Wen-chi Vivian Wu and **Michael Marek**

Taiwanese student reaction to English language Internet teleconferencing for enriching EFL classroom instruction

A B S T R A C T This paper reports students' reaction to a series of "live" Internet teleconferences in which an American interacted with Taiwanese English classes. The goal was to strengthen the integrative motivation of students who rarely have the opportunity to interact with L1 speakers. Using qualitative methodology, students were found to be particularly interested in instructional teleconferencing, focused on authentic pronunciation and usage, as well as improving understanding of American culture. Perceptions of the distance-learning experience were often framed in terms of nervousness or relaxation while speaking with an American through teleconferencing. Students frequently alluded to the benefits of teleconferencing to allow preparation in advance for the interaction. Details of the technology and curriculum design are presented, with recommendations for practice for others wishing to use teleconferencing to enrich classroom experience. Internet teleconferencing holds potential for significant increases in student motivation, confidence and ability, wherever a language is taught as a foreign language.

Keywords: EFL, scaffolding, e-learning, English, Chinese, Taiwan, Skype, Internet, teleconferencing, motivation

1. Introduction

In the contemporary world, mastery of language has become a key to success, and English is the most common language of international marketplaces. In Taiwan, however, Taiwanese students of English have few opportunities to interact with L1 speakers or to undergo meaningful learning experiences because there are few L1 speakers actually teaching English in Taiwan.

Even outside the academia, L1 speakers are difficult to find because the dominant culture speaks Chinese and many students lack the motivation necessary to seek out opportunities to learn independently. Rather, English is considered a subject to study only academically, without opportunities for practical use, and is routinely taught by a faculty whose first language is Chinese, although they are often trained in America. As a result, students consider English to be a foreign language, to be used in the classroom setting and only rarely in daily life. Therefore, Taiwanese English instruction programmes are entitled "English as a Foreign Language" (EFL), which is distinct from "English as a Second Language" (ESL) instruction because English is not the dominant language of the surrounding culture.

As part of a major overhaul, the Ministry of Education (MOE) in Taiwan initiated a six-year development plan to be completed by 2008, budgeting US$303 million for English instruction at all levels of public and private schooling (Zheng, 2002). However, many of the programmes initiated from the plan did not reach fruition. The MOE's priority of creating a more authentic learning environment by recruiting foreign L1 speakers as teachers was unable to overcome existing problems, such as too large classes, lack of administrative support, weak student motivation, and obsolete and unconnected curricula and teaching materials.

The lack of consistently available, authentic language-learning materials to supplement in-classroom learning is one of the most significant challenges for innovative EFL professionals in Taiwan (You, 2003). Such materials best stimulate self-motivation, which can translate into long-term improvements in confidence and ability. It has been recognized for years (Fox, 1998) that the Internet has the potential to offer opportunities for such authentic interaction to EFL students. As SC Yang (2001:156) stated, "The Web serves as an intrinsically motivating device and a natural platform for the development of the five Cs (communication, cultures, connections, comparisons, and communities) advocated by the American Council on the Teaching of Foreign Languages." Little progress, however, has been made in Taiwan to develop curricula that employ such online interactions

This qualitative research reports on a pilot project in which a L1 speaker of Midwest American English spoke via Internet teleconferencing to Taiwanese technical university English language classes. The findings, recorded after one semester of testing and technique development, provide insights into the possible uses of Internet audio and video teleconferencing for improving student motivation to study English and American culture.

2. Literature review

English in Taiwan, and in the majority of the world, is taught in "English as a Foreign Language" (EFL) classes, in settings that do not include regular and meaningful interaction with L1 speakers of English, nor authentic materials relating to the target culture (Huan, 1989; Kwon, Shih, Renandya, & Koike, 2000). Because English is not spoken as a primary language in Taiwan, EFL instruction is significantly more challenging (Parker, et al., 1995).

Second-language acquisition by adults has been shown to improve with access to authentic experiences with the target language, especially conversation with L1 speakers (Snow, 1987; Spolsky, 1989). The lack of authentic learning environments and materials to supplement in-classroom learning is a major challenge for EFL professionals and students in Taiwan (You,

2003). Teachers must, therefore, be creative in identifying and maximizing opportunities for authentic interaction, including utilizing online and multimedia resources, particularly when working with students who face additional adversities, such as low motivation and confidence.

2.1 Low motivation and confidence among technical university students in Taiwan

Many researchers have found that passive learning attitudes and weak learning motivation are the primary cause of lower proficiency among technically oriented Taiwanese students (Lescano, 1995; Reynold, Zetlin, & Wang, 1993; Yang, 1996). There has been little discussion, however, about the impact of passive learning environments, which employ out-dated, teacher-centred methodologies (Wu & Bright, 2006), and have not fostered dialogue between students and faculty about reasons to study English or the benefits of engagement in the broader culture of the world by Taiwanese EFL students.

In the passive learning environment commonly used in Taiwan, it is difficult to master verbal speaking and comprehension of a foreign language (Yang, I. L. 2001). Hung (1996) stated that Taiwanese technical university students chose to study EFL, used technology to advance their learning, and engaged in conversation with L1 English speakers, when available, simply to meet the objectives of a class assignment, to get a better job, or to finish requirements for degree programmes. These motivations are examples of instrumental motivation, meaning the benefits students expected from them were external goals meant to reach an outside objective rather than an internal desire to learn and become part of the target culture, defined as integrative motivation (Gardner & Lambert, 1972).

In April 2005, the Wall Street Institute surveyed 16 000 randomly sampled working people in seven Asian countries, including 2 000 in Taiwan, investigating the participants' confidence in their own English use and ability. The researchers found that Taiwanese students had the lowest confidence — after mainland China, Thailand, Japan, and South Korea, which all utilize methodologies simulating L1 ESL environments (Wall Street Institute, 2005). This correlates with Hung's (1996) finding of low confidence in the use of English among Taiwanese technical university students.

2.2 E-learning solutions to increase motivation and confidence

Fox (1998) said that the Internet can offer EFL students elements that are missing from their classroom EFL settings: "practical real life language experience, providing students with functional communicative experiences that serve the learners' needs as well as motivate them to use English in their daily lives" (p. 1). Many Taiwanese educators are seeking new ways to stimulate student interest in learning and to create an environment that uses new technology to motivate learners continually (Bottino, 2004). In American education, teleconferencing technology has been available since 1975 and online collaborative learning has become increasingly common and valuable (Juell, Brekke, Vetter & Wasson, 1996; Tiene & Ingram, 2001; Wheeler, Valacich, Alavi & Vogel, 1999). In Taiwan, conversely, few EFL faculty members are familiar enough with the technology to employ it in the classroom. Nevertheless, Taiwan's growing demand for contextually based English learning suggests that teleconferencing is a viable and potentially valuable tool.

2.3 Creating a more authentic and active learning experience

Currently in Taiwan, methodologies depend heavily on rote-memory entrance exams and

concentration on grammar and word-by-word translation, both relatively ineffective traditional teaching methods (Wu, 2006). Students learn English best, however, in an environment that closely replicates the target culture (Ying-Wen Tsai, in Lin, 2003). Research has demonstrated that e-learning can foster active learning in students and offer the opportunity to be more creative and to learn quickly in an environment that is more fun than traditional instructor-led methodologies (Cross, 2001; Grimson, 2002; Rosenberg, 2001).

In designing such a curriculum employing online interaction, the use of scaffolding is valuable. One of the most innovative teaching and learning models for classroom interaction in the past decade, scaffolding uses a social constructivist classroom, in which student/student collaboration and student/teacher interaction lead students in evolving their bases of knowledge. The central concept behind scaffolding is social interaction. It depends on the building of positive relationships among students and between students and instructors. It fosters collaboration, respect for one's own and others' ideas, and the construction of meaning from previous experience (Lee, 2003).

Online learning, when it provides authentic interaction with L1 English speakers, with appropriate scaffolding, can provide a solution to the Taiwanese EFL teacher's quandary. E-learning is particularly well-suited to allow adult students to rise above passive learning settings. A review of this literature suggested to the researchers that application of techniques and outcomes of connecting Taiwanese EFL students with a L1 speaker of English merited exploration.

3. The faculty members

The two faculty members participating in this pilot project met during their higher education doctoral programmes in the United States. The American participant was a male faculty member at a small Midwest liberal arts college, with a DEd in Educational Administration and an M.A. in Mass Communication. The Taiwanese participant was a female faculty member teaching EFL courses to non-majors at a private technology university in the central region of Taiwan, with a DEd in Educational Administration and an MS in Teacher Education. Both the Taiwanese and American faculty members were recent graduates of the same American doctoral programme in adult and higher education that de-emphasized lecture, memorization, drill and passive learning, in preference for learner-centred instruction. The faculty members will be referred to individually as "the American" and "the Taiwanese." Jointly, they will be referred to as "the colleagues".

4. Lesson plans

In the fall semester of 2006, the American spoke to the Taiwanese's EFL classes on two occasions in order to explore the viability of using the Internet to enrich EFL instruction by connecting Taiwanese EFL classes with a L1 speaker of the language. Each occasion included the American speaking individually to five different classes taught by the Taiwanese at times ranging from 20:00 to 07:00, by the American's clock. The colleagues used a free consumer audio and video conferencing system from Skype.com. The Skype system allows conferencing with audio, video, and text using standard webcams and microphones. Skype served both to connect the L1 speaker with the students in the class and to allow the researchers, in private teleconferences, to collaborate effectively from opposite sides of the world.

The students participating in this project included three day-school classes of students enrolled in the compulsory course entitled "English Conversation" and two night-school classes of

students enrolled in the compulsory course entitled "General English". Students attending day school were full-time traditional students. Students in the night school programme were also full-time but usually non-traditional students who had full-time jobs during the day.

For each of the two occasions, the American prepared a brief presentation. The first served as an introduction, discussing life in the rural American Midwest. The second discussed the four American holidays of Halloween, Thanksgiving, Christmas and New Year. In each case, the American provided a complete written script for the presentation to the Taiwanese in advance. He also created an MP3 audio recording of the presentation, speaking at a quarter of his normal speaking rate. For the first round of teleconferences, the Taiwanese provided the advance text and audio file to students to preview by themselves. She discussed specific vocabulary the American would use in class meetings before his presentation. The American then repeated the presentation at a slightly faster speaking rate during his live teleconferences with the classes. The class meetings ended with questions that the Taiwanese had assigned the students to prepare in advance.

After the first teleconferences, the colleagues adapted their lesson plan in order to engage the students more fully. For the second presentation, the Taiwanese previewed the advance text with students in more detail before the "live" sessions. Students again had slow-speed audio versions of the presentation in advance. This time, when the American repeated the presentation, he elaborated somewhat and made minor deviations from the prepared text. At his cues, the Taiwanese showed her students related US photographs, which they had not previously seen.

At the conclusion of the second round of presentations, the colleagues decided to continue the pilot programme during the spring of 2007. In order to gauge student reaction and further improve their lesson plans, the researchers used qualitative interviews with 11 students and a quantitative survey for all students. The results are reported below.

Methodology and Research Questions

The colleagues developed their qualitative instrument based on the literature review above and their personal experiences with the lesson plans. After the colleagues had agreed to the questions in English, the Taiwanese translated them into Chinese and administered them to 11 students, who had previously given their permission. Five of the qualitative participants were female day students, meaning that they were traditional undergraduates. Two were male day students and were also traditional undergraduate students. Four students, two male and two female, were in night school, intended for students who work full-time jobs. The students had all volunteered for qualitative interviews during the quantitative data-gathering process. The number 11 satisfied Merriam's (2002) standard for interviewees in phenomenological qualitative research.

Qualitative methodology, by its nature, requires that the interviewer be able to follow interesting avenues of questioning and not be completely tied to previously prepared questions. The following questions and sub-points, however, served as a starting point and guide to the qualitative interviews:

1. What did you like about the classes in which you talked with a L1 speaker via the Internet?
   a. How did the L1 speaker help you feel at ease?
   b. How did the use of technology help or improve your experience with a L1 speaker?

2. What did you NOT like about the classes in which you talked with a L1 speaker via the Internet?
   a. How nervous were you about speaking?
   b. Were there ways in which the technology interfered with your experience?
3. How did the recording and text you received in advance improve your experience?
   a. In what ways did they help you understand the L1 speaker better?
   b. In what ways did they help you understand American culture better?
   c. How could these materials be improved?
4. How could the "live" classes with the L1 speaker be improved?
   a. How satisfied were you with the technology used?
   b. What kinds of topics would you most like to discuss with the L1 speaker?
   c. How often would you like your class to be visited by a L1 speaker this way?
5. What, specifically, did you learn from your experience with a L1 speaker in this class?

The Taiwanese transcribed the answers to each question provided in Chinese by the students and then translated the answers to English. Her goal in the translation was to be as literal as possible. The colleagues then reviewed, sorted, and scrutinized the answers for themes and concepts, thus allowing description and exploration (Berelson, 1952; Tesch, 1990). The qualitative methodology provided richness of understanding of the experiences of the students in this study. The experiences of Taiwanese students at one technical university interacting live with one American via the Internet may not, however, be generalizable to students who are in other settings or who are learning other languages.

While the qualitative interview methodology was the main focus of this study, a quantitative survey was also designed to measure students' motivation to study English and confidence in using English and also served the purpose of informing readers about numerical data on how Taiwanese students' English learning improved as a result of teleconferencing instruction. To gather the quantitative data for this study, the colleagues designed a survey instrument based on Gardner's (1985) Attitudes/Motivation Test Battery, a survey of students' English-learning achievement by Zeng, Liao, Xu and Wu (2001) and the survey conducted by the California Foreign Language Project (Silva, 1997).

5. Qualitative findings

The first qualitative question asked what students liked about the sessions and how the speaker and technology affected their anxiety and the overall experience. Most of the students pointed out being able to hear the most accurate usage and pronunciation and an improvement in their listening comprehension as primary things they liked about conversing with a L1 speaker. Students also liked the understanding of American culture that they gained from the sessions. These responses confirmed other research (Hammerly, 1994; Wang et al., 2003; Yang, 2001), indicating that most students have few opportunities to talk with L1 speakers. The students in this study appreciated the informal and engaging learning style, calling it fun and relaxing. "I think the result of using teleconferencing was pretty good because it makes me take a more active role when speaking English," said one interviewee. "More traditional instruction only teaches students how to memorize things instead of applying English to daily life," said interviewee four. Interviewee eight said, "I think this kind of learning style is more fun and makes me want to speak English more," and interviewee five said, "I think teleconferencing is the best learning method".

Question 2 asked students what they did not enjoy about the class, what increased their anxiety in the situation, and whether the technology itself interfered in their learning experience. Most of the students framed their answers to this question in terms of nervousness, stress or relaxation. "I feel pressure when talking via teleconferencing because I'm afraid that the L1 speaker can't understand me when I have a hard time expressing myself," said interviewee two. "I felt less stressed about teleconferencing instruction with [the Taiwanese teacher's] assistance because she would help me do the translation when I could not understand," interviewee seven said. Several students reported nervousness in anticipation of their requirement to converse with the L1 speaker, but most found it to be less stressful than they expected. The answers suggested that the students found their interaction with the American via technology to be less stressful than if he had been present in their classroom in person.

Students also appreciated the direct role that the Taiwanese faculty member played during the teleconferences, both in helping them construct the grammar and vocabulary needed for their questions, and in understanding the L1 speaker's pronunciation and vocabulary. There were no overtly negative comments about the instructional design of employing Internet teleconferencing for language instruction.

Question 3 pertained to the helpfulness of the advance materials and to their improvement. The students almost all said that having the text and audio recording of the presentation ahead of time was helpful. Interviewee nine said, "The audio and the text allow me to get an idea of what [the American] was going to talk about and they are also helpful for understanding the conversation." "I pretty much can understand the material if only I look them [the vocabulary words] up in the dictionary and I could grasp the meaning of the reading if I spent one hour looking them up," said interviewee six.

Several students indicated that they needed to listen to the advance MP3 recording of a teleconference session multiple times, improving their understanding each time, and that having the text to read along with the audio recording was valuable. One student reported that only a few members of the class actually listened to the recording. More apparently read the text than listened to the audio. Another student suggested that putting information from the presentations on the final exam motivated students to study them in more detail. They uniformly agreed that the advance text and audio recordings helped them better understand American culture, such as interviewee six who said, "This information did help me, to a great deal, in terms of the understanding of American culture." Few had concrete suggestions for improvement; however, one felt the materials were too long, and one felt that materials were of intermediate difficulty while the class needed more focus on basic content.

The fourth question asked students to suggest session improvements and future presentation topics, as well as requesting them to gauge their overall satisfaction with the live classes. Students gave several suggestions for how often future teleconferencing sessions should be held during a semester, including one-quarter, one-third, or one-half of class meetings; every other week; or even two-thirds of total class time. One student suggested once a month. There was no particular agreement in the suggestions about new topics, other than that they seemed to be not so much interested in history but rather want to know about contemporary things. The students indicated general satisfaction with the live classes.

The final question solicited responses from the students about what they specifically learned during the classes. The colleagues had expected answers relating to the content of teleconferencing lessons; however, when the question was asked of students in Chinese, they did not appear to perceive the question this way. Instead, they more addressed what they had learned about the instructional/learning technique, as opposed to the factual information they had learned or their improvement in comprehension.

A couple of students stressed that they had learned the importance of the Taiwanese faculty member helping them to prepare, including suggestions for actually practicing their individual questions with her before the teleconference. The preview of the text materials in class before the teleconference was mentioned as important, as was the need for sufficient time to study the advance materials, reinforcing the answers to question 2.

6. Themes

Five recurring themes appeared in the qualitative interview responses, frequently spanning the responses to several of the pre-planned questions. The themes are as follows:

1. Recognition of improved motivation and active learning. The students volunteered the perception that the teleconferences improved their motivation and their active learning. They understood that teleconferencing was different from the traditional instructional models and recognized the advantage of the classroom structure that caused them to be more engaged and less passive.
2. Scaffolding value of advance preparation. The students frequently alluded to their levels of advance preparation, both in terms of in-classroom activities and individual study of the materials. Students said that advance preparation improved their ability to understand the L1 speaker and speak with him, as well as the ability of the students to learn about American culture as a result of the presentations. In this preliminary exploration of the teleconferencing technique, most of the scaffolding was directed by the faculty colleagues.
3. Interest in authentic pronunciation and usage. One of the primary benefits cited by the students of the instructional design in which they listened to and spoke with a L1 speaker of English via distance technology was that they had the opportunity to learn authentic or accurate American pronunciation and usage.
4. Interest in American culture. The Taiwanese students expressed pleasure at learning more about American culture as a result of the presentations of the American and the subsequent question-and-answer sessions.
5. Nervousness versus relaxation. The students' perceptions of their distance-learning experience were often framed in terms of how nervous or relaxed they were while speaking with the American. Students often made references to nervousness at knowing that they would be required to speak with the American. They found the experience to be less intimidating because their teacher was present and provided assistance with vocabulary and grammar.

7. Quantitative findings

The quantitative and qualitative components of this research were designed to be complementary in order to elicit the most insightful and detailed reflections possible about the effect of the live classes. The quantitative sample consisted of 240 students; 222 surveys (92.5%) were deemed complete and useable. The survey was administered at the end of the fall semester 2006.

The major findings of the quantitative study supported the themes found in the qualitative data. The students perceived that their motivation, confidence, and ability in the study of English and interest in the English class, especially in terms of their integrative motivation, all increased. The increase in each category was short of the 1.96 standard deviations required for 95% confidence (Table 1); however, a major increase after only two rounds of teleconferencing would be unlikely. The colleagues believed, based on the qualitative findings, that the increases were slight but real.

Table 1: Means for Each Section

	N	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
Section_A: Motivation	208	1.62	5.0	3.84	0.49
Section_B: Ability	208	1.50	4.9	3.52	0.44
Section_C: Confidence	208	1.67	5.0	3.60	0.49

Note: A mean of 3.00 indicates no change from the beginning of the semester.

The quantitative data revealed that the three components, motivation, confidence and ability, correlated positively with each other at the .000 level of significance, indicating that if one of the three components increased, the other two also increased. For example, as students' perception of their motivation increased, their perceived ability and confidence increased also. Just as the students who participated in the interviews stated, advance preparation, scaffolding, interesting topics, and other elements designed to decrease anxiety, increase motivation, and encourage confidence seemed to make the task of speaking with the American easier and more fun. Conversely, as students felt they were progressing in communicating with the American, they enjoyed the experience more and felt more at ease.

8. Discussion

8.1 Interest in authentic pronunciation and usage

One of the primary benefits cited by the students of the instructional design in which they listened to and spoke with a L1 speaker of English via distance technology was that they had the opportunity to learn authentic or accurate American pronunciation and usage. Knowing that they were hearing correct American usage increased the confidence of the students in the content of the lessons, in turn, increasing their confidence in their own understanding, with resulting increases in their motivation and ability. It is interesting that students realized that the chance to hear authentic American English was an instrumental motivation for them, but also that it piqued their integrative interest, confirming Gardner's (1972) theory that learning experiences are most successful when they involve both types of motivation.

8.2 Interest in American culture

Students indicated that the emphasis on discussing American culture during teleconferences with the American was important to the success of such experiences for students. A strong emphasis on cultural elements that are of interest to young Taiwanese people can, therefore, increase motivation, confidence and ability. Just as Gardner's Socio-Educational Model (1979) held that instrumental motivations cease at the end of class time, the results showed that

integrative motivation is the key to keeping students engaged in their learning. In addition, planting the seed of personal interest in non-majors is important to stimulate a desire for learning on their own.

8.3 Student nervousness versus relaxation

The students often framed their perceptions of their distance-learning experience in terms of how nervous or relaxed they felt while speaking with the American. They found the experience, however, to be less intimidating because their Taiwanese teacher was present and provided assistance with vocabulary and grammar. It is a broad goal among EFL teachers in Taiwan to find ways to reduce student anxiety about learning English as a means of increasing their self-confidence. At the same time, innovative teachers also strive to promote scaffolding and social interaction that promote learning.

Scaffolding fosters collaboration, respect for one's own and others' ideas, and the construction of meaning from experience (Lee, 2003). Roehler and Cantlon (1997) determined that social interaction is vital to the language-learning process, and the use of scaffolding in the classroom is a definite advantage. At the same time, motivation depends on the outcome of interactions and contact within the target language. Therefore, strong interactions and contacts with L1 speakers of English in a setting producing low anxiety can be considered to be an ideal environment. The students found both criteria to be true in their Internet teleconferences with the American.

8.4 Value of advance preparation

In order for students to make the most of opportunities to converse with L1 speakers, a thorough groundwork of preparation is mandatory. As indicated by the students, preview materials and activities gave them confidence in their ability to understand the subject and the speaker. Because beginning-level students, especially those who are passive learners and have little intrinsic motivation to start with, have much higher anxiety surrounding encounters with L1 speakers. Teachers employing e-learning must give students time to become comfortable with authentic materials and conversation. The students who did listen to the advance audio presentation did so several times, showing that they were willing to participate actively in the assignment and engage themselves in the class.

8.5 Engagement

Students were enthusiastic about the style of learning offered by their Internet teleconferences with the American L1 speaker of English, citing multiple positive elements but few negatives. One common statement was that students felt less nervous and less intimidated speaking with the American over the computer than if he had been in the room, feeling that the interaction was virtual but authentic. While teleconferencing has limitations on the immediateness of interaction based on the level of technology and equipment used, instructors can certainly take advantage of students' bolstered confidence to encourage participation and scaffolding.

The participating students were part of a particularly challenging subset. They were technical university students, coming from a strongly passive learning tradition, with a low integrative motivation for learning English, little confidence in their own abilities, and minimal previous interaction with L1 speakers, encountering an unfamiliar form of instruction. In addition, adult learners require engagement, active involvement, and self-efficacy in order to maximize their

learning, something that EFL learning environments rarely provide. By providing well-planned, student-led and peer-supported activities that truly interest students and give meaningful insights into the target culture, EFL instructors may incorporate e-learning to invite students to pursue further authentic language experiences and take charge of their own learning.

9. Recommendations for practice and further research

This preliminary study of the technique of using Internet teleconferencing to allow Taiwanese EFL students to interact with a L1 speaker of English indicates that further exploration of the technique and refinement of the lesson plans are warranted. The findings of this study lead to the following recommendations for practice:

1. Use of the Internet in EFL classes by allowing L1 speakers in America to interact with Taiwanese students is best used to enrich regular student-centred classroom instruction, as opposed to direct instruction of grammar and pronunciation. Used this way, it is well accepted by the participating students, who recognize its value in terms of active learning and improved self-motivation.
2. Such lesson plans should provide ample opportunity for students to hear and understand the pronunciation, usage, idioms and vocabulary of the L1 speaker, both in more formal presentations and casual, informal interaction.
3. Lesson plans should emphasize authentic explorations of American cultural elements, particularly those elements of American culture not commonly known to the Taiwanese learners, yet of interest.
4. Local teachers should be actively engaged as a minute-by-minute resource for students during teleconferences to assist in translation, formulation of grammar, and generally to reassure the students required to interact in the foreign language and to minimize nervousness.
5. Curriculum for Internet teleconferences should be planned to strengthen integrative motivation, while the overall class should retain those beneficial elements that encourage strong instrumental motivation. In this way, the Internet teleconferences should enrich the regular instruction, rather than overwhelm or replace it.

The colleagues suggest the following specific areas of further research:

1. Comparing changes in motivation, confidence and ability between classes presented with traditional teacher-centred pedagogy and classes using Internet teleconferences would allow instructors to refine in-class activities and overall teaching methodologies.
2. Further investigation of changes to students' motivation, ability and confidence due to differing numbers of teleconferences per semester, cumulative numbers of teleconferences, presentation topics and students' levels of independent involvement would allow instructors to tailor classes to their own EFL programmes.
3. An experimental study involving pre-testing and post-testing students' English-language abilities, confidence and motivation before and after a year of teleconferencing sessions would gauge the actual impact of the live classes on students' learning.

10. Conclusion

The global marketplace, growth of technology and ubiquitous Internet interconnectivity in the 21st Century have made it mandatory that professionals be able to interact successfully with people of different cultures and languages. In settings where students do not have the opportunity

to learn English as a Second Language, technology provides enrichment opportunities for students learning English as a Foreign Language. Effective use of distance technology, combined with carefully planned lessons focused to student interests, offers the opportunity to make a long-term difference in student development of motivation, confidence and ability, thus arming students with the tools to function in international settings and to learn to prepare themselves for interaction with the target language and culture.

The colleagues recognized that not every EFL environment has access to authentic speakers and materials. However, creativity, resourcefulness, and a willingness to challenge students make the best teachers. Those who make the effort to introduce new technologies, new methods and new topics into their classrooms may not always see an immediate effect on their students' abilities, but the results of this study demonstrate a technique that can quickly boost student motivation, which is essential for second-language acquisition and encouraging students to participate actively. By using any opportunity for real English-language interaction and cultural understanding, including the use of technology to create one as in this study, EFL instructors can rise above the limitations of their surroundings to engage students in their own learning.

REFERENCES

Berelson, B. 1952. *Content analysis in communication research.* Glenco, Il: The Free Press.

Bottino, R.M. 2004. The evolution of ICT-based learning environments: Which perspectives for the school of the future? *British Journal of Educational Technology*, 35(5): 553-567.

Cross, J. 2001. The E-learning FAQ. http://www.internettime.com/itimegroup/forum/ faq.htm

Fox, G. 1998. The Internet: Making it work in the ESL classroom. *The Internet TESL Journal*, 4(9). http://iteslj.org/Articles/Fox-Internet.html. (accessed on 30-07-2006).

Gardner, R.C., & Lambert, W.E. 1972. *Attitudes and motivation in second language learning.* Rowley, MA: Newbury House.

Gardner, R.C. 1979. Social-psychological aspects of second language acquisition. In: Giles, H. & St. Clair, R. (eds.). *Language and social psychology.* Oxford: Blackwell.

Gardner, R.C. 1985. *The attitude/motivation test battery: Technical report.* London, Ontario, Canada: Department of Psychology, University of Western Ontario.

Grimson, J. 2002. Re-engineering the curriculum for the 21st century. *European Journal of Engineering Education*, 27(1): 31-37.

Hammerly, H. 1994. A multilingual model for English as a "remote" and as a "local" language. *IRAL*, 32(4): 229-250.

Huan, T.L. 1989. Age, motivation, and second language learning. *Proceedings of the Sixth Conference on English Teaching and Learning in the Republic of China, Taipei, Taiwan.*

Hung, C.H. 1996. A study on the social interactions between the technological and vocational education and their educational milieu of English language education. *Studies in English Language and Literature*, 1: 82-92.

Juell, P., Brekke, D., Vetter, R.J., & Wasson, J. 1996. Evaluation of computer conferencing tools for conducting collaborative seminars on the Internet. *International Journal of Educational Telecommunications*, 2(4): 233-248.

Kwon, O., Shih, Y.H., Renandya, W, & Koike, I. 2000. Opening Address. *Plenary Symposium: English Education in East Asia for the 21st Century: Seeking for Common Ground, Okinawa, Japan.*

Lee, E. 2003. Learning through scaffolded assistance during interaction in the EFL classroom: The teacher's role to make an effective learning environment. *Journal of Pan-Pacific Association of Applied Linguistics*, 7(2): 189-213.

Lescano, A.A. 1995. The remedial English project. *English Teaching Forum* Online: 40-41.

Lin, M.H. 2003, Tsai Ying-Wen knows extremely well the international affairs, create a new milieu through the use of negotiation for Taiwan. *Merit Times*, September 14.

Merriam, S.B. 2002). *Qualitative research in practice: Examples for discussion and analysis.* San Francisco: Jossey-Bass.

Parker, J.E., Heitzman, S.M., Fjerstad, A.M., Babbs, LM. & Cohen, A.D. 1995. Exploring the role of foreign language in immersion education. In: Highland, D., Lee, P.W., Milcham, J., Weber, R.R. (eds.). *Second language acquisition theory and pedagogy.* Mahwah, NJ: Lawrence Erlbaum Associates: 235-253.

Reynold, M.C., Zetlin, A.G., & Wang, M.C. 1993. 20/20 analysis: Taking a close look at the margins. *Exceptional Children*, 59: 294-300.

Roehler, L.R., & Cantlon, D.J. 1997. *Scaffolding student learning: Instructional approaches and issues.* Cambridge, MA: Brookline Books.

Rosenberg, M.J. 2001. *E-Learning: Strategies for Delivering knowledge in The Digital Age.* New York: McGraw-Hill.

Silva, D. 1997. The California Foreign Language Project. http://www.stanford.edu/group/CFLP/ (accessed on 05-03-2005).

Snow, C.E. 1987. *Second language learners' format definitions: An oral language correlate of school literacy.* Los Angeles: University of California, Center for Language Education and Research.

Spolsky, B. 1989. *Consider for second language learning.* Oxford: Oxford University Press.

Tesch, R. 1990. *Qualitative research analysis types and software tools.* London: The Falmer Press.

Tiene, D. & Ingram. A. 2001. *Exploring current issues in educational technology.* New York: McGraw-Hill.

Wall Street Institute. 2005. The survey of Asian English ability, Taiwan is the worst by itself evaluation. http://www.wsitw.com.tw. (accessed on 22-01-2006)

Wang, Y.H., IV, Y.L., Zhou, Y.S., Zhang, P.H., Ye, Y.Z., & Liu, H.M. 2003. A study of the learning environment of college students an exam of the Shih Hsin University for example. Paper presented at *The Proceedings of New Generation Public Issue 3rd*, Taipei, Taiwan.

Wheeler, B.C., Valacich, J.S., Alavi, M., & Vogel, D. 1999. A framework for technology-mediated inter-institutional telelearning relationships [Electronic version]. *Journal of Computer-Mediated Communication*, 4(2).

Wu, W.V. 2006. EFL optimal learning environment: Perspectives of faculty and students in a Taiwanese technical university. *Dissertation Abstracts International*, 67 (11). (PROquest No. 1251814101).

Wu, W.V., & Bright, L.K. 2006. Integrative motivation development: Key to increasing ESL online learning effectiveness. *Proceedings of the E-Learn 2006 Conference: The International Forum for Researchers, Developers, and Practitioners to Learn about the Best Practices/Technology in Education, Government, Healthcare, and Business, Honolulu, Hawaii, USA.*

Yang, I.L. 2001. The environment and system of language learning: Talk about the English teaching of elementary school. *English Teaching & Learning*, 26(1): 7-15.

Yang, S. C. 2001. Language learning on the world wide web: An investigation of EFL learns' attitudes and perceptions. *Journal of Educational Computing Research*, 24(2): 155-181.

Yang, Y.F. 1996. The diagnosis of English learning despondent reason. *Humanities and Social Sciences Newsletter*, 7(4): 85-101.

You, Y.H. 2003. A study on motivation to learn English among the freshmen in the four-year program. *Project Report on Improvements on Faculty Members of St. John's Institute of Technology.*

Zheng, Z.R. 2002. English is set up to be official language. *Min Sheng Daily*, July 8.

Zeng, K.R., Liao, C.W., Xu, Y.Z., & Wu, S.R. 2001. A study of vocational high school students on how to raise their English ability. *Proceedings of Sixteenth National Technological and Vocational Education*, 207-218, Hualien, Taiwan.

ABOUT THE AUTHORS

Wen-chi Vivian Wu
Chienkuo Technology University
Taiwan
Email: vivwu123@cc.ctu.edu.tw

Michael Marek
Wayne State College
Nebraska
USA