# Volition 2.0: EnglishCentral in the Junior High School Context

Daniel Mills*[1], Olivia Kennedy*[2]

*[1]Ritsumeikan University, Japan, *[2]Omi Kyodaisha Junior High School, Japan

0200

The Asian Conference on Technology in the Classroom 2013

Official Conference Proceedings 2013

## Abstract

In the past few years, EnglishCentral, a website that uses authentic videos to develop the speaking and listening skills of English language learners, has become a popular tool used by teachers to supplement classroom practice. The following article outlines a research study conducted at a private junior high school in Shiga, Japan that examined the usage patterns of students using the website on a voluntary basis. Data was collected regarding the students' usage of the website in a school computer laboratory and at home. In addition, the participants were interviewed to collect qualitative data regarding the impact of affective factors. The data collected in this study seems to indicate that this use of technology may be beneficial and motivating with students of this age group; yet, expectations must be clearly defined to ensure adequate participation.

## 1. Introduction:

EnglishCentral is a website that provides students of English as a foreign or second language with access to authentic videos as well as tools to develop students' speaking and listening ability and vocabulary knowledge. Kimura (2010) surveyed student attitudes toward 10 self-study websites and found that EnglishCentral was rated highest among university students in their desire to continue to use the site, their enjoyment in using it, and their perception of its effectiveness. Yet little is known about how younger students perceive and use the site. The following pilot study was conducted at a private junior high school in Japan to gather initial information regarding these factors, and to assess whether EnglishCentral would be a viable medium with which to provide students with listening and speaking practice in this setting.

## 2. Literature Review:
### 2.1 English Education in Japan:

English is studied widely in Japan with 98% of the population studying the language for six years or more (Ministry of Education, Culture, Sports and Technology 2011a). Despite recent efforts to make its populace more able to communicate in English (Ministry of Education, Culture, Sports and Technology 2002), the country still ranked $27^{th}$ of 30 Asian countries in the standardized TOEFL test in 2009 (Educational Testing Service 2010). One possible explanation is that the TOEFL test assesses not only reading comprehension and grammatical knowledge, but also listening and speaking skills. Initially interested in English as a tool with which to gain international economic advantage by utilizing foreign scientific knowledge (McVeigh 2004), the post-war government set up the grammar-translation method of English education (Richards 2001). Now recognizing that English is "an important means to greatly expand opportunities for our children who will live in the global society" (Ministry of Education, Culture, Sports and Technology 2011c), the government is working towards cultivating Japanese people with communicative abilities.

In 2009 the Ministry of Education, Culture, Sports and Technology stipulated that from April 2011 foreign language study would become compulsory from the fifth grade of elementary school. While the language to be studied was not officially designated as English, policies such as the 2002 "Establishment of an Action Plan to Cultivate 'Japanese with English Communicative Abilities'" (Ostheider 2012: 110) led most boards of education to introduce English. This change formalized the intention outlined in the 2008 White Paper of "smooth[ing]" the "transition to foreign language study in lower secondary schools" (Ministry of Education, Culture, Sports and Technology 2008). While only 72 hours of language study were added to the national curriculum, the change means that English is now studied for a minimum of five years during compulsory education. 98% of students continue onto high school (Ministry of Education, Culture, Sports and Technology 2011a), where they must also continue this language study, bringing the total for them to eight years. Many universities also make English a required subject in the first two years of undergraduate study.

It is something of a mystery therefore, that linguistic competence remains so limited. Some have pointed to washback, or the influence of testing on teaching and learning (see Alderson and Wall 1993), as the likely cause. Junior high school students have

just three years in which to master the rudiments of the English language in order to pass the rigorous externally set high school entrance examinations. Since 2002, when the government guidelines stipulated the change towards communicative competence, the English examination has included a listening section, but there remains no speaking test. Students are tested on reading and listening comprehension and grammatical knowledge. The listening section is allocated between 5% and 10% of the total score, depending on which prefecture the student lives in. The writing section of the test requires students to compose a mere two to four sentences or questions. Because of the way that this test is organized, many students and their parents see activities that foster language production rather than comprehension as a waste of valuable study time (Japan: English language tests the nation 2008).

Rivers (2010) suggests that another possible explanation for the lack of communicative competence could stem from the Japanese insistence on native speaker language models. Students see that they cannot achieve the 'correct' pronunciation that the Assistant Language Teacher (ALT), usually from one of Kachru's inner-circle countries (1985), uses, and stop trying. The gap between regular teachers at elementary schools, who have very little training in teaching English and often little proficiency in speaking the language, and these native ALTs, is extreme. Junior and senior high school teachers are generally more competent, but only 27.7% are above STEP grade Pre-1, TOEFL (PBT) score of over 80, or a TOEIC score of over 730 (Ministry of Education, Culture, Sports and Technology 2011d).

## 2.2 Homework and Volition:

The unstructured and unsupervised nature of this study means that research into computer-based homework is relevant, especially where it relates to motivation and completion. Several trends emerge when we investigate what makes a computer-based homework program likely to succeed. Programs that offer immediate feedback are seen to be of merit (Rüschoff 1986; Sagarra & Zapata 2008; Mendicino et al. 2009). Scaffolding questions or hints are also of benefit (Rüschoff 1986; Mendicino et al. 2009). Rüschoff (1986) also points out that materials must "go beyond the limitations of behaviouristic drill and practice programs" (205) and actually teach, rather than just test, the student.

Another problem is observed by Sagarra and Zapata (2008) and Ayres (2002), and identifies programs with weak connections to the content covered in class time. When these connections are not made apparent to students, Computer Assisted Language Learning (CALL) course components are not regarded favorably. Even Rüschoff, writing as long ago as 1986, advises that teachers regard CALL as "an integrated part of (and an effective way of preparing students for) the other activities of a teaching unit" (205) rather than something separate from it. Peng (2009) finds that if students perceive the homework set to be useful, that they are more motivated to complete it.

## 2.3 Computer Assisted Language Learning:

CALL_refers to a broad range of research and practice concerning the use of technology to facilitate the teaching and learning of foreign and second languages. Chapelle has stated that CALL provides learners with "individualized interactive instruction unmatched by what can be provided in the classroom" (2008: 6). This is possible because learners have greater control over many aspects of their learning, and can tailor their interaction, in many cases, to their needs (Chapelle 2008). In the

case of EnglishCentral, students can learn using authentic English videos, which they might ordinarily find too difficult, by making use of a variety of scaffolds. Some of these scaffolds include slowing down the speech in a video or the inclusion of English closed captioning. These functions focus students' attention on specific linguistic features, which may be missed without them.

Furthermore, CALL environments can provide Japanese speakers, whose culture often contributes to foreign language anxiety and resulting low willingness to communicate with a safe, and in many cases, anonymous environment in which to interact in the target language. Research conducted by Friermuth and Jarrell (2008) showed that CALL environments were effective in increasing Japanese students' willingness to communicate. In addition, students reported feeling more confident and less anxious during language learning activities that were conducted via computer rather than face-to-face (Freiermuth and Jarrell 2006).

### 2.4 Technology Adoption:

Japan is known throughout the world for its technology. It is therefore surprising-that Japan has been slow to adopt educational technologies. In recent years, the government has begun to implement sweeping reforms to the educational system, and technology, especially *denshi kokuban* (interactive whiteboards) have been widely purchased. Yet simply providing students and teachers with access to technology is not enough to ensure its adoption and integration. Attitudes and perceptions towards the technology are important yet often ignored factors in the adoption process.

One framework, which can be used to understand the process of technology adoption and the role that attitudes and perceptions play in that process, is the innovation-decision model developed by Everett Rogers (2003). Rogers defines the innovation-decision model as "the process through which an individual (or other decision-making unit) passes from gaining initial knowledge of an innovation, towards forming an attitude toward the innovation, to making a decision to adopt or reject, to implementation of the new idea and the confirmation of this decision" (2003: 163). The model consists of five stages - (1) Knowledge, (2) Persuasion, (3) Decision, (4) Implementation, and (5) Confirmation. The following diagram shows these stages as well as the many factors that affect the process at each stage:
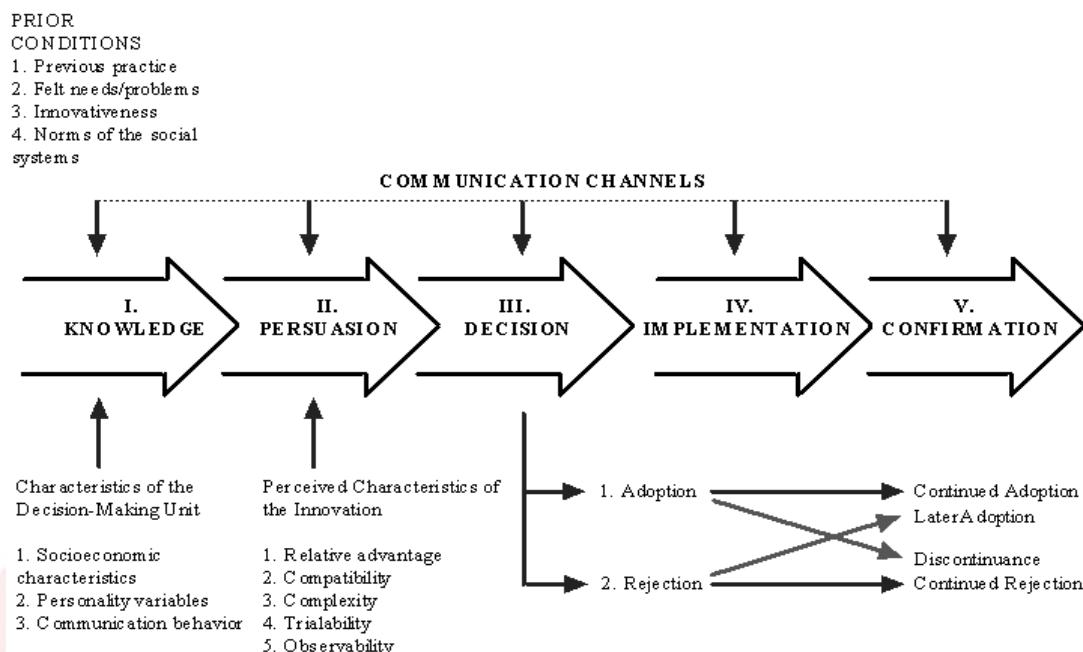
PRIOR
CONDITIONS
1. Previous practice
2. Felt needs/problems
3. Innovativeness
4. Norms of the social
system s

COMMUNICATION CHANNELS

I. KNOWLEDGE → II. PERSUASION → III. DECISION → IV. IMPLEMENTATION → V. CONFIRMATION

Characteristics of the
Decision-Making Unit

1. Socioeconomic
characteristics
2. Personality variables
3. Communication behavior

Perceived Characteristics of
the Innovation

1. Relative advantage
2. Compatibility
3. Complexity
4. Trialability
5. Observability

1. Adoption → Continued Adoption
Later Adoption
2. Rejection → Discontinuance
Continued Rejection

**Figure. 1.** The Innovation-Decision Model (Rogers 2008)

In the persuasion stage, individuals who have been introduced to an innovation make an adoption decision based on their perceptions of the innovation's characteristics. The characteristics of (1) Relative Advantage, (2) Compatibility, (3) Complexity, (4) Trialability, and (5) Observability have been shown to be predictive of an adoption/rejection decision. Rogers defines these characteristics as follows:

| Perceived Characteristics | Definitions |
|---|---|
| Relative advantage | "[T]he degree to which an individual or group perceive that an innovation is better than the object, idea, or practice that preceded it" (Rogers 2003: 15). |
| Compatibility | "[T]he degree to which an innovation is perceived as being consistent with the existing values, past experiences, and needs of potential adopters" (Rogers 2003: 15). |
| Complexity | "[T]he degree to which an innovation is perceived as difficult to understand or use" (Rogers 2003: 16). |
| Trialability | "[T]he degree to which an innovation may be experimented with on a limited basis" (Rogers 2003: 16). |
| Observability | "[T]he degree to which the results of an innovation are visible to others" (Rogers 2003: 16). |

**Table 1.** Definitions of perceived characteristics identified by Rogers (2008)

The perceptions of these characteristics are influenced by a number of factors including communication channels, personality variables and the cultural background of the adopter.

Geert Hofstede has identified five dimensions, which can be used to compare national cultures. The dimensions identified in Hofstede's work include (1) Individuality/Collectivism (2) Power Distance, (3) Masculinity/Femininity, (4) Uncertainty Avoidance, and (5) Long-term Orientation. In the adoption of technology, power distance and uncertainty avoidance have been shown to be highly influential (Erumban and Jong 2011). Power Distance is defined as "the extent to which less powerful members of organizations and institutions accept that power is distributed unequally." (Hofstede and Bond 1984: 419). Japan is situated squarely in the middle of the power distance index (PDI) with a score of 54 (Hofstede, Hofstede, and Makinov 2010). This score is common for countries that have been influenced by the Chinese philosophy of Confucianism, which advocates for balanced and reciprocal relationships between seniors and subordinates. In Japan, this is reflected in the respect that students have for their teachers, and is reciprocated through the duty of care that educators demonstrate towards their students. For this reason, teachers and others who are in positions of authority can be highly influential in the innovation-decision process.

Uncertainty avoidance is characterized by feelings of uneasiness and discomfort in unpredictable situations (Hofstede et al. 2010). According to Hofstede et al. (2010) Japan is ranked seventh highest of all nations surveyed on the Uncertainty Avoidance Index (UAI) (2010). Such a high degree of uncertainty avoidance can lead to hesitancy in adopting innovations, or to discontinue the use of technology once an adoption decision has been made.

### 3. Purpose of the Study:
The overall purpose of this study was to examine the usage of the website EnglishCentral by a group of Japanese junior high school students. Initially conceived as a quantitative research study, the project was modified when it became apparent that few of the group was using the technology. Data was therefore obtained first by monitoring the students' activity through the website's built-in 'Teacher's Dashboard,' then later by interviewing the students individually in their native language.

### 4. Methodology:
### 4.1 Setting and Participants:
The 13 students who took part in the initial orientation session were all members of the International Interaction Club, a group that meets afterschool two days a week. The school has many international visitors due to the fame of its founder, and the club's main aim is to make such guests feel welcome. Between 12 and 15 years of age, the almost exclusively female group was keen to attain a level of linguistic competence that would allow them to do this more effectively. The students recognized that the four class hours they spend in class studying English each week, while preparing them for the high school entrance examinations, were doing little for their communicative competence. They therefore asked one of the authors of this article for help. With simply no budget, the authors looked for free software that students could access at home or afterschool that would help to improve their

speaking and listening skills. The computer laboratory was made available for both the designated club times each week. The laboratory has 40 workstations equipped with NEC MY18A/B-3 computers, running Windows XP Professional. The age of the computers, however, made it difficult to use some of the functions of the website, which may have affected the students' uptake.

## 4.2 Procedures:
Participants were first given a group orientation in their school's computer laboratory. First, the students created Yahoo e-mail accounts, which they then used to register with EnglishCentral. Most of the students did not previously have a personal e-mail address. Once the students registered, they received an e-mail at their Yahoo address and were asked to confirm their registration. Students were then shown how to search for videos in which they had an interest, and how to listen to and 'speak' these videos. Finally, students were taught about the special features of the site, such as the functions that would allow them to slow down the videos and repeat lines, as well as the section that would provide them with vocabulary practice. After the orientation session, students were given access to the computer laboratory two times a week, and usage was monitored through the site's Teacher's Dashboard. In addition, the students were observed during club time, and these observations recorded. Finally, several months after the completion of the study, the researchers gathered the students, and interviewed each in Japanese regarding his or her experiences using EnglishCentral. A professional Japanese interpreter was also present to make sure that the researchers used correct language.

## 4.3 Data Analysis:
The data that was analyzed in this study originated from three sources: information gathered by the Teacher's Dashboard regarding usage, observations of the students during club time, and interviews of individual students.

Analysis of usage of the website showed, surprisingly, that despite expressing enthusiasm to use the site during their initial exposure, only half of the students accessed EnglishCentral after the orientation session. On average, students watched 16.5 videos, but the range was between 1 and 41 videos. The average number of videos 'spoken', which shows active participation with the learning tool, was 6.7, with a range of 0-17. The following graphs show the number of videos watched by students, as well as the number of videos 'spoken':
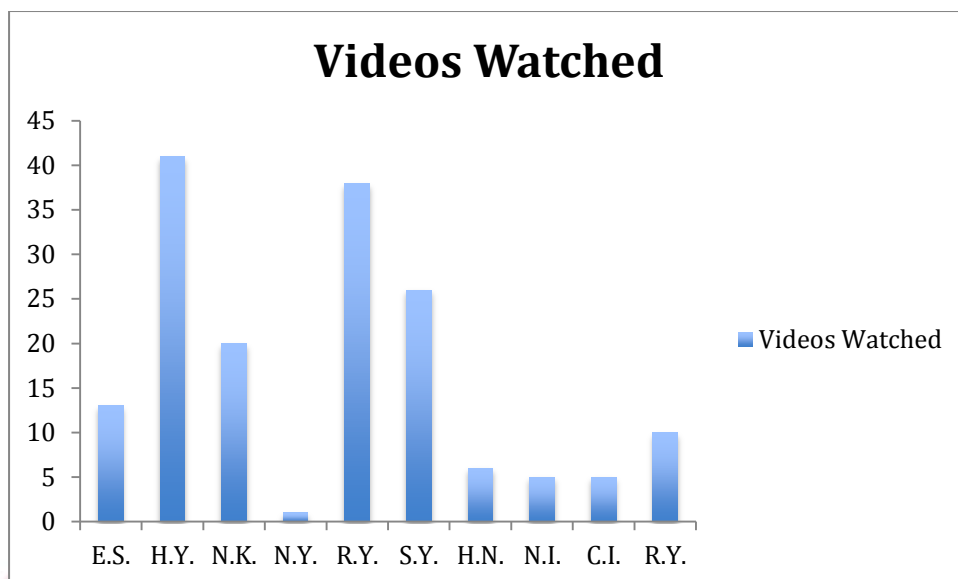
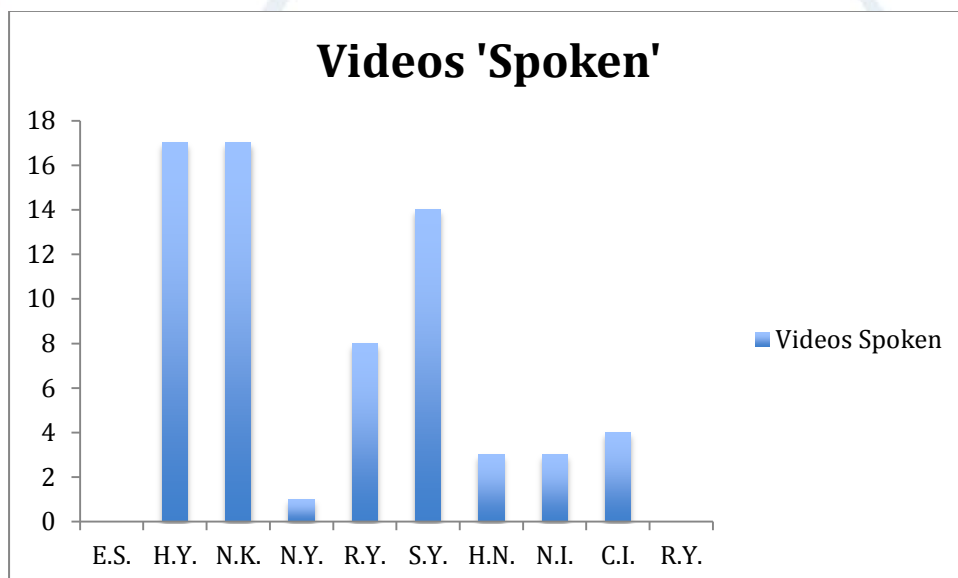**Figure 2.** Number of videos watched by students

**Figure 3.** Number of videos 'spoken' by students

Though it is evident that some students made use of the site, especially H.Y. and N.K. who not only passively watched a number of videos, but also chose to actively participate by 'speaking' videos, at least half of the students chose not to do so. The researchers wondered why this was so, and formed two hypotheses. Despite the students' stated motivation to improve their communicative ability in English, another reason for their involvement may have been to spend time with their peers and teachers. As EnglishCentral involves either watching videos then using headphones and a microphone to practice 'speaking' the video or working with vocabulary items, students may have felt that these activities were too solitary. Another possible explanation is how different the EnglishCentral environment is to the standard Japanese language classroom, where activities are traditionally very much teacher-centered. Students may have been simply overwhelmed by the expectation of them to

take an active role in their learning. The reluctance to do so may be explained by the high level of uncertainty avoidance present in Japanese culture (Hofstede et al. 2010). Observation of students during both the orientation and normal club activities provided the researchers with valuable data regarding their needs and desires. In the orientation session, when students were engaged with the EnglishCentral program, the majority of interaction occurred between the computer and the learner. When problems were encountered or if the student had a question, the student would communicate this to the teacher: peer-to-peer interaction was extremely limited. In contrast, during previous computer-based activities during club time, students were seen to be interacting with one another around the technology, when using YouTube to learn the dance moves of a popular Korean hit song, for example. It is important to note, however, that all of the students' conversations about the dance were conducted in Japanese. The only English that was used was when they talked to their teacher, a native English speaker, about the activity in which they were engaged. This behavior seems to reinforce the hypothesis that the students are more interested in interpersonal interaction than in improving their English-linguistic competence. They therefore may not have used EnglishCentral beyond the orientation session due to the fact that the website lends itself to solitary learning activities.

Finally, each of the students was interviewed in order to gain an understanding, in the students' own words, of their experience using EnglishCentral. All interviews were recorded. Common themes were noted, some of which are transcribed here. The first theme that emerged was that the students enjoyed using the site. One student stated:

*Q – イングリッシュセントラルを使った経験を何か話してください。使って感じたこと、思ってたこと。*
Q – What can you tell me about your experience using EnglishCentral? For example how you felt or thought when you were using it.
*A –動画をみました。*
A – I watched videos.
*Q –他には？*
Q – Anything else?
*A –他？他は特にないです。*
A – Anything else? Nothing in particular.
*Q –どんな動画みたか覚えてる？*
Q – Do you remember what type of videos you watched?
*A –あの〜レディーガガ。あとなんか話題の映画とかの、ちょっとの部分みたいな。*
A – Well, Lady Gaga. And some kind of little bits of popular movies. (The student may be referring to movie trailers).
*Q –楽しかった？*
Q – Was it fun?
*A –楽しかったです。*
A – It was fun.

Yet, students seemed less sure that the site was beneficial to their learning:

*Q –それで英語が上達したと思う？*
Q - Did your English improve by using it (EnglishCentral)?

*A – うん、なんか聞き取りはちょっとだけ。*
A – Yeah, it improved my ability to catch what I heard a little.

Another student told us:
*Q–何かそれをやっていたときの感想。覚えていること。*
Q – How did you feel while you were using it (EnglishCentral)? What do you remember?
*A– 感想？発音とかがよくわかる*
A – My impressions? I understand pronunciation and the like very well.
*Q–その、映像とかにでてくる人の発音がよくわかったのか、自分自身のやつ、自分の、C.さんの発音を機械がこう？*
Q – Do you mean you could understand the pronunciation of the people who appeared in the videos very well? Or do you mean you now understand how to pronounce words well. Or do you mean that the computer system understood your pronunciation?
*A–両方*
A – Both. (The student's answer is not clear. She was offered three options.)

Another student did not feel that her pronunciation changed, however:
*Q – それ使うことによって自分の発音はきれいになった？*
Q – Did EnglishCentral improve your pronunciation?
*A–いや、そんなに*
A – No, not really.

A second theme was that students seemed to see more benefit in computer-based programs that have a direct connection to either their regular term examinations or standardized tests. One student mentioned EikenCat, a program that had been used with the students during class time to help prepare them for the Eiken test and said that she learnt more from it than from EnglishCentral. She also commented that EnglishCentral was more complicated to use than EikenCat:

英検キャットはシンプルな方で、そっちのセントラルの方はなんかごちゃごちゃした方って感じがした。
I felt EikenCat was simpler, but that EnglishCentral was disorganized and complicated.

Finally, several students indicated that they were not aware that they could have accessed EnglishCentral outside of the school computer laboratory. This indicates a mistake on the part of the researchers who should have communicated this more clearly to the students. The following excerpt from one interview indicates, however, that at least one of the students would not have taken the opportunity to use the site at home anyway:

*Q – イングリッシュセントラルを家でも使えるって知ってた？*
Q - Did you know you could use it at home?
*Q – 知らなかった。*
A – No, I didn't.
*Q – 家で使ってみたいと思う？*

Q – Do you think that you'd like to use it at home?

*Q* - 使わないと思う。

A – I don't think I'll use it.

## 5. Discussion and Conclusion:
### Discussion 5.1:

This pilot study began with a desire on the part of the researchers to help the students achieve their stated aim of achieving communication competence in English. As such, opportunities were provided for them to improve their listening, speaking and inferential skills, all of which would help them to become more effective communicators. By watching authentic videos in English without Japanese subtitles, the researchers imagined that the students would key into the paralinguistic and extra-linguistic cues inherent in natural communication, as well as improve their ability to catch what was being said and give them confidence in their own pronunciation.

The study rapidly proved problematic. Club attendance dropped, with fewer members coming to the laboratory each session as the semester progressed. When it became clear that the project had stalled, the researchers began to investigate what had happened, and to reflect on mistakes that may have been made. Because the project began as a purely statistical study, we were_initially_hesitant to act so as not to influence the data. We therefore failed to follow up on several issues that may have led to more effective learning outcomes for several of the students.

When it became apparent through monitoring of the Teacher's Dashboard that the students were not accessing the site, we did not immediately gather the students to remind them that they should be using the time when the school computer laboratory had been made available to them to use EnglishCentral. It may have also been beneficial at this time to remind them that they could also use EnglishCentral on their home computers. Upon discussing the project and its limitations with supportive colleagues, it was suggested that better practice may have been to gather the students together for a second follow up orientation session once they had had several opportunities to use the site. This would have allowed the students to express concerns or ask questions, and perhaps solve frustrations that they had been unable to resolve themselves.

EnglishCentral recently published data regarding successful usage of the website. Several of the case studies show that when students are set clear targets for number of videos watched and 'spoken,' and number of vocabulary items learned, student usage of the site increases greatly. The club being a strictly voluntary activity for the students, the researchers were unable to set such targets. Had we used the website as part of the regular curriculum, however, this would have been an excellent way of raising involvement.

Two of the students who took part in the initial orientation session failed to access their newly-created Yahoo e-mail accounts to complete their EnglishCentral registration. They were therefore not included in the usage portion of the data analysis. The two girls continued to come to club sessions, and sat quietly in front of computers displaying the EnglishCentral homepage. The researcher observing them failed to notice, however, that they were using the site as guests, and therefore were neither receiving feedback on their work nor able to access many of the scaffolding

tools. Because each student interacted purely with either the computer or the teacher, neither of these girls noticed that they were experiencing a different version of the site than their logged-in peers. The two stopped coming sooner than other members of the club, perhaps due to this oversight.

One more oversight may have been the timing and execution of the final interviews. As mentioned previously, Japanese junior high school students face an intense examination period towards the end of their third year. It was, therefore, difficult to ask the students to give up study time to be interviewed for this project. For this reason we had to schedule the interviews at a time that would not impact their examination preparation. By the time we did the interviews, therefore, their experiences with the site were not fresh in their minds. Another sympathetic colleague advised us that perhaps it may have been more efficacious to have the website open and allow students to show us how they used the site, and describe their experiences while doing so. This would have facilitated recall, and more students may have therefore been able to give substantial responses to the interview questions.

**5.2 Conclusion:**

As a pilot study, this unsupported trial of EnglishCentral proved problematic but should not be discounted due to its limitations. The researchers learned valuable lessons about the volition of junior high school students and their needs regarding the use of technology. We believe that if students are given adequate support and clear expectations, EnglishCentral may indeed be a viable option to improve the communicative ability of students in this age group.

## References

Alderson, J. C., & D. Wall. (1993). Does washback exist? *Applied Linguistics 33*, pp.115-29.

Ayres, R. (2002) Learner attitudes towards the use of CALL. *Computer Assisted Language Learning, 15*(3), pp. 241-249.

Chapelle, C.A. & Jamieson, J. (2008). Tips for teaching with CALL: Practical approaches to computer-assisted language learning. New York: Pearson-Longman.

Erumban, A. A., & Jong, S. B. Cross-country differences in ICT adoption: A consequence of culture? *Journal of World Business , 41* (4), 302-314.

Educational Testing Service (2010). 2009 Test and score data summary for TOEFL internet-based and paper-based tests [online] available from <http://www.ets.org/Media/Tests/TOEFL/pdf/test_score_data_summary_2009.pdf>

Freiermuth, M. & Jarrell, D. (2006). Willingness to communicate: Can online chat help? International Journal of Applied Linguistics, *16*(2), pp. 189-212.

Hofstede, G., Bond, M. (1984). Hofstede's cultural dimensions. Journal of Cross-Cultural Psychology,15, pp. 417-433.

Hofstede, G., Hofstede, G. J., & Minikov, M. (2010). *Cultures and organizations: Software of the mind.* New York, New York: McGraw-Hill.

*Japan: English language tests the nation* 2008, Oxford Analytica Ltd, United Kingdom, Oxford.

Kachru, B. B. (1985). Standards, codification and sociolinguistic realism: The English language in the outer circle. *English in the world: Teaching and learning the language and literatures* ed. R. Quirk, & H. G. Widdowson, Cambridge: Cambridge University Press, pp. 11–30.

Kimura, T. (2010). Learning spoken English with a new web-based CALL system using speech recognition and popular video clips [online] available from <http://englishcentralblog.files.wordpress.com/2012/02/let2010-survey.pdf>

McVeigh, B. (2004). Foreign language instruction in Japanese higher education: The humanistic vision or nationalistic utilitarianism? *Arts and Humanities in Higher Education, 3*, pp. 211-227.

Mendicino, M., Razzaq, L. , & Heffernan, N.T. (2009) A comparison of traditional homework to computer-supported homework. *Journal of Research on Technology in Education, 41*(3) , pp. 331-359.

Ostheider, T. (2012) From "foreign" language education to plurilingualism: Challenges for language education policy in a multilingual Japan. *Journal of Social Sciences, 8*(1), pp.109-115.

Ministry of Education, Culture, Sports, Science and Technology (2011a). Koutougakkou kyouikuno genjou (The present condition of senior high school education) [online] available from <http://www.mext.go.jp/component/a_menu/education/detail/__icsFiles/afieldfile/2011/09/27/1299178_01.pdf>

Ministry of Education, Culture, Sports, Science and Technology (2011b). Chapter 4: Foreign Language Activities [online] available from <http://www.mext.go.jp/component/english/__icsFiles/afieldfile/2011/03/17/1303755_011.pdf>

Ministry of Education, Culture, Sports, Science and Technology (2011c). Five Proposals and Specific Measures for Developing Proficiency in English for

International Communication [online] available from <http://www.mext.go.jp/component/english/__icsFiles/afieldfile/2012/07/09/13 19707_1.pdf>

Ministry of Education, Culture, Sports, Science and Technology (2011d) Survey results of public junior high schools and combined junior high and high schools [online] available from <http://www.mext.go.jp/english/elsec/1319702.htm>

Ministry of Education, Culture, Sports, Science and Technology (2008). 2008 White Paper on Education, Sports, Science and Technology Chapter 2: Enhancement of Primary and Secondary Education [online] available from <http://www.mext.go.jp/b_menu/hakusho/html/hpab200801/detail/1292600.htm >

Ministry of Education, Culture, Sports, Science and Technology (2002). Japanese Government Policies in Education, Culture, Sports, Science and Technology Chapter 2: Towards Advancement of Academic Abilities [online] available from
<http://www.mext.go.jp/b_menu/hakusho/html/hpac200201/hpac200201_2_015 .html>

Peng, J.C. (2009) Using an online homework system to submit accounting homework: role of cognitive need, computer efficacy, and perception. *Journal of Education for Business,*
*84*(5), pp. 263-268.

Richards, J. R. (2001). *Approaches and Methods in Language Teaching.* Cambridge: Cambridge University Press.

Rivers, D.J. (2010) Politics without pedagogy: questioning linguistic exclusion. *ELT Journal,65*(2), pp. 103-113.

Rivers, D.J. (2011). Japanese national identification and English language learning processes. *International Journal of Intercultural Relations, 35*, pp. 111-123.

Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York, New York: Simon & Schuster.

Rüschoff, B. (1986) The"intelligence"of intelligently programmed adaptive CALL materials for self-study. *System, 11*(2), pp. 205-210.

Sagarra, N. & Zapata,G. C. (2008). Blending classroom instruction with online homework: A study of student perceptions of computer-assisted L2 learning. *ReCall, 20*(2), pp. 208-224.