

Developing Moodle Reading Quizzes with TTS-Aided Multimedia Glossary

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Present College English education situation in Japan

- Growing presence of TOEIC tests
 - English credits gained by TOEIC scores
 - Entrance examination exempted by TOEIC test scores
 - TOEIC score required for job interviews

How TOEIC scores are used for crediting and entrance examinations

(two examples of local engineering colleges)

University	TOEIC score & Creditable units	Entrance examination replacement
Maebashi Institute of Technology	630+ = 6 units 529-629 = units 470-519 = 2 units	Ph. D course for Systems and Information Engineering
Gunma University	750+ = 4 units 680+ = 2 units	Graduate school of engineering (from 2010)

Problems

- Not many students of Engineering are familiar with TOEIC tests, and their scores lag behind others.
 - Reading texts are rather long that they spend too much time to finish
 - They are not accustomed to the question format
 - They are not familiar with job-related situations
 - Business vocabulary
 - Business contexts
 - On the job expressions

One Solution

- Creating an online reading quizzes that can be used autonomously by students

Featuring

- Business-oriented texts

written with a native speaker's help

- Help in vocabulary building

enhanced glossary function

- Pronunciation support

utilizing TTS

Procedure

- Asked a native speaker of English to write up 40 reading texts which contain as much job-related vocabulary and expressions.
- Created TOEIC style multiple-choice quizzes based on the texts using the Quiz module of Moodle.
- Created a course glossary which gives help to business-related technical terms.
- Gave each glossary item pronunciation (voice sound) using TTS.
- Applied auto-linking from the glossary to all the related words in the texts.
- Offered the quizzes online.

TTS

- Text-To-Speech conversion technology
 - WavePad
 - eLite
 - Microsoft Reader
 - TextAloud
 - Festival
 - ReadPlease
 - Cepstral
 - Natural Voice (AT&T)
 - Ultra Hal Reader
 - Speechify (Nuance)
 - Loquendo
 - VoiceText (Hoya-Pentax)
 - Corpus-based and context-sensitive voice synthesis

TTS limitations

- Limitations on expressing:
 - Emotions
 - Natural intonation
 - Natural overlapping of utterances
 - Loan words
- Sound blurring on junctures

Recommendable use of TTS that cancels the limitations

- Using TTS for words and short phrases

e.g.

- Online course navigation and instructions
- Voice support for glossary items

Ask for demonstration

ERQ: Quiz 1: Business Letter - Windows Internet Explorer

http://harahara.net/moodle/mod/quiz/view.php?id=2477

ファイル(F) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルプ(H)

ERQ: Quiz 1: Business Letter

English Reading Quizzes

Home > ERQ > Quizzes > Quiz 1: Business Letter

Update this Quiz

Info Results Preview Edit

Quiz 1: Business Letter

INFORMAL BUSINESS LETTER

Date: Fri, 20 Jul, 2008 14:05:47 +0700

From: Bill Rogers <rogers@compworld.com>
To: Dewayne Larsfield <dewayne_cats@cmu.com.fr>
Subject: Your order has shipped
Dear Dewayne,

I am happy to inform you that your order (#200534) has been filled and shipped. It should arrive in 2-3 weeks if there are no unexpected delays at customs. You can track the delivery of your order using the link below:

http://harahara.net/?courseid=92&concept=order - ERQ: Glossaries Sea...

English Reading Quizzes

Home > ERQ > Glossaries > Search

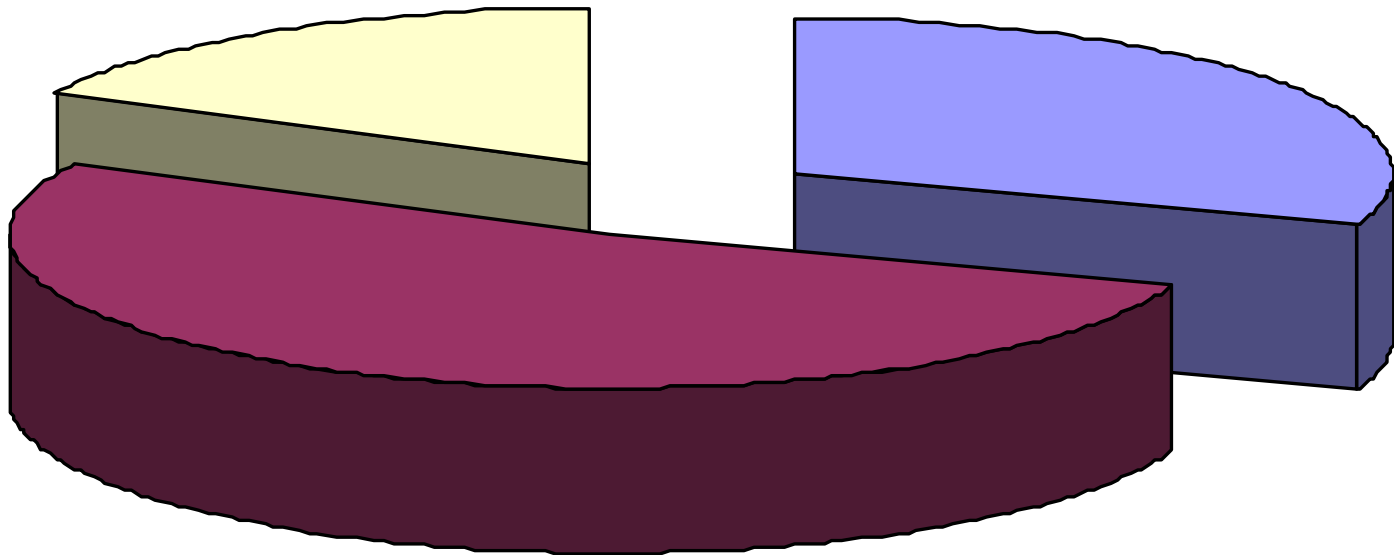
order: (名)注文、発注、(動)注文する

» On the job vocabulary

Close this window

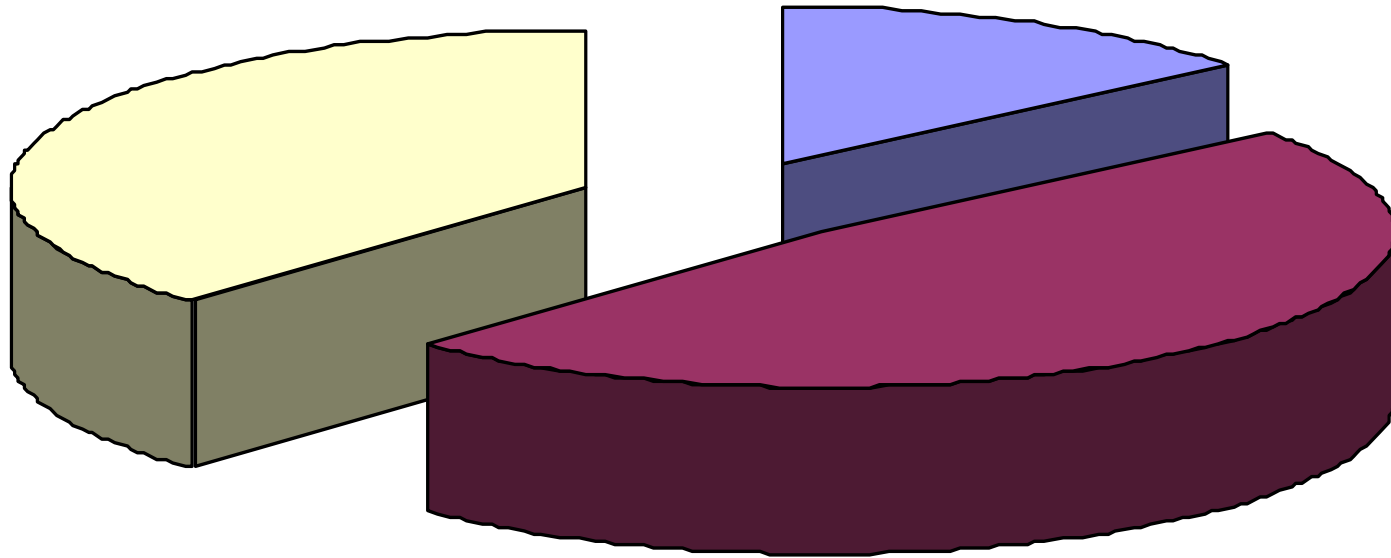
Moodle Docs for this page

Did you use the glossary (dictionary)
function?



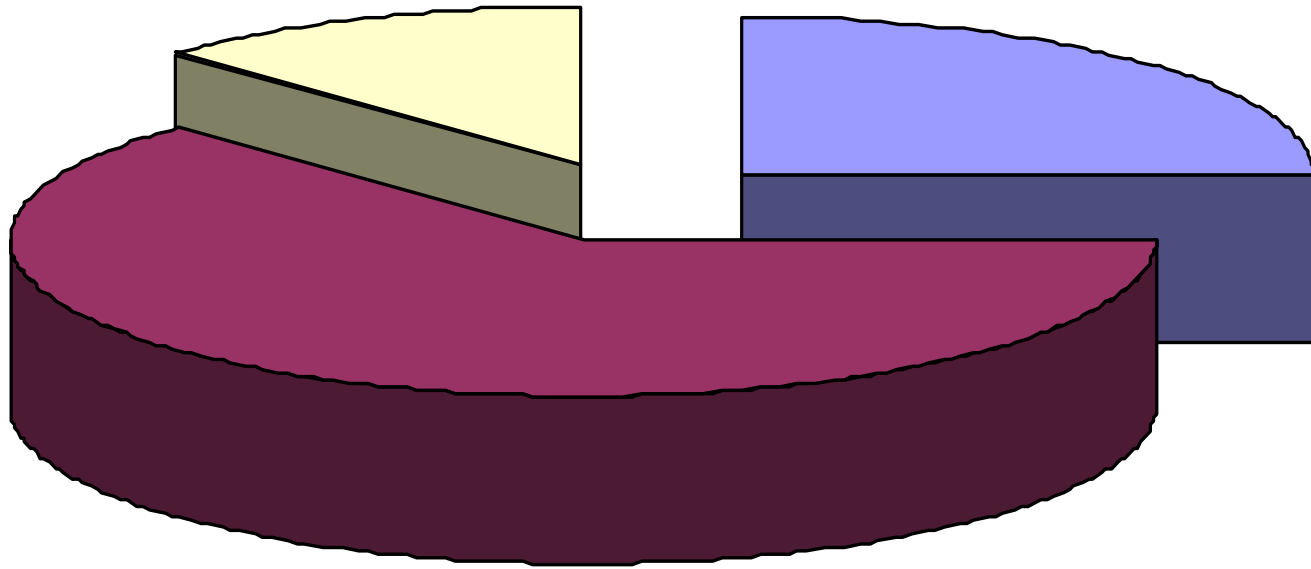
■ Yes, I used it often. ■ Sometimes I used it. ■ No, I never used it.

Did you listen to the pronunciation along with the word definition?



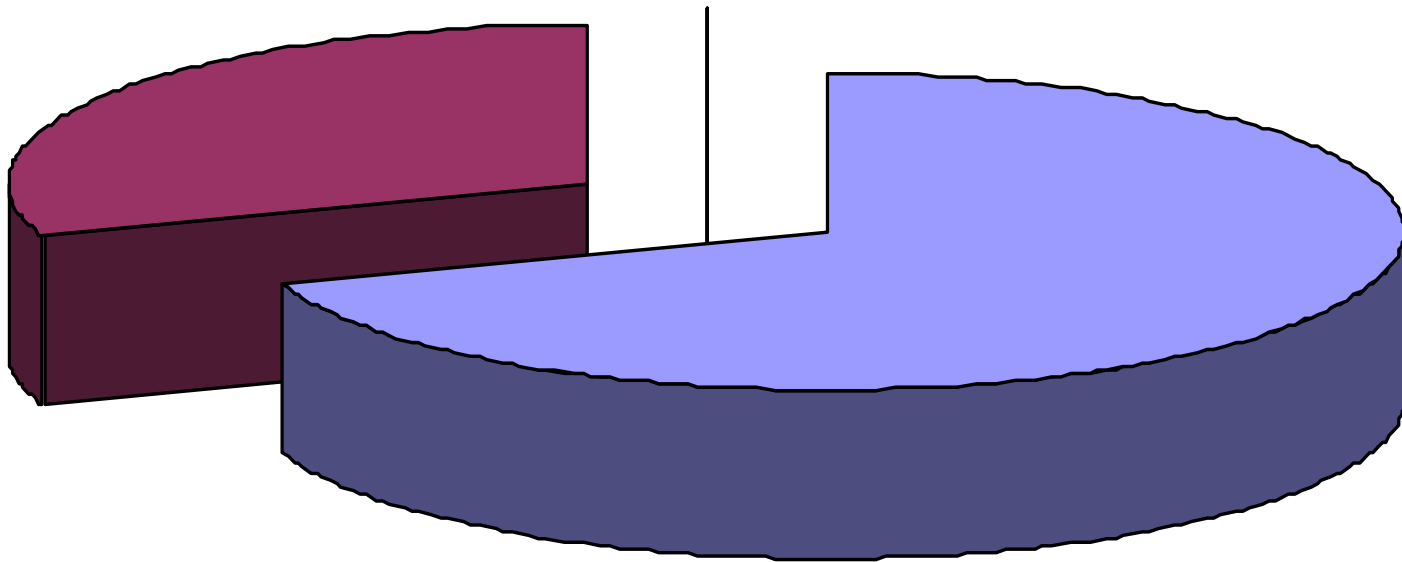
■ I always listened to them. ■ Sometimes I listened. ■ I never listened.

Did you find the pronunciation helpful?



■ Yes, it was helpful. ■ To some extent, it was helpful. ■ It wasn't helpful at all.

Do you think practice like this will help you with English proficiency tests?



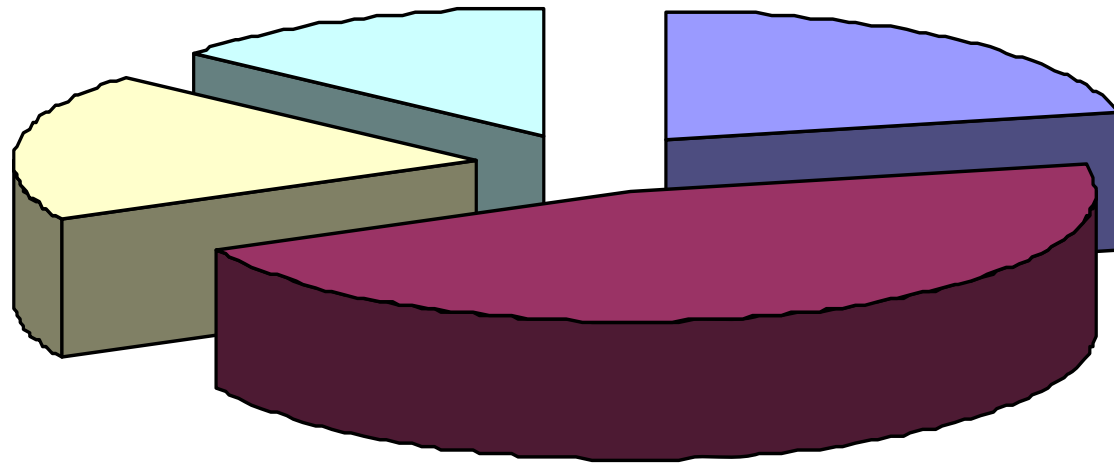
■ Yes, this will be of help.

■ To some extent yes.

■ I don't think it will help so much..

■ This will not help me at all.

If you think it useful, what are the major factors? (multiple answers allowed)



- I can use it any time.
- The more I do it, the more I get accustomed to the test.
- I can check the answers immediately.
- There is a convenient glossary function.

Advantages of using TTS

- Non-native-speaker teachers can create native-like quality listening materials at ease, without help from native speakers.
- We can make our own original listening materials and have them freely available online.
- We can create authentic materials to meet our students' needs and interests as well as change or modify them whenever we want.
- Gospel to entrance examination, where strict confidentiality is required.

Rebuttal to criticism that voice synthesis is unnatural

- Machine-made announcements are frequently used in airports, department stores, and telephony services everywhere in the world. Students need to get used to listening to those synthesized voices, understand them, and react properly.
- TTS English should be recognized as one of many English variations.

References

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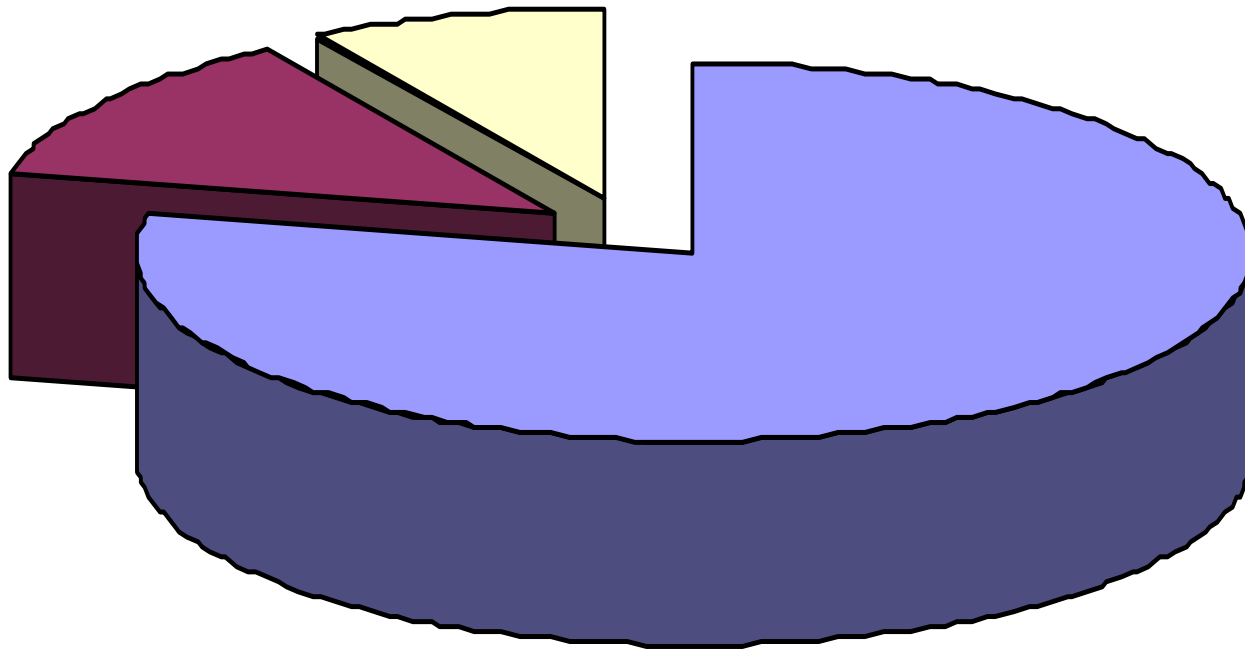


Thank you!

ありがとうございました

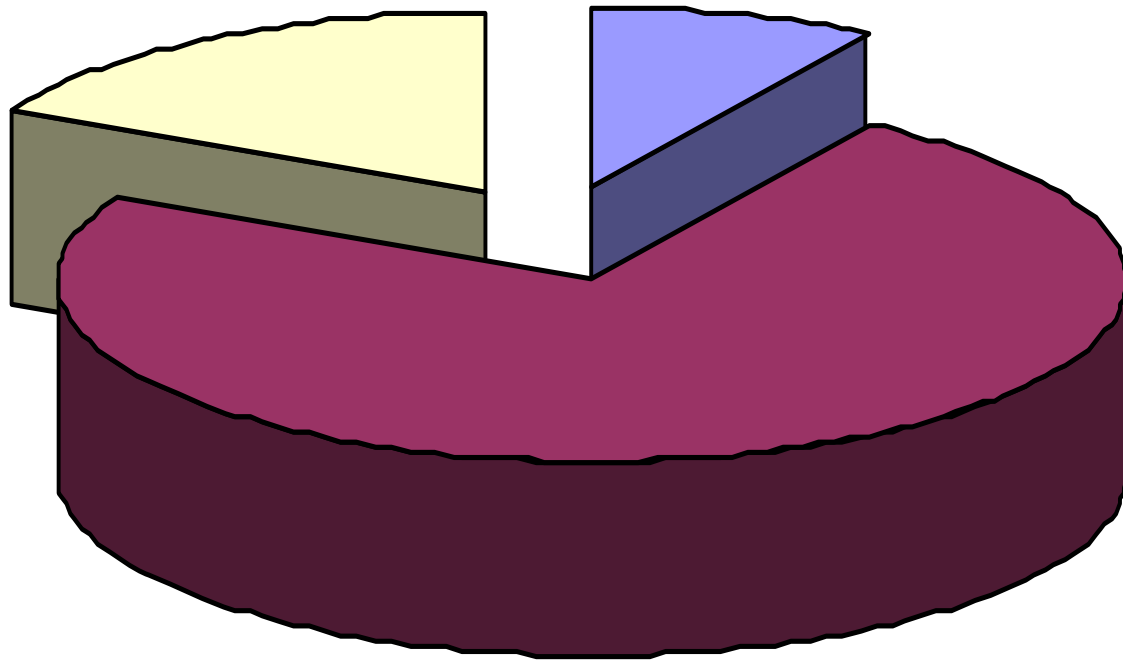
hideto@moodler.com

課題となっていた問題は全てやり終わりましたか？



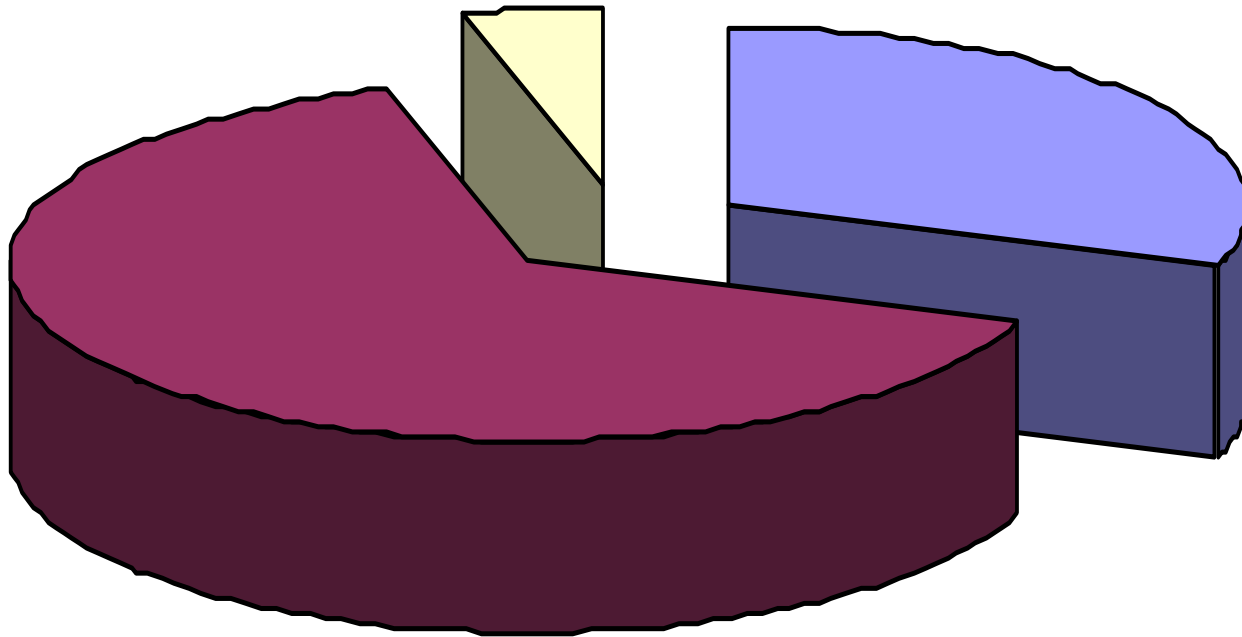
□ ア、全部やり終わった □ イ、途中までやった □ ウ、全然やらなかった

手順や操作性は分かり易かったですか？



■ ア、分かり易かった ■ イ、普通 □ ウ、分かりにくかった

問題の難易度はどうでしたか？



□ ア、難しかった □ イ、普通 □ ウ、易しかった

最後に感想、意見があれば自由に書いて下さい。

- ・回答がすぐにわかり、たくさん問題ができるので特にTOEIC対策には有効だと思った。
- ・パソコン操作が苦手なためアクセスするのが心配だったが、なんとかできた。
- ・検索エンジンで“Harahara”と入力すると一発で見つかるので助かった。
- ・グロッサリー機能を使うよりYahoo!辞書で調べた方が接続時間が短縮され、制限時間の節約になると思った。
- ・その場でグロッサリーを自分で作れるのはとても便利だが、いちいち長文や問題に戻るのがパソコンだと大変。
- ・10分のリミットボックスがQ1の問題文にぶつかっていたので少しやりにくかった。
- ・ダブルパッセージの問題がもっとあれば良かった。
- ・何が間違っていたかはすぐわかるけど、何が正しいのかもすぐにわかるとより良い。
- ・やり終わったことの確認をしっかりとできるようにしてほしい。
- ・操作手順や説明などを見られるページを作ってほしい。
- ・問題と出題の文が同じ画面で見ることができれば、より快適に取り組めるのではないか。

中間模擬テスト、期末模擬テストの結果

- 中間テスト平均
465点
- 期末テスト平均
450点

