

CASE STUDY

Hokkaido University

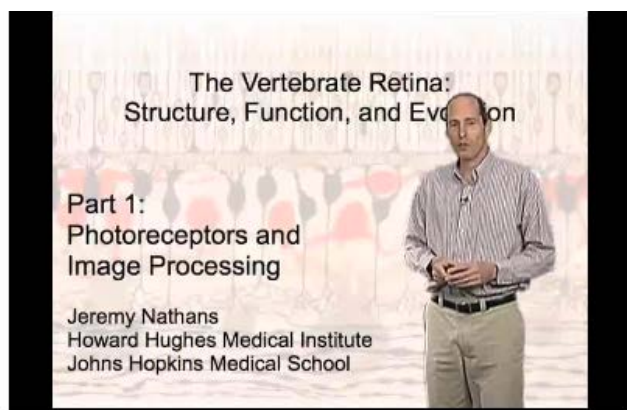
Glexa
web multimedia LMS

English Online

Hokkaido University (Sapporo, Japan) has offered a fully online English language course since 2006. All 2600 freshmen take this course during their first semester. 5 instructors and 15 teaching assistants use Glexa to improve the students' receptive and productive skills. In 2013, freshmen obtained the highest mean scores for TOEFL-ITP in the course's 8-year history.

GlexaQuiz

Hokkaido University want students to listen actively. GlexaQuiz asks students to arrange sentences in the correct order while watching videos or listening to songs. Students may see verbatim transcriptions or sentences edited for written language. Rearranging sentences holds the students' attention, and allows them to succeed without recognizing every single word, somewhat analogous to what we experience in the real world.



- The image is formed on the back wall of both.
- This is the first of three lectures on the Vertebrate Retina: its structure, function, and evolution.
- In this first part, we are going to look at photoreceptors and image processing.
- It consists, of course, of the eye and a significant fraction of the brain, as indicated by these arrows.
- The retina is also capable of discriminating objects that differ in their angular position

Video and transcript courtesy of ibioseminars.org.

GlexaMotion

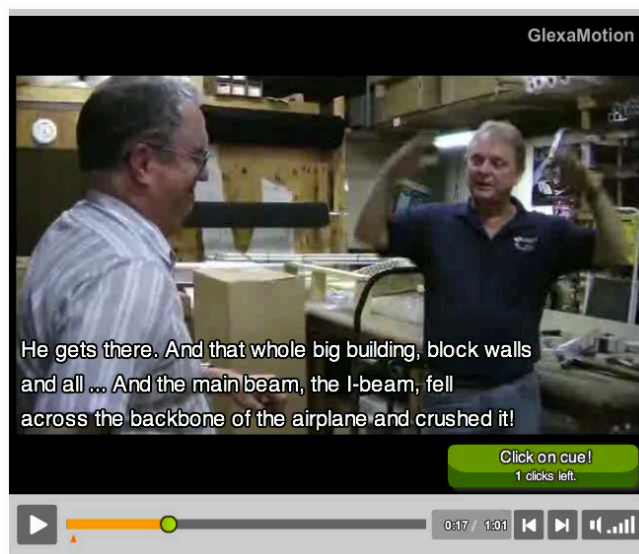
Real-life language is often a one-time encounter. Airport announcements don't repeat themselves, movies don't wait for their audiences. Audiovisual recordings that allow pausing, rewinding and playback are unrealistic.

GlexaMotion forces learners to focus by giving students exactly one chance to understand the video clip. GlexaMotion asks questions without warning, similarly to teachers cold-calling students. Too slow to respond? You lose your turn.

Click on Cue

Gestures occasionally convey information that is not present in the audio medium. The fact that students rarely gesture when talking is evidence of the dearth of audio-visual language learning. Glexa's click-on-cue feature allows students to respond when they see gestures that complement spoken language.

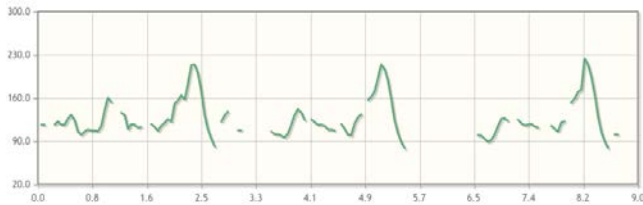
Click-on-cue is also used to identify boundaries in speech, for example, to identify breaks in radio news stories reported by the same announcer.



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GlaxaPitch

Prosody (that is, features such as intonation, speed, and rhythm) may be partially self-taught, because the underlying skills are found in most languages. GlaxaPitch shows prosody as pitch contours. Students say the utterance multiple times, then view their pitch contours in order to discern broad prosodic patterns in their speech, and compare them with the native-speaker target.



GlaxaStory

Online conversation practice can be mundane. GlaxaStory alleviates the monotony by allowing students to choose the direction of the conversation. 360-degree panoramas with HTML links may be used, so that students can interact with the visual scenery and engage in branching, pre-recorded conversations. Sometimes all choices are correct; other times some choices are distractors. Well-prepared students breeze through the assignment. Sight-seeing activities (both as visitors and guides) are popular.

IMGP5892 Panorama_685_90_vga_autorotation_controller_new.swf

You are visiting 北海道大学
Hokkaido for the first time.
View the panorama, and pick a place you would like to go next.

1. the Engineering complex
2. the Ohno Pond
3. the Model Barn

Yes, that's what I mean. What are the ingredients?

1. It's made of fatty tuna and rice.
2. This is a kind of nigiri-zushi.
3. The ingredients are pressed together by hand.

GlaxaPhone

85% of Hokkaido University students have never made a phone call in English. They practice simulated telephone calls using GlaxaPhone. 17 different recorded prompts are used to create over 2700 call combinations. All calls are checked by teaching assistants. Over 96% of students submit satisfactory assignments. Students prefer this task because they can be creative and they perceive they are being graded fairly.

* Review [glaxa required assignments 1, 2, 3, and 4](#). These assignments include instructions for [glaxa required assignment 5](#).

* Ask your TA or instructor for help.

* Decide what to say. You may write down the information.

* You may call as many times as you wish.

* Dial **415-386-3330**. Either click on your screen or type on your keyboard.



The microphone indicator is activated when you place a call. Talk loud enough so that the microphone indicator stays yellow most of the time.

Plans

Hokkaido University is replacing its on-site computer servers and clients during summer 2011. Hokkaido University selected Glaxa for its main online learning platform. When additional server capacity is required in the coming years, Hokkaido University may contract with a cost-effective off-campus server-hosting firm. Many learning experiences will utilize video. New client computers will have cameras so that students can practice gestures, posture, and eye contact.

Contact

Questions and comments may be addressed to: Goh Kawai, PhD, Associate Professor, Center for Language Learning, Hokkaido University, email: goh@kawai.com, <http://goh.kawai.com/>.



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Glexa
web multimedia LMS

Blended learning of English language

Hokkaido University (Sapporo, Japan) offers English language courses where freshmen review and prepare online, and interact face-to-face in class. In these blended learning courses, students use computers only outside of class. During class, students are on their feet, choosing conversation partners, and saying phrases they learned in advance at home.



Adventures Abroad – Glexa version



Hokkaido University expects students to actively review and prepare for classes. 5% (130 out of 2600) freshmen do so by using *Adventures Abroad – Glexa version* (Chieru: Tokyo), an eLearning adaptation of the successful textbook (Fuller and Cleary (2009) *Adventures Abroad*, Macmillan LanguageHouse:

Tokyo). *Adventures Abroad – Glexa version* includes most material from the print and DVD edition plus (a) explanations on why and how to learn, (b) multiple varieties of each learning task, presented in the order of difficulty, and (c) tasks where the student records phrases. The print version is limited to 4 pages per lesson unit, but the Glexa version has no such constraint.

Listen — drag the phrases

Students learn **why** they do the task (e.g., "You need to know what restaurant workers talk about, and how they say it.") and **how** they do the task (e.g., "Listen to the conversation. Sawako is ordering a meal at the Corn Dance Café in Santa Fe. Drag the phrases in the order you hear them."). An instructor using a print textbook in the classroom would say these instructions. **Adventures Abroad – Glexa version encourages autonomous and flipped learning by explicitly stating the reason and steps for each task.** Students remain motivated because they are constantly reminded of their learning objective.



Here's your menu. Let me know when you're ready to order.
Hello.
I'd like to try something different, I think. How about the barbecued buffalo?
OK. Would you like a cup or a bowl?
Today we have pumpkin soup.
Excellent choice. The barbecued buffalo comes with garlic mashed potatoes, baked p fries.
Hi, my name's David. I'll be your waiter tonight.

Listen — capture information

Students start with easy tasks and progress to harder tasks. Instructors can choose assignments based on the students' proficiency, class time, homework load, and whether the task is for review or preparation.

How you do the task

Listen to the conversation.

Type or choose the phrase for each person.

Corn Dance Café

CUSTOMER'S ORDER
Table#5

- | | |
|--------------------|------------------------------------|
| 1. Soup: | <input type="text"/> |
| 2. Main course: | Barbecued (<input type="text"/>) |
| 3. Potato: | <input type="text"/> |
| 4. Salad dressing: | <input type="text"/> |
| 5. Drink: | <input type="text"/> |
| 6. Desert: | <input type="text"/> ice cream |



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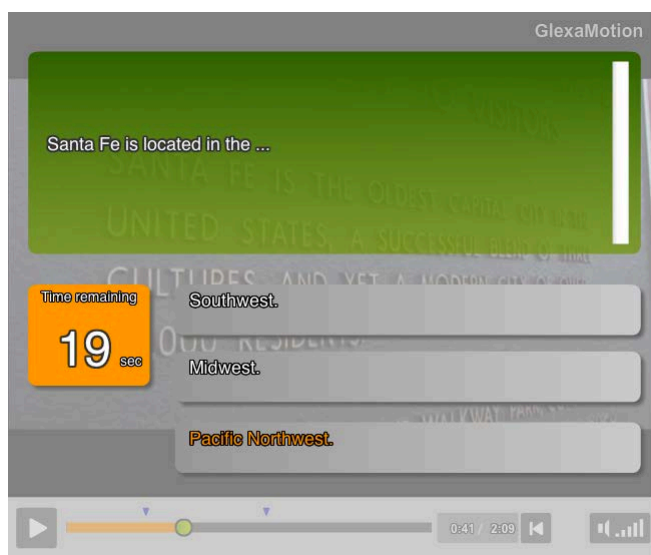
Cityscape — view travel destinations

High-quality video is popular among students as a enjoyable reward towards the end of the learning cycle. **During video playback, *Adventures Abroad – Glexa version* asks questions without warning, similarly to teachers cold-calling students.** Students remain vigilant throughout the video program.

If training to respond quickly is of interest, *Adventures Abroad – Glexa version* can measure the length of time a student spent before responding.

How you do the task

Watch the video. Occasionally, questions appear on the screen. Answer questions within a certain length of time.



Say the conversation

***Adventures Abroad – Glexa version* simulates conversations. Students hear a question, and immediately say their answer.** This is one of the hardest tasks. It is also a task that students can fairly reliably assess themselves — that is, when students feel they did well, they usually did (self-assessment is accurate at about 80%). Students who succeed in simulated conversations tend to do well in face-to-face conversations.

Students prefer simulated and real conversations because they can be creative and because they perceive they are being graded fairly. This is one reason why courses using *Adventures Abroad – Glexa version* won teaching excellence awards at Hokkaido University.

Why you do the task

You need to ask questions and to answer them. Questions have many possible answers.

How you do the task

Listen to each phrase, then say your answer.



Plans

In 2011, Hokkaido University selected Glexa for its main online language learning platform. When Hokkaido University replaces its on-site computer servers and clients during summer 2015, Glexa may be used for courses other than language learning, such as biology and computer science, so that students may take lectures at times and places of their choosing, and engage in hands-on activities in class.

Contact

Questions and comments may be addressed to: Goh Kawai, PhD, Associate Professor, Center for Language Learning, Hokkaido University, email: goh@kawai.com, <http://goh.kawai.com/>.



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Technical writing

In 2013 spring semester, Hokkaido University (Sapporo, Japan) began to offer an online English language task that introduces technical writing to freshmen. Most of our freshmen (75 percent, 1860 out of 2485) major in technical fields, and rely on figures and tables to convey their message. **Learners write captions (titles, labels, legends, and explanations) for figures and tables, and compare their writing with their classmates'.**

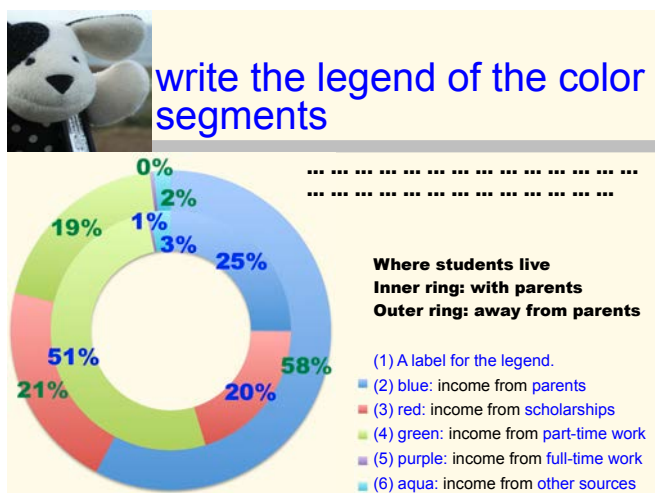


Figure 1. Screenshot of video lecture

(1) source of income (2) parents (3) scholarship (4) part-time work (5)full-time work (6)other
05:05 2013年7月2日 11:02

(1)sources of income (2)parents (3)scholarship (4)part-time work (5)full-time work (6)other sources
05:05 2013年7月1日 09:55

Sources of income (1)parents (2)scholarship (3)part-time work (4)full-time work (5)other sources
05:05 2013年6月24日 15:41

blue:parents red:scholarships green:part-time work purple:full-time work aqua:other sources
05:05 2013年6月24日 14:05

Figure 2. Sample of students' writing

Constrained context

We believe writing can be partly self-taught by providing learners with fairly rigid writing templates that learners complete by inserting phrases matching the specific context. Technical documents observe a prescribed, systematic format. **Learners follow explicit rules to write captions for figures and tables.** (By contrast, our self-learning approach would be unsuited for documents allowing more freedom, such as creative writing or poetry.) Learners write captions for graphs (histograms, pie charts, radar charts, scatter plots, regression lines), photographs (experimental apparatus, microscope imagery), and tables (simple tables consisting of text only). In each case, learners view figures and tables with their formatting complete; learners add English text to specific regions of the figures and tables (e.g., the label of the x-axis, the title of the figure, the definition of the solid line in the graph).

Writing in a shared online space

Learners view an online lecture (Figure 1) that shows figures and tables, write captions that are viewable by the entire class (Figure 2), read their classmates' writing, and revise their own as necessary. Instructors show model examples (Figure 3), but do not correct answers individually.

[OPTION] Technical writing (4) tables and how to learn

here's what I wrote

Table 2. Yearly sales of Japanese manga and US comics in the USA between 2003 and 2011, organized by media and genre.

media	genre	sales per year (millions of dollars)									
		2003	2004	2005	2006	2007	2008	2009	2010	2011	
digital	Japanese manga and US comics								1	8	250
	Japanese manga	100	140	180	200	210	175	140	120	113	
print	US comics	311	328	352	396	430	437	428	419	414	

Source: JETRO (2013-03-27) "USA content market research: manga and anime". Retrieved 2013-07-06 from http://www.jetro.go.jp/file/report/07001194/us_animation_comic.pdf

あなたが発言

あなたの発言を入力して

送信

発言一覧

すべて

Table1.Sales of mar

Table1.manga and c

Table2.Yearly sales the USA between 2C and genre.

Table 2. Yearly sale in the USA between and genre.

Table1. Yearly sales between 2003 and .

教師からの指示

Instructions


When the video tells you to write your response, (a) pause the video, and (b) type your response in the box あなたの発言 located towards the upper right.

Figure 3. Screenshot of the Glexa LMS



Systematic improvement

Learners view lectures on improving their writing. We focus on generalizable and straightforward techniques, such as combining multiple phrases containing similar words (Figure 4).



here's what I wrote

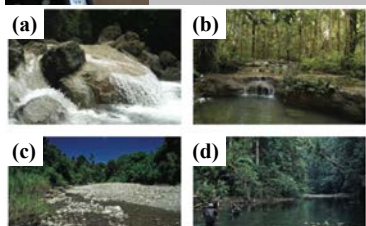

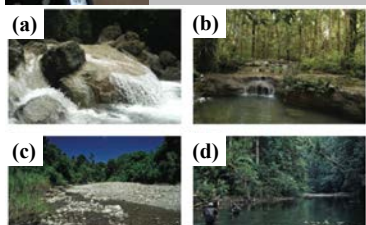


Figure 10. Photographs of regions of rivers in Buton where fish were found. (a) A region with large rocks and small waterfalls. (b) A region with deep pools and vegetation. (c) A region with high water temperature. (d) A region that is wide and slow-flowing.




a 2nd example



factorization
 $xa + xb + xc + xd$
 $= x(a+b+c+d)$

Figure 10. Photographs of regions of rivers in Buton where fish were found. Each photograph shows regions with (a) large rocks and small waterfalls, (b) deep pools and vegetation, (c) high water temperature, and (d) wide and slow-flowing water.

updated 2013-06-28 09:30 utc goh@kawai.com



be precise with less words

1st version – 45 words
Figure 10. Photographs of regions of rivers in Buton where fish were found. (a) A region with large rocks and small waterfalls. (b) A region with deep pools and vegetation. (c) A region with high water temperature. (d) A region that is wide and slow-flowing.

2nd version – 39 words
Figure 10. Photographs of regions of rivers in Buton where fish were found. Each photograph shows regions with (a) large rocks and small waterfalls, (b) deep pools and vegetation, (c) high water temperature, and (d) wide and slow-flowing water.

3rd version – 37 words
Figure 10. Photographs of regions of rivers in Buton where fish were found. The regions had (a) large rocks and small waterfalls, (b) deep pools and vegetation, (c) high water temperature, and (d) wide and slow-flowing water.

Figure 4. Example of removing redundancy

Discrimination test

At the end of the semester, all freshmen (including those who did not participate in the technical writing task) took a reading comprehension test that asked learners to choose the best captions from 4 choices (Figure 5). Scores showed that participating learners correctly identified desirable captions more than non-participating learners.

Some non-participating learners scored well, suggesting that skills for judging captions are acquired implicitly or casually in high school. This may mean that we can teach more advanced technical writing.

49. Look at the following 4 figures. The data in the figures are the same. Choose the figure that has the best combination of labels, titles, and explanations.

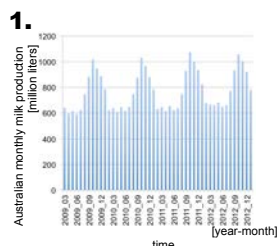


Figure 4. Bar chart of Australian monthly milk production in millions of liters from 2009-03 to 2013-01. The 4 peaks in the data correspond to Australian springtime, when dairy cows produce maximum milk (approximately 1050 million liters per month). The 4 valleys are fall and winter, when milk production falls and remains at approximately 650 million liters per month. The annual peaks and valleys mean that farmers need more feed, water, workers, and equipment during spring.

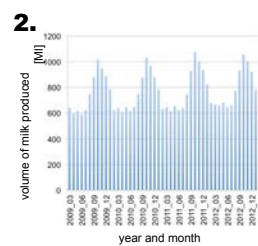


Figure 4. Histogram of volume of milk produced in Australia per month between 2009-03 and 2013-01. Milk production follows a seasonal pattern. Between February and July, production remains low at about 650 million liters (MI) per month. Between August and January, however, production rises, peaking at about 1050 MI in October, the Australian spring. Peak volume is almost double that of the minimum. These results mean that storage facilities are required to provide milk to consumers during months of low production.

Figure 5. Portion of reading test

Plans

Hokkaido University started online teaching of technical writing in 2013 spring semester. Learners agreed with the learning objective, but were dissatisfied with the quality and quantity of writing advice.

In a separate writing and conversation class, teaching assistants (TAs) commented more frequently on what learners wrote in a shared online space. Because this method improved the learners' production and satisfaction, technical writing in 2014 may involve intervention by TAs.

Contact

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