

# Blended Learning: A Case Study for Japanese Language Studies

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**Abstract.** This article examines the link between e-learning and instructor-led teaching in a local university in Hong Kong. It employs a case study to examine the relation in a sample of undergraduate students studying Japanese language. More specifically, the study aims to pose a challenge to the existing and dominant instructor-led teaching method. The paper also provides implications for the design of course structure and content that will improve students' performance and motivation while enhancing the effectiveness of teaching and learning as a whole.

**Keywords:** blended learning, language studies, Japanese language, e-learning

## 1 Introduction

In recent years, e-learning has assumed greater importance in educational sectors as it has been recognized as contributing to overall quality, effectiveness, convenience and cost of learning experiences [1]. In view of growing significance of blended learning in language studies, it is absolutely essential to develop efficient blended learning practices capable of providing excellent quality of teaching. Today, we can understand better how learning experiences could be improved by the “blended” combinations of both traditional and technology-based learning methods [1] and how it can have significant effects on students' learning processes in terms of motivation, performance, and effectiveness.

In this paper, some insights are provided relating the application of blended learning in language studies. In particular, Japanese language study is discussed. This paper first explores the distinctive features of Japanese language. Then it intends to justify blended learning by analyzing the respective merits of instructor-led and e-learning paradigms. We also demonstrate how the blended approach could match perfectly to the demanding nature of Japanese studies using a case study research method in a sample of undergraduate students studying Japanese language in a local University in Hong Kong. We hope that the propositions of our recipe of blended learning could bring incites and insights to educational practitioners in similar academic disciplines.

## 2 Blended Learning and its development in Language Studies

Since Sir Tim Berners Lee invented World Wide Web in 1989, there have been revolutionary changes in our way of life. The Internet shows its influences in the areas from business, mass media to entertainment. Education, as one of the major elements in governmental expenditure, is no exception. E-Learning and later Blended learning is widely adopted in Hong Kong and most developed countries in hope of increasing productivity. E-learning is characterized by online resources and Virtual Learning Environments (VLE) such as WebCT/Blackboard [2] which supports self-motivated and self-paced learning. Meanwhile blended learning further complements e-learning by providing activities such as instructor-lead classes, role-play and discussion group alongside with e-resources. It is well believed that blended learning is a better learning paradigm than e-learning and the fact is supported by a recent study conducted by Thomson and NETg [3]. The study showed that the speed and accuracy performed by the “blended” student group was considerably superior to that of the pure e-learning group by 30-40%. With the uprising urge of “enhanced productivity” and “cost effectiveness”, blended learning has become an ideal and only solution to educational practitioners and business training experts.

E-learning and Blended learning is inherently superior to its traditional counterpart in many ways. In logistic point of view, the use of hyperlinks and e-documents nowadays not only reduces the time and cost, but also allows rapid information dispersion at any time and anywhere. In pedagogic point of view, e-learning and blended learning helps memory reinforcement since it encourages self-paced learning and self assessment during non-contact hours. In the long run, blended learning helps on class progress since it reduces the asynchronies and variance of progress among students. (At times, the progress of class is *"dictated by the slowest learners in the group"* [4].) However, e-learning is no silver bullet. Online resources and VLE do show their short sides from time to time. One major problem is that students are generally inexperienced and hence personal guidelines and study models are needed in order to keep them from wandering around the sea of online resources without target. Another issue is that e-solution generally lacks personal interaction which is important in disciplines such as second language acquisition [5]. To conclude, we need tailor-made blended learning schemes for different subjects and careful stock picking of pedagogic activities is indispensable.

Among all those academic and vocational subjects, language studies are probably the most challenging areas. The reason lies in the fact that language is not a single skill but a *collection* of literary and communicational skills which requires high degree of proficiency. It is a long and painstaking process that it takes years to train up the language ability of a student to a level which enables direct communication with native speakers. Language study is also distinctive in a way that the learning of high level concepts or syntaxes heavily depends on how well a student can grasp the fundamental ones. For example, to learn the passive voice in English, students have to master the past participles. This implies that foundation building is particularly important during the course of study. In this research, we attempted to investigate different learning dimensions to figure out a combination of pedagogic approach and teaching media for effective language learning.

### 3 Methodology

The present research employed a case study research approach. Case study approach is that the researcher systematically gathers in-depth information on a single entity such as an individual, a group, an organization or a community using a variety of data gathering methods. Particularly, picking the right cases for study and understanding and correctly translating the dynamics to one's own situation are critical for successful problem solving [6]. Cases to study may range from *dancehall musicians to student physician*, and a case may be *a single child, a classroom or clinic or a charity* [7]. A case study approach is considered the most appropriate methodology to answer the **what**, **how** and **why** research questions. As Yin [8] indicates, exploratory case study is good in dealing with proposition development and tracing links between concepts or incidence. This research method allows the researchers to study the central phenomenon in depth. The case study was conducted between September 2007 and February 2008. The case being studied was an intermediate Japanese language course. The case included forty-two undergraduate students aged around twenty years old.

### 4 A Case Study for Japanese Language Study

In this study, we use the well-known Japanese Language Proficiency Test (JLPT) [9] as a benchmark to generate the ideas. In particular, we try to sketch the full picture by referring to four vital dimensions in language studies: writing-vocabulary, listening skills, reading-grammar and oral skills. Each sub-session first highlights the problems faced in traditional classrooms with refer to the distinctive linguistic features of Japanese language. We then demonstrate how the *quality of learning and teaching* could be improved after blended learning came into picture.

#### 4.1 Study of Japanese Vocabulary

In most instructor-led classes, instructors teach students about 180 new vocabularies in one semester. For decades, compilation of personal wordlist is the only means for students to master a huge amount of vocabularies. But yet, compilation of word list is not a no-brainer and considerable planning is needed. Let alone the tremendous time and effort required, study of Japanese vocabulary is especially difficult due to problems rooted from the linguistic features. The same kanji may contain two or more different pronunciations. For example, the word 'day' (日) could be pronounced as *hi/bi* (ひび), *nichi* (にち) or *jitsu* (じつ). Even in daily conversations, in which Kanji writing is not necessary, the situation is no better. Japanese is flooded with huge amount of homophones (sound-alike words). According to Mochizuki [10], Japanese homophones are three times more numerous than those found in Chinese. Given a pronunciation, one could easily find three or more words which pronounce exactly the same (Fig. 1). For extreme case such as こうしょう, a single pronunciation could even carries 43 different meanings. As the mental database of vocabularies grows, memory tends to "interfere with each other". [11]

Pronunciation	Possible meanings and corresponding Kanji (Chinese character)		
<i>Koto</i>	Capital (古都)	Affair (事)	Piano (琴)
<i>Kōtō</i>	Oral (口頭)	Nice baseball pitching (好投)	High level (高等)
<i>Kōdo</i>	Height (高度)	Brightness (光度)	Hardness (硬度)
<i>kōdō</i>	Action (行動)	Lecture Hall (講堂)	Highway (公道)

Fig. 1. Homophones in Japanese

From the learner’s point of view, there is a need of automatic instrument which helps vocabulary management and self-assessment. From the educator’s point of view, there is a need to encourage students to actively learn new vocabularies so that they could accumulate thousands of vocabularies before the JLPT exam. With respect to the vocabulary dimension, it is expected that the e-technology will create synergy by speeding up the wordlist compilation and classification process for students’ self-learning. The “huge information volume” and “high searching speed” properties of e-resources match perfectly to the demanding wordlist compilation task. Students can store the words in an electronic form instead of hand-written text on small paper cards. It allows students update the personalized wordlists and review them at anytime and anywhere. Students could also share or exchange wordlists in VLE platforms, forums, blogs or even personal wiki solutions [12] with their fellows.

In this case study, Blackboard [2] system was set up for an intermediate Japanese language course. Like other web-assisted courses, lecture handouts are released online. Yet instead of using Internet as merely a data-release medium, we intend to treat it as a learning platform. Several discussion groups are being set up to encourage students exchanging ideas (Fig. 2). Students are encouraged to ask any questions either in Japanese, English or Chinese relating Japanese language or culture. We believe that this can help stimulate students’ motivation in learning the language, especially for those students who have learnt the language for one or two years. Hyperlinks to interesting resources are also posted in VLE in order to stimulate students’ interest. For instance, students are encouraged to visit YouTube[13] (Fig. 3) to view *selected* music clips with Japanese subtitles and lyrics. Despite the fact that grammars in songs are not perfect, it is hoped that students could build up a habit in learning vocabularies and Japanese culture from real-life resources.

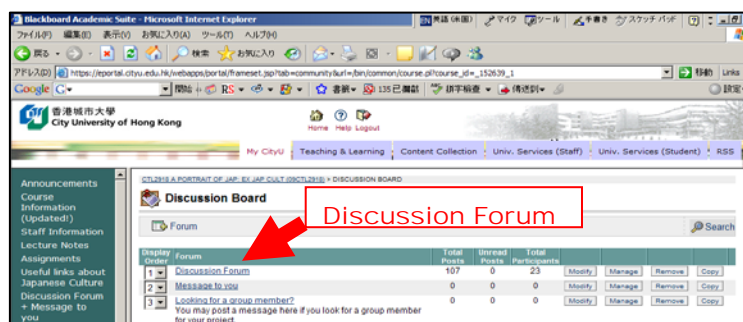


Fig. 2. Japanese discussion forum on Blackboard



Fig. 3. Music Clip in YouTube [13] together with

To build up comprehensive and ordered vocabulary list, students are encouraged to make use of existing online systems such as the excellent Yahoo! Dictionary Service [14]. Online dictionaries (Fig. 4) are inherently superior to the paperback ones in terms of a large word counts and related resources. Apart from that, online dictionaries are usually equipped with value-added features. As shown in Figure 4, the Yahoo! Dictionary not only provides related synonym and antonym, but also displays entries with the *same Kanji but different pronunciations*. (Yahoo! Dictionary shows two entries for “yesterday”: *kinō* (きのう) and *sakujitsu* (さくじつ)). This feature is invaluable to students who intend to take JLPT. Apart from the Yahoo! Dictionary, the Goo dictionary [15], which displays Wikipedia [16] entries related to queries, is also a good choice. At the same time, the Yahoo! Translation [17] or the Babel Fish [18] (Fig. 5) also helps students to translate texts, or even websites from Chinese or English to Japanese. Despite most translation sites are only capable for short sentence translation; students can still use these free web-sites to assist their self-learning.



Fig. 4. Yahoo Online Dictionaries [14]



Fig. 5. Yahoo! Translation [17] (left) and Babel Fish Translation [18]

## 4.2 Study of Japanese Listening Skill

In traditional in-class training, most instructors find difficulties in improving the listening skills of their students. Given that the contact-hours are limited, most of the times have been spent on vocabulary and grammatical explanations. Nowadays, standard teaching aids used are those companion tapes or CDs included in textbook. Each chapter accounts for about 5-7 minutes of recording, including the recitation of main text/article, sound-only roleplay and listening questions. Considering that time needed for students to write down the answers and for instructors to reveal the correct answer together with vocabulary and grammatical explanations, one could easily draw a conclusion that instructors are simply not able to afford playing the tape many times within the standard 50-minute listening lab session in classroom. Needless to say, playing real-life recordings such as news broadcast or radio program in class is simply out of the question. The outcome of all those is that the listening ability among students in class could be highly asynchronous, which in turn, affects the progress of class. It is especially problematic that a considerable number of Japanese courses are taught in Japanese itself by native teachers.

In our opinion, switching from tape to digital media is inevitable. Of course, the media itself is inherently superior, in the sense that it supports random access and bookmarking. However, the real significance come from the fact that electronic recordings make information dispersal easy and it promotes self-learning.



Fig. 6. Japanese recording (mp3) on Blackboard

Recorded Japanese passages and dialogs in mp3 format are available to students via Blackboard (Fig. 6). Students in need could listen to the recordings as many times as they want after the scheduled listening lab session. This helps alleviating the pressure of limited time. Apart from mechanical examples included with textbook, students were also given chances to be exposed to interesting real-life materials. For instance, short animation clips from the famous films “My Neighbor Totoro” (となりのトトロ) and “Spirited Away” (千と千尋の神隠し) [19] were shown to students by using the YouTube video (Fig. 7). Those films are targeted to juvenile audience in Japan and hence the language used, as well as the speed is appropriate to intermediate level students. Students were given the Japanese transcript of the films beforehand and they could try to follow during animation playback. This serves a trio advantage: First of all, students could practice their listening skill, with dialog (*and dialect*) by native speakers. Also, students were exposed to the “everyday language” used among local Japanese people. More importantly, it stimulates students’ interest and encourages them to be active learners.

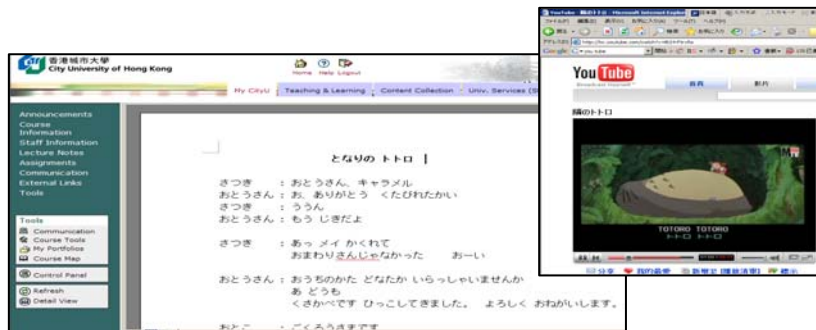


Fig. 7. Animation “Totoro” from YouTube with the corresponding transcript

### 4.3 Study of Japanese Grammar

Despite the fact that Japanese vocabularies are affected by Chinese language, Japanese grammar itself did not significantly change [20]. Some scholars [21] urge that, in particular, the Japanese particle system is a major hurdle for second-language learners in college-level Japanese courses, due to its complexity and its absence from the learners’ first language. The picture is further complicated by the fact that a single particle is usually overloaded with multiple usages. For example, the particle と could be used to represent accompaniment (*similar to “and” in English*) or conditional events (*similar to “if” in English*). As a result, Japanese teachers usually found themselves spending most of the times in teaching grammatical concepts to students.

The use of a blend of e-technology and traditional tutoring is proved useful in levelling the learning curve and improving students’ writing and grammar skills. Nagata’s [21] experimental study suggests that the computer’s metalinguistic feedback program can lead learners to develop general grammatical competence in the use of particles. In addition, we try to help students learning grammar by posting managed articles and summaries on the Blackboard environment. Apart from listing articles in a time-oriented manner (*from week 1 onward*), we also try to summarize the knowledge taught in different semesters to formulate grammar-oriented summaries.



Fig. 8. Linguistic summaries which consolidate grammatical rules learnt from different levels (left). List of usages and examples for particle か (right)

As shown in Fig. 8, learning materials related to Japanese grammar (i.e. exercises and explanatory notes for outside benchmark language tests or summary of particular

patterns) have been uploaded to the Blackboard. This feature helps students to manage their memory better and is particularly useful for students who intend to attend the JLPT, since examinees are always asked to fill in the blanks by selecting a correct particle from a list of multiple choice questions.

To promote self-learning and self-assessment, selected exercises, such as the questions from past JLPT papers are posted on Blackboard (Fig. 9). Even if students have queries regarding Japanese grammar, students could freely raise their questions on the Q&A forum in Blackboard (Fig. 10). With online forum, students' questions could be answered within a short time without being delayed until the next lecture. Also, it is observed that forum answers not only help the student who questioned, but usually also benefit the whole class as well, since questions among peers are usually similar or overlapped. By uploading the revision exercises and linguistic summaries, instructors can save time from performing mechanical routine jobs. They can concentrate to spend more time for areas which require face-to-face instruction and interaction with students, such as oral training.



Fig. 9. Exercises and JLPT past papers for self-assessment



Fig. 10. Online Question & Answer forum in Blackboard

#### 4.4 Study of Japanese Oral Skill

Like most languages, the accent and intonation of spoken Japanese may be the most difficult parts to learn. In Japanese language, there are many words with same pronunciations. However, a change in the accent would change the meaning of the word. For instance, *ame* can be 'candy' (*ame*) or 'rain' (*ame*). Unlike English which has stress accent, Japanese has pitch accent which means that after an accented syllable, the pitch falls. Another distinct feature of Japanese language is the honorific expressions. Japan is well-known as a hierarchical society. Japanese has an extensive system to express politeness and formality. The position of a person is determined by a variety of factors including job, age, experience, or even psychological state [22]. This makes Japanese expressions difficult for the overseas learners [23].

Type	Person with whom to speak	Expressions
Casual	Friends, Siblings, Juniors	食べなさい、食べて、食べてください
Honorific	Seniors, Teachers, Guests	召し上がってください、お召し上がりください

Fig. 11. Differences between casual and honorific expressions  
Source: *A Manual for Using Honorifics* [24]



Figure 11 shows two sets of possible expressions used to invite someone to eat. The first row shows the ‘casual’ daily expressions used among friends and the second row shows the honorific expressions. It can be seen that the sentence structures and the words used are quite different. It is believed that the best way to enhance oral ability may be to maintain face-to-face interactions between tutors and learners. As Yamazaki [25] suggests, ideal speech translating systems are far from mature and considerable future work is needed on resolving various acoustic and linguistic phenomena such as colloquial idioms, occasional omission of words and inversion of word order. Nevertheless, in reality, it is infeasible to have intensive training between teachers and students. Hence, net resources, offline assessment and feedback mechanism via VLE are suggested to supplement normal face-to-face tutorial sessions. In here we focus our discussion to three related aspects: 1) the ability to pronounce a single vocabulary, 2) the ability to pronounce a complete sentence with correct tone and intonation, and 3) the presentation skill and interaction among peers. In each lesson, some 15-20 new vocabularies from textbook are taught. Since pronunciation audio clips are always available in the companion resource of textbook, it is not a major problem. Meanwhile for new vocabularies students *learnt outside class*, the use of electronic dictionary or online Text-to-Speech (TTS) systems is suggested. For instance, the NeoSpeech system (Fig. 12) available online supports pronunciation of vocabularies or even short phrases.



Fig. 12. Pentax NeoSpeech [26] – Online Japanese Text-to-Speech (TTS) system

Students can use the system to input simple vocabularies such as the mentioned vocabularies ‘candy’ (*ame*) or ‘rain’ (*ame*) to practice the pronunciation. Further, according to our rudimentary experiments, it was found that the system is rather intelligent because it can handle complex Japanese pronunciation rules well. For instance, the system can distinguish the pronunciations even the vocabularies are written the same but with different meanings. An example is illustrated in Figure 13. In Japanese language, the meaning of the vocabulary “十分” could be “ten minutes” or “adequate.” Pronunciation differs depending on the meaning. It was found that the NeoSpeech system can distinguish the pronunciation perfectly.

Meaning	Pronunciation
今、十時十分です。 Now is ten minutes past ten.	→ じゅっぶん / じぶん ( <i>Juppun or Jippun</i> )
日本語はまだ十分ではありません。 My Japanese is still not very good.	→ じゅうぶん ( <i>Jubun</i> )

Fig. 13. Test of NeoSpeech – pronunciation of the same word in different sentence structure

Students were also encouraged to use the provided link (i.e. the NeoSpeech) or software (i.e. mp3 recording) to enhance the quality of their reading and oral assignments. Students could make good use of this advanced systems so as to improve their pronunciation and intonation. For learning the pronunciations of single vocabularies, online text-to-speech systems provide variable degree of usefulness. However, to train up the ability to pronounce sentences or documents, we suggest the use of offline assessment and feedback mechanism to complement face-to-face oral sessions, since we also found the software is incapable of presenting the sentences or dialogues together with appropriate emotional expression. Apart from mere pronunciation, the presentation skills and interaction during conversation are also considered important. As suggested by Chaudron [8], the interaction in the classroom between peers is one of the most significant factors for successful learning of the second language acquisition (SLA). From time to time, students' performance during class is recorded with camcorder and some outstanding ones will be uploaded to Blackboard. Not only could it help the instructors to understand the students better, but it also allow students learning from each other, by observing the good practices as well as the weak points which require refinement.

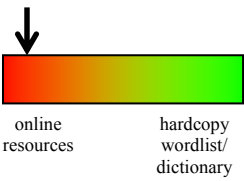
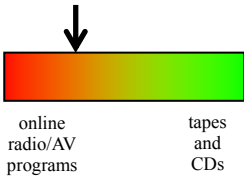
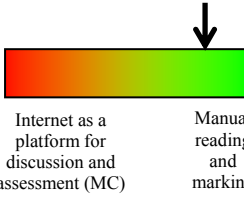
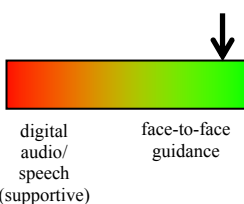
## 5 Conclusion

In our previous research, we discussed and proposed how facilitators can enhance the teaching activities effectively by four dimensions of Japanese language learning. Suggested activities are highlighted in Figure 14 [27]. In the present research, we continue to explore how educators and learners can be benefited from blended learning with proposed activities in relation to vocabulary, listening, grammar and oral skills. As Singh and Reed (2001) point out [1], *"Blended learning focuses on optimizing achievement of learning objectives by applying the "right" learning technologies to match the "right" personal learning style to transfer the "right" skills to the "right" person at the "right" time."* In addition, effectiveness of blended learning also depends on whether an instructor or facilitator can match the appropriate delivery media to existing teaching activities and to catch up with the e-learning paradigm.

In this paper, students are suggested using online dictionaries and pop-culture materials to assist vocabulary learning. The informative online resources not only save time for knowledge management and retrieval but also free students from schedule and geographical restrictions. E-resources also benefit listening training which allows students to access real life programmes and broadcasts from Japan. For grammatical training, we suggest the use of VLE and online forums with assistances from e-helpers or e-mentors. Instructors may also encourage students to ask questions on the VLE so as to save time from in-class activities while enhancing students self-learning ability. Finally, with respect to oral skill training, the system NeoSpeech is introduced to improve pronunciation particularly for vocabulary and short sentence.

This case study demonstrated that instructors can use different levels of "blend" in different learning areas to improve students' motivation and performance, and thus also enhance the effectiveness of teaching and learning as a whole. However, like other revolutionary institutional policies, 'human' is the ultimate factor which governs

*make or break*. Despite the availability of robust *hardware* (technology), we also need appropriate *software* (instructors) to make things happen. Instructors must be well trained, both technically and mentally, and accommodate themselves to the new-generation instructional media.

Ability	Distinctive attributes	Blending of media	Suggested activities
<b>Vocabulary</b>	<ul style="list-style-type: none"> <li>• Numerous!</li> <li>• Is best memorized with synonym / antonym</li> <li>• Requires dictation</li> </ul>	 <p>online resources      hardcopy wordlist/dictionary</p>	<ul style="list-style-type: none"> <li>• Share and exchange compiled wordlist via internet and VLE</li> <li>• Use of online dictionaries which overwhelm the traditional ones in terms of word count</li> <li>• Remember vocabularies anytime anywhere with mobile technology</li> <li>• Online quiz (dictation)</li> </ul>
<b>Listening</b>	<ul style="list-style-type: none"> <li>• Repeated listening is needed</li> <li>• Ability improves if constantly “immerse” in that language.</li> <li>• Best training aids possibly come from real-life dialogues from native speakers</li> <li>• Related to oral skill</li> </ul>	 <p>online radio/AV programs      tapes and CDs</p>	<ul style="list-style-type: none"> <li>• Utilize online radio / AV broadcast via steaming technology through internet</li> <li>• Upgrade teaching aids from cassette tape to digital media with visual aid and/or speed control</li> </ul>
<b>Writing and Grammar</b>	<ul style="list-style-type: none"> <li>• Idea can be presented in a thousand and one ways with different tones and styles</li> <li>• Learning via reading model articles with good rhetoric</li> <li>• Practice makes perfect</li> </ul>	 <p>Internet as a platform for discussion and assessment (MC)      Manual reading and marking</p>	<ul style="list-style-type: none"> <li>• Distribution of distinctive articles, templates, teaching aids via internet/VLE</li> <li>• Replace part of assessment with online quiz (especially MC questions for lower grade)</li> <li>• Discussion or Q&amp;A using online forum.</li> </ul>
<b>Oral</b>	<ul style="list-style-type: none"> <li>• Stress on interaction</li> <li>• Complex intonation rules</li> <li>• Numerous homophones</li> <li>• A.I. speech recognition technologies could not catch up with the complexity of natural language</li> </ul>	 <p>digital audio/speech (supportive)      face-to-face guidance</p>	<ul style="list-style-type: none"> <li>• Face-to-face classroom gatherings with role-play practices</li> <li>• Recording of students’ speech into digital form (e.g. mp3) and submit to instructor via VLE.</li> </ul>

**Fig. 14.** Suggested blending model for Japanese study

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