

# **The IALLT Journal**

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## **AN ONLINE ORAL PRACTICE/ASSESSMENT PLATFORM: *SPEAK EVERYWHERE***

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### **ABSTRACT**

*Despite its obvious importance, it appears that in many foreign language programs, oral practice is not given as much time and attention as it deserves. Or perhaps it is more accurate to say that foreign language professionals recognize the need for more oral practice, but do not have at their disposal a convenient means to provide it. An online oral practice/assessment platform, Speak Everywhere, has been developed to fill this void. It allows instructors without special computer knowledge to quickly create video-based speaking exercises and quizzes for their students to work on outside the classroom. The instructor can access the oral productions that the students submit to the system, and grade them or give individual feedback on them either in text or audio or both. Using its flexible and easy-to-use authoring sub-system, it is possible to create exercises of various formats (e.g. Q&A, repeat after the model, structure drills, role-play, and oral reading).*

**Editor's Note:** *The following essay presents an online project developed by the author, outlining its genesis and its functionality. He also refers to studies involving implementation of the tool in various language settings. The IALLT Journal encourages submissions which review the software and/or present research involving the use of this or similar tools to support the teaching and learning of languages*

## INTRODUCTION

It is something of an embarrassment that while oral proficiency is the number one item that foreign language students desire to acquire, our teaching practice very often does not seem to reflect it (Harlow & Muyskens, 1994, Tse 2000; Rivera & Matsuzawa, 2007; Houston, 2005). Often class time provides the only opportunity for students to practice speaking. However, there is much to cover during class sessions: introduction of vocabulary, presentation of grammar points, discussion of culture, etc. According to a survey of foreign language teachers (Fukada & Wei, in press), foreign language students spend an average of about 50% of class time on oral practice. Considering that in-class oral practice is largely group or pair work, the percentage is 25% or less on a per-person basis. In terms of quality, since the instructor cannot monitor all students, their oral practice is certainly not optimal. Assuming four 50-minute sessions per week, 25% translates into 50 minutes of semi-monitored oral practice per week, or 10 minutes a day. Certainly, one cannot hope to become orally proficient in a foreign language with such a small amount of practice. This is especially true with non-cognate languages for which a greater amount of foundational oral practice is required.

Another way to examine the oral component in a curriculum is to look at the percentage of oral practice/assessment in the determination of the final course grade. Several years ago, that percentage for one of our courses at our institution was only 10%, consisting of two oral interviews. Individual oral interviews are difficult to administer more than a few times a semester because of logistical difficulties associated with them. Ideally, oral skills should be assessed continuously, or at least as often as the other skills throughout a course (Fulcher, 2010; Tuttle & Tuttle, 2011), but the logistical cost makes it impractical to do so.

Since classroom time is limited, we might turn to out-of-class opportunities to provide oral practice, but since the advent of Communicative Language Teaching, traditional language labs have disappeared. CALL has taken over many of the functions of technology support for language learning, but until very recently CALL developers have avoided the oral skill area mainly because of a lack of viable technology.

## **SPECIFICATIONS FOR A NEW SYSTEM**

At Purdue University we decided to create a web-based system to provide more opportunities for students to practice speaking actively. Such a system needed to meet the following specifications: (1) The system must allow individualized oral practice outside the classroom. (2) The instructor must be able to monitor the students' practice asynchronously and grade it. (3) The instructor must be able to give feedback to the students both in text and in audio. (4) The students must be able to practice anywhere at any time at their own pace to reduce the level of their anxiety. (5) The system should be able to provide prompts in various ways, especially through video. (6) There should be an authoring component that would allow instructors without specialized computer knowledge to create exercises easily and quickly.

## **SPEAK EVERYWHERE: AN OVERVIEW**

The software system which we designed and developed according to these specifications is called *Speak Everywhere* (SE), currently available at <http://speak-everywhere.com/>. It is a foreign language oral practice/assessment platform that delivers individualized, self-paced, and teacher-monitored practice. It also functions as a semi-direct oral testing instrument. It has operated successfully since Fall 2009 in real courses and is currently in full production.

*Speak Everywhere* is a web-based server software program. It consists of three sub-systems: author, instructor, and student. Instructors and/or material designers use the Author Sub-system to create oral exercises, using video, audio, graphics, and/or text. Students access the Student Sub-system to work on the exercises. As they speak, their oral production is recorded. They can listen to the recording immediately afterward to compare the model and their own production side by side. They can repeat each exercise item as many times as they wish. When they are satisfied with their production for an item, they can submit it to the system. When instructors log into the Instructor Sub-system, they can see which students have done which exercises, and listen to each recording. They can choose to grade them and/or give feedback on them in text or in audio or both.

## THE STUDENT SUB-SYSTEM

### The Home Page

The heart of the system is the Student Sub-system:

- [Change password](#)
- [Terms of Service](#)
- [Privacy Policy](#)

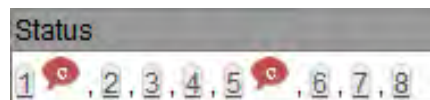
School	University of USA
Year-Semester	Fall 2012
Course	French 102
Student Name	John Doe

**Lesson 3**

Exercises	Status	Link
AS [Repeat after the teacher] vocabulary	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11	→
AS [Flashcards] vocabulary	1, 2, 3, 4, 5	→
AS [Q&A] Answer these questions	1, 2, 3, 4, 5, 6, 7, 8	→
AS [Drill] Telling time	1, 2, 3	→

**Figure 1. The home page of the Student Sub-system**

Exercises are grouped into *chapters* for organization. Assigned exercises are marked with “AS” in the first column. Exercise names can be in any language. In the Japanese course depicted in Figure 1, the material designer used such labels as [Repeat after the teacher], [Flashcards], and [Q&A] to indicate the type of interaction each exercise implements. The numbers in the next column correspond to exercise items. For example, Exercise “[Q&A] Answer these questions” has 8 items. When a student completes this exercise, this column may look like:



**Figure 2. Exercise status display**

The numbers have become audio links. Clicking a number will play the recording that the student submitted for that item. This feature is provided in order for the students to verify that their submissions have been saved on the server correctly. The balloon icons represent comments from the instructor. Clicking one of them will play the comment audio and display the comment text. The arrow button in the last column of Figure 1 is a link to the associated exercise. Students click it to start the exercise and they come back to the Home Page when the exercise is done.

### Exercises

The following is an example of the exercise screen.

Course: Japanese\_Demo Exercise: [Repeat after the teacher] Vocabulary practice 1 Item 1 of 18

**Lesson 20  
New Vocabulary**

**Instruction:**

ビデオの先生の後について  
言って下さい。

Repeat after the teacher in the video.

あちら (that way)

Speak Everywhere

REDO LISTEN STOP SUBMIT & NEXT S $\leftrightarrow$ T | T $\leftrightarrow$ S

Playback ended

Figure 3. Vocabulary exercise screen

On the left is an instruction panel. Since this panel is an image file, it can hold text and/or various images (photos, drawings, maps, clip art, etc.). On the right are a video display area (top) and a control panel (bottom). The video streams from the server and is displayed in the video area.

Video replay and voice recording can be controlled programmatically, or they can be placed under the user's control. This and various other options create a large number of interaction formats. In the following, samples of interactions that the system supports are described.

**Q&A.** This interaction simulates the instructor posing a question in video format and the student responding to it. Voice recording is automatically activated at the completion of the video prompt.

**Listen and repeat.** Figure 3 demonstrates this basic type of exercise, here focused on vocabulary. The video provides a model and the student is to repeat it as closely as possible. The student can compare his or her production with the model's.

**Shadowing.** The student hears and simultaneously echoes a recording of a foreign language (<http://www.foreignlanguageexpertise.com>). This represents a common training method for simultaneous interpreters. There is some research evidence that shadowing helps improve not only oral fluency, but also one's general proficiency (Sakoda & Matsumi, 2005). The program captures the learner's voice while the source video clip plays.

**A flashcard exercise.** For example, a cue image is shown in the video display area. As soon as it is displayed, voice recording starts. The student must identify the item in the target language within a specified time frame. The student can proceed to the next item without waiting for the time to run out.

**Read and answer questions.** This is a variation on the Q&A format in which a reading passage is presented on the instruction panel. The student is to read it first, and when he clicks the "START" button, the video will pose comprehension questions to which the student is to respond. This exercise integrates three skills: reading, listening, and speaking.

**Look at a picture and answer questions.** Another variation on Q&A is to display an image, e.g., a map. Then, the video prompt might ask for directions from point A to B. Another example would be to show a picture of a room, and have the student describe it.

**Role-play.** Another use of the Q&A format is role-play or dialogue, either scripted or unscripted. The video prompter can play the role of A, for example, and the student can say and record B's lines.

**Structure drills (1).** This and the two subsequent formats implement grammar drills. The first type, of which Figure 10 is an example, can be considered the most introductory.

Course: 10-JPNS-202-011 Exercise: [Say and check]would like Item 1 of 4

**Structure drill: would like**

**Instruction:**

Follow the example below to make sentences.  
Click "RECORD" to record your sentence, and click the video play button to listen to a model.

Cue: **birthday, digital camera, shirt**

Pattern: **For ~ I would like ~, but not ~.**

You say: **For my birthday, I would like a digital camera, but not a shirt.**

Speak Everywhere

RECORD LISTEN STOP SUBMIT & NEXT

Exercise ready.

Figure 4. Structure drill

In this drill, the student is to construct a sentence using the given cue and pattern. Students can take as much time as they need preparing a sentence, and record themselves as many times as they want. They can also listen to the model whenever they want to: that is to say that in this format, video replay is placed under the students' control.

**Structure drills (2).** The basic Q&A interaction can once again be employed to deliver grammar drills as well. For example, to practice telling time using the structure *It's ~* with all accompanying options (such as *o'clock*, *till*, and *past*), we could have the video pose the question *What time is it?* and present a cue like “7:15 AM” either on the instruction panel or as part of the video.

**Structure drills (3).** In an enhanced version of the second type of structure drills, the sequence of events is as follows: (1) The video presents a cue either verbally or in text, (2) the student produces an utterance, and (3) the video presents a model. This format simulates typical drills done in the classroom.

**Oral reading.** The interaction used for Structure drills (1) can also be used for an oral reading activity. A reading passage can be put on the instructional panel, and the video can be a native speaker model reading the passage. The student practices reading the passage, and clicks the “RECORD” button when ready. A long passage can be presented one paragraph at a time.

**Free production.** The simplest *Speak Everywhere* exercise is a free production task like a short monologue. One can write a simple instruction like “Talk about your family for two minutes” on an instruction panel. No video is necessary for this exercise. The student clicks “RECORD” and start speaking. A slightly more elaborate exercise is a story-telling task. *Speak Everywhere* can present a Flash app in place of the video. For example the Flash app can present a series of images. The student can flip through a series of pictures, for example, to construct a story and tell it. Because the Flash app works independently, the user is able to flip through the images while telling (and recording) the story.

It should be stressed that the foregoing examples are by no means exhaustive. Additional exercise types might very well be implemented using the currently available options.

## THE INSTRUCTOR SUB-SYSTEM

The Instructor Sub-system has three main functions: (1) assign/unassign exercises, (2) manage the course roster, and (3) listen to students' recordings and provide feedback. Results can be displayed on the student's home page, available for reviewing the grade and the comments.

In order to access students' recordings, the instructor chooses an exercise and arrives at a screen like the following:



10-JPNS-202-011: Online Comprehension / Speaking Test 1 Part 1

Student	Items	Stop audio	Play all	Delete audio
Shang, Fei	01 02 03 04 05 06 07 08 09 10		Play all	Delete these
Taylor, Justin			Play all	Delete these
Kim, Donghoon	01 02 03 04 05 06 07 08 09 10		Play all	Delete these
Joan, Heather	01 02 03 04 05 06 07 08 09 10		Play all	Delete these
Lee, Young Young	01 02 03 04 05 06 07 08 09 10		Play all	Delete these
Yan, Anna	01 03 04 06 07 08 09 10		Play all	Delete these
Yoshino, Alexander	01 02 03 04 05 06 07		Play all	Delete these
Kathryn, Will			Play all	Delete these
Yan, Samuel	01 02 03 04 05 06 07 08 09 10		Play all	Delete these
Kurtz, Nathan	01 02 03 04 05 06 07 08 09 10		Play all	Delete these
Yoon, Gyeon	01 02 03 04 05 06 07 08		Play all	Delete these
Wu, Junqin			Play all	Delete these
Belgmann, David			Play all	Delete these
Diachon, Tracy	01 02 03 04 06 07 08 09 10		Play all	Delete these
Li, Honghui	01 02 03 04 05 06 07 08 09 10		Play all	Delete these
Purdy, Christopher	01 02 03 04 05 06 07 08 09 10		Play all	Delete these
Yan, Ruiyan			Play all	Delete these
McNair, Elizabeth			Play all	Delete these
Yu, Songhui	01 02 03 04 05 06 07 08 09 10		Play all	Delete these
Taylor, Justin			Play all	Delete these

Figure 5. Instructor Sub-system: access to students' audio

The instructor can listen to the recordings by clicking the audio links and can supply a comment to each recording, either an audio recording or a text, or both:

**Add a comment**

---

Text comments:

Audio Comments:

*Figure 6. Comment input screen*

## THE AUTHOR SUB-SYSTEM

Typically, an author needs to prepare a JPEG image and/or a video clip for each exercise item. Once the image and/or video files are ready, the instructor can access the Author Sub-system within a web browser. A general procedure for authoring an exercise is as follows:

1. Create a chapter if there is not already one for this exercise.
2. Open the chapter in which to create the exercise.
3. Fill out a very short “Add a new exercise” form.
4. Open the exercise by clicking an “open” button.
5. Add items to the exercise by giving each item a name and click an “Add” button.
6. For each item created, upload a JPEG image and a video clip following on-screen instructions.

No specialized program or computer programming knowledge is required for authoring exercises in *Speak Everywhere*.

### A CURRICULAR INTEGRATION SAMPLE SCENARIO

*Speak Everywhere* exercises can be offered as an optional learning ancillary, but the platform is primarily designed to be fully integrated into a course curriculum. Classroom activities can build upon what students practice online, and vice versa. It makes good sense to move oral exercises that are best implemented as individualized practice from the classroom to *Speak Everywhere*. This would have an added benefit of freeing up some of the class time for more interactive and communicative activities. Here is an example scenario demonstrating a high level of integration:

Day 1:

Time	Classroom activities
0-10	Introduction of new words
10-15	Repeat the new words
15-30	Grammar point #1 lecture
30-40	Grammar point #1 practice
40-50	Culture point #1 lecture

At home:

SE activities
Repeat new words and compare with the model
Vocabulary flashcards
Grammar point #1 drill (1)
Grammar point #1 drill (2)
Grammar point #1 drill (3)

Day 2:

Time	Classroom activities
0-5	Brief review
5-25	Communicative activity utilizing grammar point #1
25-40	Grammar point #2 lecture
40-50	Grammar point #2 practice

**Figure 7. Sample integration of Speak Everywhere**

Five minutes of repeating new words in chorus in class is usually not sufficient to ensure mastery. In this curriculum, rather than spending more time on it in class, students work on the new words at home through two different SE exercises. They also work on grammar point #1 individually through a few different SE exercises. Having done these SE exercises (carefully designed to ensure a reasonable level of mastery), on Day 2 they should have good enough control over the new words and the grammar point that they can successfully engage in a communicative activity that utilizes the grammar point. As can be seen from this example, *Speak Everywhere* provides a one-stop solution to the task of implementing a blended learning curriculum.

## AVAILABILITY

*Speak Everywhere* was developed by the present author in the Center for Technology-Enhanced Language Learning at Purdue University, and is commercially operated by e-Language Learning LLC at <http://speak-everywhere.com>. It is a subscription-based service on the web available to language instructors for \$20/year. They can create exercises and test-drive them in their own account. Once exercises are ready for a course, they request a SE course to be set up. The students in the course pay a usage fee at \$1/week. For example, a student in a 10-week course would pay \$10 upon the first access to the course. Institutional pricing is also available upon request.

## CONCLUDING REMARKS

Several studies have been conducted to examine the effects of the *Speak Everywhere* platform and of various activities implemented therein on various aspects of language acquisition in multiple languages. Preliminary results from

*Fukada*

one study indicate that a simple repeat-after-the-model exercise has a significant beneficial effect on the acquisition of Japanese word accentuation (Yoshida, 2010). Another line of research has found that oral repetition is more effective than written practice in acquiring verb conjugations in Japanese (Yamaguchi, 2011). A Spanish oral test study found a moderately high correlation between an online test based on *Speak Everywhere* and one-on-one interviews (Cuza, Fukada, & Ginther, 2012). Ikeda & Fukada (2012) reported on successful integration of *Speak Everywhere* into a Japanese course and favorable feedback from the course participants. Because *Speak Everywhere* makes it possible to collect large amounts of students' oral production quickly and effortlessly under various conditions, it is not only an instructional and assessment tool, it can also be also a useful research tool. In addition, it is useful for compilation of learners' spoken language corpora.

### **ABOUT THE AUTHOR**

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## REFERENCES

- Cuza, A., A. Fukada, & A. Ginther. (2012). Oral skills assessment in multisectional Spanish language courses: an exploratory study. Manuscript submitted for publication.
- Fukada, A. & M. Wei. (in press). Nihongokyoku niokeru supiikingushidou no ichizuke to genjou: ankeetochousa ni motozuite [The current status of speaking training in Japanese language courses: A pilot survey study], In Matsumoto, K. (Ed.) *Proceedings from the 23rd Annual Conference of the Central Associations of Teachers of Japanese*.
- Fulcher. G. (2010). *Practical language testing*. London: Hodder Education.
- Harlow, L.L., & Muyskens, J.A. (1994). Priorities for Intermediate-Level Language Instruction. *The Modern Language Journal*, 78 (2), 141-154.
- Houston, T. (2005) Outcomes assessment for beginning and intermediate Spanish: One program's process and results. *Foreign Language Annals*, 38(3), 366-374.
- Ikeda, J. & Fukada, A. (2012) Speak Everywhere o tougoushita supiikingujuushi no koosusekkei to jissen [Design and implementation of a speaking-focused course that integrates *Speak Everywhere*], *Journal of the Society for Teaching Japanese as a Foreign Language*, 152 (2012) 46-60.
- Rivera, G. M., & Matsuzawa, C. (2007). Multiple-language program assessment: learners' perspectives on first- and second-year college foreign language programs and their implications for program improvement. *Foreign Language Annals*, 40 (4), 569-583.
- Sakoda, K., & Matsumi, N. (2005). Nihongo shidou niokru shadowing no kisoteki kenkyuu (2): ondoku renshuu tono hikaku chousa kara wakarukoto [Basic research on shadowing in teaching Japanese (2): insights from a comparison with oral reading]. *2005-nendo Nihongo Kyouiku Gakkai Shuukitaiikai Yokoushuu* [Proceedings from 2005 Autumn Meeting of the Society for Teaching Japanese as a Foreign Language], 241-242.
- Tse, L. (2000). Student perceptions of foreign language study: A qualitative analysis of foreign language autobiographies. *The Modern Language Journal*, 84 (1), 69-84.

*Fukada*

Tuttle, H. G. and Tuttle, A. R. (2011). *Improving foreign language speaking through formative assessment*. Larchmont, NY: Eye On Education.

Yamaguchi, M. (2011) *Effects of written and oral practice on L2 learners' acquisition of Japanese verb conjugations* (Master's Thesis). Purdue University, West Lafayette, Indiana.

Yoshida, K. (2010) *Effects of oral practice on pronunciation: Focusing on word accentuation* (Master's Thesis). Purdue University, West Lafayette, Indiana.