# 13 A comparison of telecollaborative classes between Japan and Asian-Pacific countries – Asian-Pacific Exchange Collaboration (APEC) project

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## Abstract

The purpose of this report is to compare the effects of 'telecollaborative classes' between students in Japan and those in Asian-Pacific countries such as Taiwan, Thailand, and the United States (Hawaii). The telecollaborative classes are part of the Asian-Pacific Exchange Collaboration (APEC) project, a 4-year project involving students in elementary school through junior and senior high school (age range, 10–18 years). All Japanese students have been studying English since the age of 10. The focus of the present research is on awareness of English learning and communication among Japanese students before and after video chat sessions. The results suggest that telecollaborative classes improve student awareness and motivation toward English learning and communication. This is the first report of the telecollaborative APEC project.

Keywords: international exchange, telecollaboration, student awareness, APEC.

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# 1. Introduction

## 1.1. Background

Although the Japanese media routinely emphasizes the importance of English-speaking ability, it generally seems as though insufficient time is allocated to English learning in the classroom in Japan. Japanese teachers of English often attempt to engage in language input activities during English lessons at school, but in the current educational environment, effectively motivating students to learn English remains difficult, particularly in terms of speaking and listening. In 2011, the Ministry of Education, Culture, Sports, Science, and Technology of Japan introduced an action plan entitled 'Five Proposals and Specific Measures for Developing Proficiency in English for International Communication', with the aims of providing students with more opportunities to interact with native speakers of English and encouraging teachers to adopt 'collaborative learning' with foreigners using information and communication technology.

## 1.2. Previous studies

Shimizu (2005) found that previous studies on this topic reported that real-time communication with native English speakers via videoconferencing tended to take the form of lengthy group discussions, which could be difficult for Japanese students, who are often reluctant to speak out loud in front of others. Shimizu (2005) also reported that one-on-one communication activities using Skype (Microsoft Skype Division, Luxembourg City, Luxembourg), a free Voice over Internet Protocol (VoIP) application, may allow students to speak more freely and comfortably. He also found that the use of Skype led to a rapid increase in the number of words spoken. Regarding collaborative learning, Johnson, Johnson, and Holubec (2002) reported the following merits of collaborative learning: "It is obvious that pair-work or group-work are superior to individual activities when various skills or judgments are required for better achievement" (p. 8).

## 1.3.  Objectives

As described above, collaborative learning via Skype, so-called 'telecollaboration', has tremendous potential to enhance students' positive attitudes toward English learning and communication. Therefore, the objective of this study was to compare the effects of 'telecollaborative classes' in the APEC project between students in Japan and those in Asian-Pacific countries such as Taiwan, Thailand, and the United States (Hawaii). In the schools participating in the project, English is a primary communication tool, and students are expected to be aware of the importance of English learning. Therefore, student awareness toward English learning was investigated. Telecollaboration was adopted as a strategy to increase student motivation and inspire positivity toward English learning and communication.

# 2.  Methodology

## 2.1.  Experiment

A total of 20 schools in Asian-Pacific countries, 10 of which are located in the cities of Imizu, Namerikawa, and Toyama in Toyama Prefecture in Japan, participated in the present study (Figure 1 below).

An elementary school, a junior high school, and a senior high school in each city in Toyama Prefecture participated in the project. Teachers at the schools in each city started a team in which they could exchange information about the schedule and the lesson plans at each school. Each city in Toyama Prefecture has a partner city, and each school has a partner school. Key teachers at each school can directly discuss with each other over the Internet what they want to do in their telecollaborative classes. Students in Japanese classrooms, where English learning starts from the fifth grade onward, number about 40. Elementary school teachers want to start Skype sessions with all students in order to make the class easier to control. All elementary students are

beginners. On the other hand, junior and senior high school teachers want to provide students with one-on-one or one-on-two communication activities via Skype in order to provide more speaking opportunities in English. The primary devices for junior and senior high school students in Toyama Prefecture are 20 handheld PCs (iPod Touch; Apple Inc., California, United States), two wireless routers (UQ WiMAX; UQ Communications, Tokyo, Japan), and Skype for oral communication (Figure 2).

Schools in Toyama Prefecture can freely use these devices for their collaborative activities. By using these devices, students are able to communicate orally in regular English classes (Figure 3). The yearly telecollaborative class schedules are different for each school, but when the sessions are held, students can engage in mostly one-on-one oral communication for 40 minutes. Every school shown in Figure 1 had just started their sessions, so the main tasks for students during telecollaborative classes were activities such as self, school, and community introductions.

Figure 1.   APEC project school link
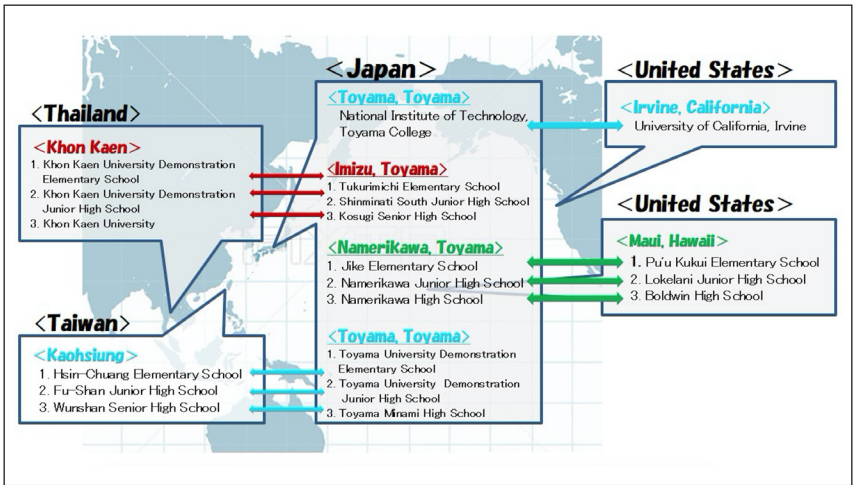
Figure 2.   Devices used in telecollaborative classes



Figure 3.   Telecollaborative classes



## 2.2.    Assessment procedure

In order to assess the development of student awareness toward English learning and communication through telecollaborative classes, pre- and post-questionnaires were conducted. The pre- and post-questionnaires each have 13 questions with responses ratable on a 5-point Likert scale. All items are written in Japanese to ensure that the students can fully comprehend the meaning of each question.

## 3. Results

A *t*-test was conducted to analyze changes in student awareness toward English learning and communication as a result of telecollaborative classes. Results from one high school in Toyama Prefecture are shown in Table 1.

Table 1.   Changes in student awareness toward English learning and communication as a result of telecollaborative classes at a high school in Toyama (N=20)

| Item | | Pre | | Post | | Difference | | t | df | p | | d |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | M | SD | M | SD | M | SD | | | | | |
| 37 | I would like to join Skype activities more often. | 4.14 | 2.39 | 7.06 | 2.30 | 2.91 | 2.39 | 7.20 | 34 | .000 | *** | 1.24 |
| 32 | I would like to communicate with people in foreign countries via Skype. | 3.97 | 2.35 | 6.94 | 2.45 | 2.97 | 2.58 | 6.80 | 34 | .000 | *** | 1.24 |
| 28 | I would like to study abroad. | 3.17 | 2.39 | 5.46 | 2.38 | 2.29 | 2.07 | 6.54 | 34 | .000 | *** | 0.96 |
| 33 | I would like to communicate with people in foreign countries via SNS. | 4.49 | 2.49 | 7.11 | 2.42 | 2.63 | 2.46 | 6.32 | 34 | .000 | *** | 1.07 |
| 29 | People can realize the importance of studying English through conversations on Skype. | 4.43 | 2.50 | 6.77 | 1.99 | 2.34 | 2.30 | 6.03 | 34 | .000 | *** | 1.04 |
| 36 | I would like to join international exchange projects more often. | 4.66 | 2.25 | 6.94 | 2.50 | 2.29 | 2.48 | 5.45 | 34 | .000 | *** | 0.96 |

| 34 | I am highly motivated to learn English. | 4.20 | 2.39 | 6.26 | 2.06 | 2.06 | 2.45 | 4.97 | 34 | .000 | *** | 0.92 |
| 25 | Conversations with people who live in other countries are fun! | 5.63 | 2.16 | 7.11 | 2.17 | 1.49 | 1.90 | 4.63 | 34 | .000 | *** | 0.69 |
| 30 | I would like to take an English proficiency test regularly to evaluate my progress. | 3.40 | 2.60 | 5.00 | 2.00 | 1.60 | 2.10 | 4.50 | 34 | .000 | *** | 0.69 |
| 27 | People can become good English speakers after a 1-year stay in an English-speaking country. | 4.83 | 2.13 | 6.09 | 1.96 | 1.26 | 2.06 | 3.61 | 34 | .001 | ** | 0.61 |
| 26 | English will be an important communication tool in my future career. | 7.06 | 2.03 | 8.14 | 1.31 | 1.09 | 2.08 | 3.09 | 34 | .004 | ** | 0.64 |
| 31 | English conversations through Skype are fun! | 5.63 | 2.73 | 7.11 | 2.42 | 1.49 | 3.04 | 2.89 | 34 | .007 | ** | 0.58 |
| 35 | I would like to become a good English speaker. | 7.11 | 1.94 | 7.91 | 1.84 | 0.80 | 1.89 | 2.50 | 34 | .017 | * | 0.42 |

***$p<0.001$; **$p<0.01$; *$p<0.05$

## 4.     Discussion

As shown in Table 1, significant improvements were observed for all 13 items on the post-questionnaire. These findings suggest that telecollaborative classes are effective in providing students with increased opportunities for interaction in English, and help them recognize the value of language learning via Skype.

## 5.    Conclusion

The findings of this study indicate that the APEC project has produced positive early results. They also suggest that telecollaborative classes improve student awareness and motivation toward English learning and communication. The APEC project will continue until 2019. In future research, this model will be implemented into classes from elementary to high school throughout Toyama Prefecture.

## 6.    Acknowledgments

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