a higher score than was given to the textbook reading assignments (2.09) and graded readers (2.14). When asked which out-of-class project they would prefer, Diigo was the top choice (chosen by 11 students), though graded readers was also popular (9 students). Reading from the textbook for homework and reading on web but recording in a notebook got just one vote. The student written feedback on the survey reinforced the results above. Students wrote that Diigo was "awesome" or "fun", though a few students wrote that they wanted read graded readers instead.

Student motivation

The students were to have read about 25 articles based on the instructions given at the beginning of the project. According to Diigo data, the students viewed a mean of 23.6 articles, but they wrote just 10.8 summaries ($SD = 6.71$, median = 9). Some did not read as much as they were supposed to, and there is some question whether they understand the directions. Five of the 23 students completed five or fewer summaries and seemed to give up on the project.

According to the survey, it seems the project did motivate many of the students to read. Nearly half the students disagreed with the item “Before this project, I often read articles in English out of class” (2.45), so it seems many students did not read English on the internet much in the past. However, many moderately or strongly agreed that doing the project increased their motivation to read in English (1.86). Survey results indicate that some students may continue to read articles in English in the future (2.08). One student wrote that he or she preferred to read online because he or she could find interesting articles, and two others wrote that they liked that internet articles were often “renewed” and they could learn about recent news. Two other students wrote that the project was “fun.”

Overall, it could be concluded that the social bookmarking project may have moderately increased students’ motivation to read on the internet. User data seemed to show they were not intrinsically motivated to read more than they were required to, but survey responses and student comments suggested that overall they were more motivated to read in English on the web compared to before the semester.

Student cooperation and interaction

According to Diigo data, about three-fourths (76%) of the articles viewed were shared by others, rather than searched for by a student on his/her own. The students shared 173 articles by the deadline (see Table 1), and they were viewed 543 times. The bookmarked articles were viewed an average of 3.14 times ($SD = 3.40$, median = 2). There was considerable variance depending on the article. Forty bookmarked articles were not viewed by any classmates, while 11 articles were viewed over ten times.

Table 1: Diigo Usage Data (mean data)

Bookmarked Pages	Comments by Peers per Bookmark	Additional Views per Bookmark
173	1.1	3.14

There was a mean of 1.1 additional comments per shared article. Classmates who did not sit by each other in class often commented on each other’s bookmarks, and the online project seemed to increase the number of classmates the students communicated with. On the other hand, two of the quietest students in class did not participate much more on the online project than they did in class, though it was hoped that the online platform might help these students feel more comfortable to interact. However, a few students who were somewhat reserved in class did interact much more online, going beyond what they were required to do. The class indicated on the survey that using Diigo helped them communicate somewhat with their classmates (1.95). One student wrote on the survey:

[The] Diigo project was very interesting for me because I could share various articles with classmate[s]. Also, I get an opportunity [to] communicate with classmate[s] by talking [on] Diigo so I could enjoy Reading class. I could ... learn the interest of my classmates.

Students' proficiency & computer skills

There was little evidence of improved reading skills by the students as the semester progressed. Many of the summaries submitted did not demonstrate that the student read the article thoroughly. For example, one student described Starbucks in her comment under her bookmark. However, though the article contained "Starbucks" in the title, the article actually explained the history of tea and coffee in Japan. The instructor wondered if the students were reading the articles carefully, or if they were just trying to complete the assignment as quickly as possible. However, according to the survey responses, most students replied that they did try hard to understand the articles (1.72).

Several of the article summaries revealed a miscomprehension of the article's contents, indicating that it was challenging for these intermediate-level students to comprehend authentic articles. Nevertheless, the survey results indicated that the students felt that the project improved their reading ability (1.72) and their vocabulary (1.72). One student wrote on the survey that doing the project was "the best way to [one's] reading proficiency."

In terms of web skills and the students' awareness of useful web sites in English, there seemed to be great improvement. Nearly four in five of the sites bookmarked (79%) were from the sites introduced at the beginning of the semester, and many replied on the survey that the project introduced them to many useful English websites (1.95). Even more students felt that their ability to search for web pages in English improved (1.63). Students felt less strongly about the improvement of their computer skills (2.23).

Management of the project

For students, reading on the web and using Diigo was not much easier than reading graded readers and writing a summary in their notebook. According to survey results, the class as a whole seemed to feel that the online project was somewhat more troublesome (2.23) and slightly more time consuming (2.36) than the paper-based project.

Nearly all the students who preferred graded readers did so not because they did not like reading authentic articles or using the social bookmark software itself. Rather, these students seemed to dislike using computers or they had trouble accessing the internet. One student replied in the survey that books were more "convenient." Many students have long commutes, and they can easily read books on the train. One student wrote that there were sometimes computer troubles, and another student said he or she does not have a computer at home. Another student commented that he or she does not want to look at the computer display for a long time.

For the instructor, using Diigo to manage the independent reading project was easier and more rewarding than the notebook based project. It was initially more time consuming, with two full class days devoted to getting the project going. However, this time seemed to be well worth the effort. The social bookmark site allowed for instantaneous access and ongoing supervision of student work. More timely feedback was given, and comments

check all the journals. Moreover, quantitative data was computed automatically, saving the instructor from having to count the number of summaries. It was physically easier to check the summaries and comment online than transporting notebooks home for the weekend. Supervising and grading the project was also more enjoyable as student interaction could be observed.

The social bookmark site also tracks data for tags, making it possible for the teacher to judge student interests. Somewhat surprisingly, the top three tags were news (43), sports (31), and global (19), rather than topics such as music or movies, which received three tags each. Just over half of the bookmarked articles were from Japanese (English-language) news sources (56%). This may have been because it was easier for students to read articles in which they had adequate background knowledge of the topics. Twenty-eight percent of the bookmarks were from foreign news sources (especially **CNN**, as opposed to **BBC**). Few bookmarks (11%) came from topic-based sites like **MTV.com** or **NBA.com**, and the articles related to someone's personal interests like basketball or car racing gathered few comments or "likes" from classmates.

Limitations and suggestions for implementing a social bookmarking project

It is difficult to compare the social bookmarking project to the graded reader project done in the previous semester as they consisted of several variables: reading online versus on paper; reading non-fiction versus fiction; reading authentic articles versus simplified materials; and recording one's work online versus in a notebook. Moreover, as this was an action research project, testing was not done to measure student progress, and the student survey was not piloted or examined for validity or reliability.

In pedagogical terms, there were two main difficulties encountered:

- ✧ some students' trouble accessing and using computers
- ✧ several poor quality summaries, indicating either a lack of effort or reading ability

These troubles would likely be larger among lower-level students or in countries with an unreliable internet connection.

Nevertheless, the user data and the feedback from the students seem to indicate that there were many benefits of having students read online and using the social bookmark site:

- ✧ increased interaction between classmates
- ✧ the ability to find interesting articles and sites shared by others
- ✧ somewhat greater motivation to read English online
- ✧ easy management of the project by the teacher

Overall, the students in this study seemed to appreciate the project, though the results were less dramatic than hoped. It can be concluded that using social bookmarking is beneficial, especially for more advanced learners with adequate internet access. The project is also recommended for intermediate-level learners, though more support and encouragement is needed.

Instructors considering implementing social bookmark sites should consider several things. Before the semester starts, the instructor should register for a bookmarking site, and set up a group page for the class. Diigo was easy to use for the instructor in this research project, and few students seemed to have difficulty using the group page.

One or two classes should take place in the lab towards the beginning of the semester. The instructor should explain the purpose of the project, give detailed instructions to the site, and recommend search engines and potentially interesting sites. Students also need time to register for the site and to be shown how to search for articles on the web, strategically read news articles, and summarize without plagiarizing. The project requirements and evaluation should also be made explicit at the beginning of the semester. In the current research, the project requirements seemed to be too confusing for the students.

During the semester, the teacher can monitor and advise students out of class. It also may be beneficial to give learners a tentative grade and to offer comments on how they might improve mid-project. Time in the computer lab around during the middle of the project will give the teachers a chance to help individual students who are still having troubles. For students who have no access to computers at home or for students who dislike using the computer for an extended period of time, it could be suggested for them to print out articles at school and read them at a later time.

At the end of the semester, the students can be evaluated quantitatively, by checking user data on the number of bookmarks and comments made, and/or qualitatively, by checking whether the summaries show adequate comprehension of the article. Participation may be encouraged and measured by checking the number of views, likes, and comments made by classmates. Finally, post-project student surveys are essential for improving the project for the next time.

Conclusion

Overall, the learners in this action research study slightly preferred the online project using social bookmarking sites as opposed to the graded reader project. Based on the results and feedback from the students, reading authentic articles on the internet seemed to be appropriate for the intermediate-level university classes. It was, however, challenging for the students, and it likely did not increase their reading fluency or lead to as much incidental acquisition of vocabulary as compared to graded readers. Nevertheless, the students were able to find articles that met their interests, and they did manage to comprehend the articles enough to comment on them. Moreover, they felt they had improved and most responded that they enjoyed reading articles on the web.

Though other independent reading projects also have value, using a social bookmark site to manage learners online reading had several unique benefits. First, it seemed to add authenticity to the reading project, since learners could readily share summaries and opinions with their peers. Sharing information with classmates online increased interaction and cooperation, compared to more traditional independent projects. As learners found and shared interesting online material, others often chose to read the content. Lastly, the project was easier and more rewarding to manage for the instructor. Supervision was ongoing, and it was interesting to be able to quickly access various articles and to read student interaction. Overall, the use of social bookmarking is recommended for intermediate to advanced students who have reliable internet access.

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