The Communicative Environment and Communication Responsibility
Joan C. Kosta
Mercy College,
Dobbs Ferry, New York, USA
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Abstract

By focusing on the conditions that surround initial speech acquisition and theories associated with first and second language acquisition, one may consider alternate approaches to encourage the use of speech and communication of adult, non-native English speakers. This article describes the language environment established for Japanese college students in an EFL program to facilitate increased English-speaking using a Communicative Responsibility Model (CRM). Results showed changes in conversational tasks as well as a decrease in speaking anxiety. Implications of these findings suggest a fresh look at recreating a different environment for adult second language users within educational and clinical settings, particularly for those who demonstrate speaker anxiety and speaking reticence.
Speech-Language Pathologists (SLPs) are increasingly aware of the communication needs of second language learners. Demographic changes in the US and throughout the world compel SLPs to pay more attention to second language learners, since the need to distinguish speech and language disorders from speech and language differences has become acute as these populations continue to grow (ASHA, 1985; Battle, 2002; Nicolosi, Harryman & Kresheck, 1996; Wiley, 1996; US Bureau of the Census, 2002; US Office of Special Education, 2000). Speech-Language Pathologists’ interest in the culturally and linguistically diverse (CLD) population has focused on assessment and non-biased testing; frequent and inappropriate placement of L2 children in classes for the language impaired; language acquisition in bilingual children; bilingual speech/language assessment; language assessment; language development and the environment; code-switching; and dialectal differences (Adler, 1991; ASHA, 1993; Battle, 2002; Bernstein, 1989; Butler, 1981; Cole, Dale, & Thal, 1996; Crago, 1990 & 1992; Damico, 1991; Hamayan & Damico, 1991; Goldstein, 2000; Kayser, 1995; Kayser in Battle, 2002; Kessler, 1984; Langdon & Cheng, 1992; Roseberry-McKibbin, 1994, 1995a & 1995b; Taylor & Payne, 1983; Terrel & Terrel, 1983; White, 2002; Wilson, 1996). Accent modification/accent reduction and ESL speakers who need to develop more natural and intelligible speech but who do not suffer from language problems have also begun to attract researchers’ attention (Craig & Sikorski, 1985; Dato, 1986; Compton, 1983, 1984a, and 1984b; Sikorski, 1985; Sikorski & Craig, 1985). This study seeks to address specific issues for the more mature second language user, particularly communication effectiveness, rather than language learning. Therefore a speech-language pathologist’s perspective on the speaking environment of adults who are new to English as a Second or Foreign Language can be particularly effective with special attention to communicative effectiveness and use. Battle’s description of a contemporary “Ecologic” therapeutic approach (Battle, 2002, p. 120-131), which integrates culture and treatment by focusing on ethnicity, socioeconomic status, attitudes, self-concept and learning styles, may be crucial for the creation of a second language learning environment. An ecologic approach considers both the environment in which communication takes place and communication effectiveness. By comparing a child’s language and speech acquisition and the ways in which second languages are learned and used, it may be possible to use early experiences and environment modification to enhance both an ecologic and natural approach to teaching and using a second language. Before considering the communication environment, however, a review of language learning and second language acquisition is in order.
Theories of Language Learning

The behaviourist approach (Skinner, 1957) viewed language as verbal behaviour subject to a process of operant conditioning or habit-formation. The four components of habit formation include the child's imitation of sounds and patterns, reinforcement of the sounds similar to adult models, repetition of the sounds or patterns, and conditioning or shaping the verbal behaviour until it coincides with the adult model. The environment plays a major role in the behaviourist approach in the form of models and rewards. The language environment helps learning take place and though habit-formation does not fully explain first language acquisition, it does play a role (Littlewood, 1984, p.15).

In the 1960’s the behaviourist view of first language development was challenged by Chomsky's transformational account of the nature of language (Chomsky, 1965). His psycholinguistic theory stressed language form and the mental processes on which language is built. Language was no longer considered just verbal behaviour but rather the result of a complex set of rules for linguistic competence that differed from performance. Brown (1973) added that "a radically different possibility is that children work out rules for the speech they hear, passing from levels of lesser to greater complexity, simply because the human species is programmed at a certain period in its life to operate in this fashion on linguistic input" (p.105). Therefore, interest in the child's internal processes and active contribution to the learning process was deemed important while little emphasis was placed on environment, social cognitive growth, semantic, phonetic or pragmatic aspects of language.

Semantic theories of language acquisition include Fillmore’s (1968) case grammar and the influence of semantics on syntax. An explanation of the interaction of form (syntax, morphology, phonology—including suprasegmentals), content (semantics), and use (pragmatics) was a major contribution to the semantic theory of language development (Bloom & Lahey, 1978; Lahey, 1988) and has served as a model for speech therapy for children with language delays and disorders.

The sociolinguistic framework illustrates a different view of language acquisition (Beebe, 1980; Bernstein & Tiegerman, 1993; Nelson, 1993; Reed, 1994; Tarone, 1997; Tarone & Swain, 1995) focusing on the communication unit that imparts information and strongly emphasizing the function and use of language as well as the social and psychological aspects of language learning. Environment, motivation and interaction are the key elements of this framework, and thus behaviourism provides a foundation for sociolinguistic theory. In many remediation programs, sociolinguistic theory focuses on behavior shaping and modification and
has been applied to investigations of aptitude, attitude and motivation in relationship to language learning (Gardner & Lambert, 1959; Gardner, 1960, 1968).

Though long neglected, Mowrer's Autism Theory of Speech Development (Mowrer, 1952, 1958) illustrates an interesting and deceptively simple way to envision second language teaching. Mower's theory stresses a modified image of conditioning that provides an emotional feeling of hope (1958). His work with talking birds and his observation of infants suggest that reproduction of sounds and words occur if they sound or feel good in the context of affection. Hence, infant sounds are first made because of a relationship with other forms of satisfaction. We might conclude that these early sounds or words assume emotional connotations and are therefore reproduced by the child: the child is provided with sound modelled by the parent and coupled with activities associated with good feelings. Unless the child is sensory impaired, as voice accompanies human contact, it is a source of comfort. Eventually, the child begins to utter sounds that are both self-and caretaker-imitated. This early sound practice is critical in developing both speech sounds and language. Activities surrounding initial oral communication are pleasant and non-stressful. In such a feedback process, the child's "inborn linguistic capacity" (Palmer & Yantis, 1990, p.21) becomes a critical determinant in the child's development.

Second Language Learning

First language acquisition has had an influence on the study of second language learning. For example, Littlewood (1984) suggests that second language learning is governed by the same principles as first language development, namely, behaviourism. He notes that first language learners are novices as far as language habits are concerned, whereas second language learners have a set of habits in the native language, some of which will help the new learner talk while others may hinder (Littlewood, 1984, p.17). Though the present study is concerned with speaking and the communication environment, the divergent points of view concerning second language learning are instructive. Attention has focused on age of acquisition, differences between child and adult acquisition, and teaching methodologies. However, second language acquisition has been more concerned with language acquisition rather than with speaking. Krashen’s Theory (1981, 1982, 1985a & 1985b) and the Natural Approach (Krashen & Terrell, 1983; Terrell, 1977; Richards & Rogers, 2003) gained wide popularity in ESL instruction. Though Krashen’s theories have met with debate (McLaughlin, 1978; Gregg, 1984), second language education continues to concern itself with issues of acquisition and learning (Dulay & Burt, 1974a & 1974b; Gregg, 1990). Two of Krashen’s hypotheses are of particular interest to the present study. The Input Hypothesis with its focus on the use of meaningful and interesting referents in conversation and on exposure to Comprehensible Input (Krashen & Terrell, 1983)
relates to adult language stimulation. Input has been compared to 1st language acquisition and the way in which parents adjust their input to the tolerance level of the child (Gregg, 1984). As the present study attempts to create a “safe” environment, the tolerance level and adjustment of input may be relevant. Second, the Affective Filter Hypothesis, or the imaginary barrier that prevents input and affects the behavioural aspects of self-confidence, motivation, and anxiety to filter input, plays a powerful role in communication. Piaget (1965) and Vygotsky (1962) stress social interaction as critical learning factors while Cummins (1984), Schumann (1978, 1986) and Wong Fillmore (1991) describe the affective and social variables in which language occurs. Even in the communication of culturally and linguistically diverse populations, the influence of social variables surrounding the acquisition of a second language, or more specifically, a second dialect, are critical (Taylor, 1997). Therefore, motivation and attitudes in second language use and the need to use real communication to develop communicative competence remain important (Hymes, 1972; Krashen, 1982b; Krashen and Terrell, 1983; McLaughlin, 1978; Gardner and Lambert, 1959; Skehan, 1989).

The “Critical Period” of L2 acquisition is also worthy of discussion when considering adult learning (Birdsong & Mollis, 2001; Ervin-Tripp, 1974; Hong Zhao & Morgan, 2003; Krashen, 1973; Lenneberg, 1967; Penfield & Roberts, 1959; Stern, 1976). Despite general agreement that children exhibit a language learning advantage (Birdsong & Mollis, 2001), various arguments for the advantages of the adult learner have also been suggested (Ausubel, 1964; Hammerly, 1991; Schumann, 1978.) This pilot study does not consider the concept of the “Critical Period” as interest was in language use, speech, and pragmatic awareness of communication. Though debate will continue regarding the age advantage (McLaughlin, 1992), the fact remains that some adults and some children have more difficulty than others. This study makes no attempt to assess language competency since the major interest was to address speech for communication purposes. The willingness and ability of participants to say anything was deemed more important than saying the right thing. Using a sociolinguistic perspective, the investigator focuses on one particular aspect of learning English, namely, the mastering of a variety of communication skills (within a supported learning environment).

**The Japanese Experience of Learning English**

Japanese is a non-tonal language that contains 18 consonants, 5 vowels, and one final consonant /n/ that occurs at the end of a syllable. Though the language is highly inflectional, relatively equal stress is used (Goldstein, 2000; Kuno & Monane, 1979). Differences between Japanese and English include phonology, syntax and the use of suprasegmentals. Omission of personal pronouns, the absence of singular/plural distinctions, and the placement of verbs and
particles at the end of the sentence are but a few phenomena that present obstacles to understanding Japanese speakers’ use of English. Japanese is syllabic and the combination of one consonant plus one vowel is equivalent to one letter or sound (Goldstein, 2000; Matheson, 1999). Four alphabets are used in Japanese. (1) Kanji, the Japanese writing system, was adapted from Chinese. It provides the core parts of sentences and includes nouns, verb roots, and adjectives (Hiroko-Storm, 1993; Matheson, 1999). (2) Hiragana uses phonetic symbols and is the first pronunciation guide that children learn, playing an important role in grammar by indicating subject, object, prepositions and particles (Cheng, in Battle, 2002; Matheson, 1999; Neustupny, 1987; Hiroko-Storm, 1993). (3) Katakana provides a corresponding symbol for each Hiragana symbol. It is used for foreign words and names, some Japanese company names, and interestingly, for sounds of voices in comic books (Matheson, 1999). (4) Romaji uses the Hepburn system of Romanization that is similar to the English alphabet. Both Romaji and Katakana often create pronunciation problems to the point of unintelligibility (Matheson, 1999). Because the phonetic guides for pronunciation of Japanese words are used for English and because of the Japanese syllabic structure, the result is often words like “loo ko” or “waito,” or by adding a vowel to final consonants or between consonants, the result may be “miruku/milk” or “cureamu/cream.” Matheson (1999) has highlighted the negative impact on English comprehensibility suggesting that the continuing problem of Katakana’s use in approved school textbooks results in a Japanese English that is understood only in Japan. In fact, signs and t-shirts with English writing occasionally illustrate mismatched, incomprehensible or ambiguous meanings (Matheson, 1999; Kosta, 2002). Phonological difficulties include consonants such as /g/, /l/, /v/, /f/, /l/, /th/ and /w/ used only for the syllable ”wa” and less frequently for a weak ”wo.” The use of verbal and non-verbal signals to confirm listening (Neustupny, 1987) include short responses such as “yes,”(hai, e, so desu ne), or the listener’s head nod after almost every speaker’s utterance, indicating politeness, perhaps contributing to the limited English phrases and responses used by Japanese speakers.

Unfortunately, many of the problems encountered in English are reflected in the results of the Japanese 2004 English Language Test. Fifty-eight percent of those who took the exam scored less than 120 out of a possible 200 points. During the previous year, English exam scores were lower than the scores of the other 5 foreign language tests reported (ELT News, 2005). Sato (1992) says there is a need to “change the view of Japanese of being silent, sleeping, and smiling” (p.99) and to improve foreign learning. She states that the major learning problem in the Japanese educational setting is due to a continuing focus on grammar and the limited amount of classroom time devoted to English.
Although many students are successful at reading and writing in English, their conversational ability is often limited, in part by lack of access to native English speakers. Although children begin English in Junior High School, by the time they begin college, they are still unintelligible to outsiders, a fact of which they are very much aware, contributing to embarrassment and anxiety about speaking. The students in the present study followed a typical trajectory for Japan, starting with English classes in the 7th grade. Some also attended a Junku (after-school educational program). One student admitted that he began studying English at the age of nine and had never spoken to a native English speaker until he enrolled in the American college. Because of the number of years he had studied English and his limited ability to communicate, he was embarrassed, a feeling he frequently showed by laughing.

Since culture is one prime influence of learning (Saville-Troike, 1982), it is natural that students are often too frightened to speak English. The students in this study were further hampered by a myriad of phonetic substitutions and omissions of English phonemes, which frequently interfered with their communicative success and often led them to cease speaking entirely. It is possible that if they had been encouraged to use spoken English on a more frequent basis at an earlier time, some of their anxieties might have been reduced. As long as second language learners are afraid to speak, many errors will persist. When questioned about their speech, students typically responded by saying, "I don't talk good English." When asked to be more specific, they almost never mentioned intelligibility, instead focusing without exception on the errors that they expected to make. This anxiety interferes with using natural speech production affecting all aspects of communication including the suprasegmental elements of speech and voice that include inflection, pitch, quality, stress, duration, rhythm, and intensity. Interestingly, it is often these same suprasegmental differences that form the major obstacle to successful communication and intelligibility (Craig & Sikorski, 1985). Furthermore, their voices were barely audible and students reluctantly suggested that if they spoke softly, no one would hear their mistakes.

It is imperative that the speaking anxiety pervasive in new English speakers be addressed. This study is based on three clinical impressions: first, that students' attempts to communicate are infrequent, thereby limiting their ability to improve speech and communication skills through practice; second, that by increasing the opportunity for students to use English in a non-threatening atmosphere and by the teacher modeling speech behaviors, students will utilize more natural communication styles; and third, that Japanese students’ prior educational experiences constitute the prime determinant of their persistent phonological or sound errors.
Ethnography and Teacher Research

Ethnographic research has been most effective in studies of language and culture (Carlsen, 1991; Crago, 1992; Crago & Cole, 1991; Heath, 1983; Nunan, 1992; Saville-Troike 1982, 1986). This research provides “important insights into language learning and use, which suggests that perhaps the principles of formal experimentation could well be revised” (Nunan, 1992, p.57). The collection of rich materials and expansive ways in which data may be analyzed and used provide a strong argument for the use of ethnographic research. One variety, Teacher Research, is most effective when addressing issues of cultural or linguistic diversity (Silverman, Welty & Lytle 1996). Kosta (2004) suggest its effectiveness and application in investigations of students’ self-analysis/self-reflection and use of the Communication Responsibility Model. Teacher Research creates a living laboratory to investigate issues of learning, adapting, and responding. Data are collected through logs, journals, descriptions, interpretations, interviews, focus groups, student narratives, and self-evaluations. Log entries may include descriptions of events that occur and thoughts that provide understanding, surprises, and reflections (Drennon & King, 1995). Particularly effective are interviews, which may be informal, scripted, or open-ended. Britton (1987) describes Teacher Research as a quiet form of research, which may employ quantitative (process-product) or qualitative (interpretive) designs (Cochran-Smith & Lytle, 1993, 1999; Lytle, 1993; Maxwell 1992; Showler, 2000). In interpretive research, students and teachers construct their classrooms as social systems; as this model considers that culture affects learning; it suggests that research should also consider culture (Cross & Steadman, 1996; Lytle, 1996).

Study Objectives

This study focuses on the environment of EFL college-age Japanese speakers and is based on the assumption that changes will occur in the use and amount of spoken English if a natural, non-threatening environment is created. To this end, activities in and out of the classroom were designed to create a warm, safe, "talking" place. Littlewood’s (1984) descriptions of ESL and EFL communities aptly describe the learning environment of the students in this study with just a slight difference. Littlewood describes the EFL situation as one in which “language has no established functions inside the learner’s community but will be used mainly for communicating with outsiders, whereas ESL occurs where “language has communicative functions inside the community where the learner lives” (p.54). The students in this study had both communities: the larger, Japanese, non -English speaking community as well as the all-English speaking faculty who lived on the same campus. Thus, there were minor ESL and major EFL influences.
The EFL teaching methods in Japanese schools are clearly linked to students’ difficulty in mastering spoken English. The students who served as subjects in this study said that their prior English education was designed to prepare them to pass Japanese University entrance examinations, and reading and writing were stressed while speaking was largely ignored. When questioned further about their speaking experience, they frequently suggested that they believed speaking to be unrelated to English mastery.

From a speech-language pathology perspective, this secondary importance attributed to speaking and listening has a devastating influence on the attainment of skills needed to become an English communicator. Taylor (1997) advocates an orally-based second-dialect educational environment that integrates a functional and structural approach as the primary requirement of instruction. Though Taylor specifically refers to dialect, many of the same issues may well exist in learning (and using) a second language.

Research Questions

When considering the environment in which young adults use their newly acquired English and the obstacles that limit their speaking and communicating opportunities, several questions arise. Why do some new speakers take speaking risks while others remain silent? Why do some limited English speakers engage in communicative interaction while others (who have achieved academic success in English) do not communicate verbally? Certain communication behaviours appear to aid communication interaction, including a willingness to assume responsibility for oral communication. These behaviours form the basis of the Communication Responsibility Model. Thus, an environment was created to assess changes in pre-and post-performance by Japanese college students (in Japan) in a variety of speech and communication behaviors. The following research questions were asked.

1. Will students participate in creating a “natural” speech environment in the college setting?
2. Will speaking anxiety be reduced in a more “natural” setting?
3. Does the use of “Communicative Responsibility” requirements increase the amount of speaking? These requirements include the ability
   • to answer questions without prompts (AQ)
   • to initiate conversation without prompts (IC)
   • to ask open ended questions, as opposed to yes-no questions (Y-N)
   • to use complete responses to questions, as opposed to 1-2 word responses (1-2)
   • to self-correct practiced phonemes that would aid listener’s comprehension (SC)
4. Will a focus on suprasegmentals increase the use of volume and inflection?
Methods

Participants

Eight Japanese college students ranging in age from 18 to 24 who were enrolled in a summer speech class at an American college in Japan, served as subjects. All subjects attended the college for at least one semester or session. Six subjects entered the College two months prior to this study, one attended the College for one complete semester, and one attended the College for two semesters. All subjects had successfully completed the Japanese school system and had passed the college entrance examinations. No auditory testing was available; however, subjects reported normal hearing based on hearing testing in the Japanese school system.

Procedures

Class Meetings and Activities

Activities both within and outside the classroom were designed to create a warm, safe, “talking” environment. The class met for seven and a half hours of instruction each week over the course of six weeks. Additional extracurricular meetings and activities were held beginning in the third week.

Week 1: For the first two weeks, the class met in the traditional classroom where seating was arranged in a circle. The curriculum followed that of a traditional Speech Introduction course.

Week 2: An introduction to the phonetic alphabet, types of communication (i.e. verbal and non-verbal), and different types of speeches and presentation styles was presented as part of the curriculum. Beginning in the third week, the following extracurricular classroom activities were added.

Week 3: Watching an American movie at the instructor's apartment and talking about the story, stars, and setting, before, during, and following the movie

Week 4: Participating in an informal-get-together in the instructor's apartment

Week 5: Grocery shopping for a planned joint cooking activity

Week 6: Cooking dinner, dining and conversation, and cleaning after dinner

Spontaneous activities included eating lunch in the cafeteria, sitting outside the college and talking, watching students as well as the instructor playing tennis.
Students agreed to certain conditions that they considered "non-threatening." During the ninety
minute class meeting these conditions included (1) free speech periods without correction (20
minutes), (2) an informal room set-up (conversational groupings in the classroom and in the
examiner's apartment), (3) use of humour and joking (materials in interviews led to much
laughter as did activities during repetitive drills, e.g. tongue twisters, nonsense syllables, Simon
Says games, (4) stories and anecdotes told by the teacher, and (5) a 15-minute articulation
correction time. Students requested sound drills, which had not been planned as an activity;
because drills were familiar to their prior learning style, they were added albeit in humorous
contexts. Activities were designed to have students “play” with speech. Students were to play a
variety of roles and were given dialogues. All communication was in English, regardless of
difficulty, without any correction except for the 15-minute articulation correction time.

Participants agreed to conduct three weekly interviews comprised of eight specific,
individually developed questions and were required to serve as both interviewer (of anyone) and
interviewee (of a classmate). Interviews have frequently been used in ethnographic research and
are most effective activities (Crago & Cole, 1991; Westby, 1990). This assignment provided an
opportunity to practice interpersonal communication skills. Interviewers recorded interviewees’
responses and presented a weekly oral report describing their interviews, including any unusual
or unexpected experiences, which was the free speech talking time when no corrections were
made by instructor or students. Students also maintained a “speaking diary” to record any
particular feelings or concerns about their English speaking. The diary was intended to serve as a
personal reflection, and not to be read by any other student or instructor. However, some
students requested that it be discussed with the instructor, as they wished to talk about some of
their experiences.

The Communication Responsibility Model was introduced to students to illustrate the
“responsibility” of a communicator both as speaker and listener. The CRM, comprised of four
behaviours, was used to introduce, reinforce, and measure changes in successful communication
interactions.

1. To answer questions without prompts (AQ)
2. To initiate conversation without prompts (IC)
3. To ask open ended questions as opposed to yes-no questions (Y-N)
4. To use complete responses to questions as opposed to 1-2 word responses (1-2)

These behaviours were based on interviews and communication tasks set by the examiner in five
Japanese EFL speech classes. Analysis of interview questions and answers revealed certain
verbal and non-verbal behaviours in conversations that focused primarily on continuing or
ending conversation. From these interviews and conversations, four communication behaviors

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were identified. In response to students’ anxiety concerning intelligibility, the following was added to the CRM.

5. To self-correct practiced phonemes that would aid listener’s comprehension (SC). Students were asked to listen to particular speech sounds, to repeat, and to practice identified sounds. As they became more confident, the instructor added additional sounds. The goal was to identify error sounds in classmates’ speech, in the instructor's speech (deliberately introduced), and in the individual’s speech. They were also asked to match or copy the sound modeled by the instructor who introduced the concept of "playing with the sound" if the attempt was unsuccessful. This method allowed the students to modify a sound until it resembled the model and then to finish the word that contained the sound. Nonsense words and syllables were often used to eliminate anxiety associated with linguistic content. This listening model is influenced by the Feedback Approach to Articulation Therapy (Van Riper, 1947; Van Riper and Irwin, 1958), and is a viable approach for correction of articulation errors, particularly with nonnative English speakers. In addition to using tape recorders, all students were provided with their own feedback tube, made from a cut rubber hose. Students were asked to produce words or sentences, sometimes sounding angry, happy, quiet, or loud, thereby practicing changes in prosody.

Since students used volume and inflection when speaking Japanese, but not English (which interfered with more natural speech patterns), the following suprasegmental features were identified:

1. To use more appropriate volume (V)
2. To use more appropriate prosody (P)

Although suprasegmental features were analyzed separately from the five Communication Responsibility factors, participants were aware of the importance of these suprasegmentals in their speech. In fact, other aspects of communication such as eye contact and facial expression were identified as “speaking helpers.”

**Data Collection**

All classes and meetings in the instructor’s home were tape-recorded and then transferred to logs by the investigator. Data gathered after the second week were used as baseline measures and were compared to final data obtained at the end of the sixth week. Measures of the use of open-ended questions, yes-no questions, and complete responses, were derived from student interviews (written format). Following the Teacher Research Model, questions 1 and 2 were analyzed using qualitative analysis whereas questions 3 and 4 reflect quantitative analysis.
Results

Student Participation in Creation of a Natural Setting

This pilot study was based on the assumption that changes would occur in use of spoken English if a natural, non-threatening environment were created. Students demonstrated a willingness to participate in a “natural” setting and suggested many activities. Though no qualitative data regarding the amount of participation is presented, the willingness to participate was evident in requests to add more activities and meeting times than originally planned. Saville-Troike (1978) describes group cohesiveness in relationship to learning proper accent suggesting it may “be worn as a badge of group membership,” (p. 71). The students in this study developed group identity and cohesiveness, which they demonstrated proudly by wearing a rubber hose (around the neck) that was used as a feedback tube, as their “badge of courage,” a sign that they had begun to consider themselves part of a special group.

Speaking Anxiety

Though students did not verbalize anxiety at the beginning; the first class was relatively silent with little participation. During the second class, the examiner noted some changes in attitudes of students as they began to participate and to laugh more appropriately. Students thought that playing with sound, and using nonsense words and syllables was funny and this enabled them to initially participate with less anxiety. They acknowledged the fun they had speaking English because of some of the “crazy” things we did and because all responses were met positively. As the weeks progressed, spontaneous visits to the examiner’s apartment became routine, with the request to “just talk English,” always preceded by apologies for the intrusion. A reduction in anxiety was particularly noted when they reported speaking on the telephone in English, something they had previously avoided.

Communicative Responsibility

To document improved or increased communicative interactions that primarily focused on continuing or ending conversation, changes in CRM behaviours were monitored. Articulation self-correction, an ever-present student anxiety was added at the students’ request, despite the fact that it had not been included in the original model. Overall, all eight subjects displayed some degree of change in all variables. Table 1 presents individual subject raw score responses of pre-and post-treatment for the five variables that comprise communicative responsibility.
Table 1. Pre- and Post-Treatment Raw Scores for all Communicative Responsibility Variables.

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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Post</td>
<td>3</td>
<td>6</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Note. AQ = answers questions without prompts; IC = initiates conversation without prompts; Y-N = asks yes-no questions rather than open ended questions; 1-2 = uses 1-2 word responses rather than complete responses; SC = self-corrects phonemes studied in class.

Examination of scores reveals subject 6 to be the single student who failed to demonstrate change in all five variables (IC=Initiates Conversation). This subject had the most absences as well as having the least active participant rate in all activities. He was essentially silent, in Japanese as well as in English. Figures 1 to 8 show the performance of all subjects, pre-and post-treatment, in the five communicative responsibility variables.
Figure 1. Pre- and post-test performance in communicative responsibility variables for subject 1.

Figure 2. Pre- and post-test performance in communicative responsibility variables for subject 2.
Figure 3. Pre- and post-test performance in communicative responsibility variables for subject 3.

Figure 4. Pre- and post-test performance in communicative responsibility variables for subject 4.
Figure 5. Pre- and post-test performance in communicative responsibility variables for subject 5.

Figure 6. Pre- and post-test performance in communicative responsibility variables for subject 6.
Figure 7. Pre- and post-test performance in communicative responsibility variables for subject 7.

Figure 8. Pre- and post-test performance in communicative responsibility variables for subject 8.
Descriptive and inferential statistics of pre- and post-treatments for the five variables are presented in Table 2. Statistically significant changes in mean values for all variables were noted. Of particular interest is the change in the ability to answer questions without prompting (AQ). This result is noteworthy, as the inability to respond to questions generally ends a communicative attempt, and in the context of interpersonal communication, appears most important for maintaining communication interaction.
Table 2. Communicative Responsibility Pre- and Post-Treatment Scores.

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>Pre</th>
<th></th>
<th>Post</th>
<th></th>
<th>Paired t-value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Pre</td>
<td>Post</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M  SD</td>
<td>M  SD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AQ</td>
<td>8</td>
<td>0.875 0.991</td>
<td>2.750 1.035</td>
<td>5.35</td>
<td>0.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IC</td>
<td>8</td>
<td>1.125 1.726</td>
<td>1.375 1.187</td>
<td>2.65</td>
<td>0.033</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y-N</td>
<td>8</td>
<td>4.375 1.922</td>
<td>1.375 1.685</td>
<td>5.29</td>
<td>0.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-2</td>
<td>8</td>
<td>3.250 2.121</td>
<td>0.875 1.457</td>
<td>4.77</td>
<td>0.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC</td>
<td>8</td>
<td>0.000 0.000</td>
<td>3.125 1.726</td>
<td>5.12</td>
<td>0.001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. AQ = answers questions without prompts; IC = initiates conversations without prompts; Y-N = asks yes-no questions rather than open ended questions; 1-2 = uses 1-2 word responses rather than complete responses; SC = self-corrects phonemes studied in class.

Paired t-tests for related measures were used to compare the pre- and post-treatment scores for the five variables and are shown with the level of significance (p) of each t-statistic. Each variable demonstrated differences that were significant with p values ranging from 0.00106 (AQ) to 0.03315 (IC). It is interesting to note the raw scores in the AQ variable, as changes in this variable perceptually created a difference in the subjects' general communicative interactions within the classroom and social environmental settings. The Pearson Product Moment Correlation was computed to measure the strength of relationships among pre- and post-treatment variables. Table 3 illustrates that pre-treatment category relationships were not statistically significant, whereas Table 4 illustrates several post-treatment variables statistically correlated. Using open ended questions and not using Y-N questions (Y-N) correlated with using complete responses and not 1-2 (1-2) word responses, answering questions without prompts (AQ), and self correcting (SC), and may suggest that the initiation of conversation in the form of questions should be considered in order to improve abilities in other communicative tasks. The correlation between answering questions without prompts (AQ) and using complete responses rather than 1-2 words (1-2), prompts one to consider the listener's responsibility in an interpersonal interaction. Once again, answering questions without prompts (AQ) appears to be
important in conversational activities. It bears noting that although these variables correlate, no cause-effect relationship is suggested.

Table 3. Pearson Product-Moment Correlation Among Communicative Responsibility Pre Treatment Measures.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Y-N</th>
<th>1-2</th>
<th>AQ</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>.114</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AQ</td>
<td>-.497</td>
<td>-.663</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IQ</td>
<td>-.440</td>
<td>-.570</td>
<td>.610</td>
<td></td>
</tr>
</tbody>
</table>

Note. AQ = answers questions without prompts; IC = initiates conversations without prompts; Y-N = asks yes-no questions rather than open ended questions; 1-2 = uses 1-2 word responses rather than complete responses. Not significantly different than zero at p<0.05.

Table 4. Pearson Product-Moment Correlation Between Communicative Responsibility Post-Treatment Measures.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Y-N</th>
<th>1-2</th>
<th>AQ</th>
<th>IC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>.720*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AQ</td>
<td>-.840*</td>
<td>-.876*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IC</td>
<td>-.593</td>
<td>-.517</td>
<td>.591</td>
<td></td>
</tr>
<tr>
<td>SC</td>
<td>-.853*</td>
<td>-.617</td>
<td>.739*</td>
<td>.342</td>
</tr>
</tbody>
</table>

Note. AQ = answers questions without prompts; IC = initiates conversations without prompts; Y-N = asks yes-no questions rather than open ended questions; 1-2 = uses 1-2 word responses rather than complete responses; SC = self corrects phonemes studied in class. * Significantly different than zero at p<0.05.

Suprasegmental Features

Although suprasegmental features were analyzed separately, students were aware that communicative responsibility included these two factors as well as the five factors previously described. In fact, several other components of communication were studied (e.g., viewing movies and discussing facial expression and eye contact), but not included in analysis.
The two objectives chosen to assess use of suprasegmentals included use of more appropriate volume (V), and prosody (P). Table 5 illustrates individual subject raw score responses in pre- and post-treatment conditions for the two variables considered under this category. Examination of scores reveals subjects 6 and 7 failed to demonstrate change in both variables.

Table 5. Pre- and Post-Treatment Raw Scores for all Suprasegmental Variables.

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Appropriate Verbal</th>
<th></th>
<th>Appropriate Prosody</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
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<td>1</td>
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<tr>
<td>3</td>
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<td>2</td>
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<tr>
<td>4</td>
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<td>2</td>
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<tr>
<td>5</td>
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<tr>
<td>6</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Note. 1 = not acceptable; 2 = acceptable.

McNemar's Chi-Square Test for correlated proportions was used to determine the significance of the difference between pre- and post-treatments in the use of Volume (V) and Prosody (P). Tables 7 and 8 illustrate nominal values expressed for "Yes" or "No" responses. Despite trends in the direction of change, there were no statistically significant differences between pre- or post-treatment measures in either volume or prosody variables.
Table 6. 2x2 Contingency Table Illustrating Appropriate and Inappropriate Use of Volume on Pre- and Post-Treatment Measures

<table>
<thead>
<tr>
<th></th>
<th>Inappropriate</th>
<th>Appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inappropriate</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Appropriate</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

Note: p = 0.13361

Table 7. 2x2 Contingency Table Illustrating Appropriate and Inappropriate use of Prosody on Pre- and Post-Treatment Measures.

<table>
<thead>
<tr>
<th></th>
<th>Inappropriate</th>
<th>Appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inappropriate</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Appropriate</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: p = 0.24881

Discussion

The purpose of this pilot study was to determine if by creating a more “natural speech environment,” college-age EFL students would increase their communication interaction, decrease speaking anxiety and develop an awareness of specific behaviours that would help them communicate, leading to a further reduction of speaking anxiety.
Question 1 assessed students’ willingness to participate in creating a more “natural” speech environment. This environment helped decrease the emotional climate associated with anxiety. Tarone (1997) and Littlewood (1984) support this concept by suggesting that the classroom and second language community generally increase emotional anxiety for new language learners. Rivers (1983) suggests that going out of the classroom or bringing the community into the classroom would encourage natural language use. Students participated in all aspects of the creation of a natural or comfortable environment. They rearranged the classroom, met in alternate locations, suggested new settings, and continuously requested more activities, meeting times and places. The Japanese grade school class obviously is not a natural setting for learning English. Wilcox, Kouri and Caswell (1991) found that the more naturalistic training environment (in their case, it was the classroom) resulted in better generalization to untrained environments in promoting initial lexical acquisition by language-delayed preschool children. The most successful results of instruction in the present study were elicited when students practiced speech in the investigator’s home—eating, watching movies (in English), shopping, and cooking together. Cairns (1979) comments on the complication of studying interaction behaviours in the natural setting vs. the laboratory setting and noted that both locations represented concerns. As the creation of a “natural setting” is very difficult, this attempt, albeit, structured, was geared toward interaction that would occur in the natural, i.e. home setting. Furthermore, Rivers’ assertion that the teacher must be psychologically willing to engage in a new student relationship and “build a different interactional structure (1983, p.110) is supported in this study.

Question 2 specifically addressed the issue of speaking anxiety. Though environmental changes helped students speak more comfortably in English (according to anecdotal reports), concerted efforts were made to reduce speaking anxiety. Students often reported that the restriction of correction to specific “correction times” was helpful: They felt freer, as anything they said was “all right.” Perhaps McLaughlin’s (1992) discussion of immersion, in which children are exposed to English in all situations may be applied to these results. Critical to this concept is a positive-non-threatening environment for both teacher and students. Students previously indicated that fear of mispronouncing English sounds often kept them from speaking English, which presented a conundrum to the investigator. Though speech sound practice is part of the speech curriculum, it is at odds with the attempt to create a “natural” environment. However, since students made the request, it was included. These students reported increased English usage in other settings with their class peers and friends, decreased anxiety, and a highlighted ability to laugh at their own mistakes. They all reported a desire to engage in other, every-day activities using English.
Question 3 examined the concept of Communication Responsibility. Though the data are limited to eight participants, results suggest the need for further examination of these variables’ role in increasing interaction, or, equally important, in providing motivation and self-assurance to take speech risks. Early investigations by Goffman (1967) and Robinson (1987) demonstrated that turn-taking and conversation structure were important elements of interaction, and that conversation is enhanced through speech reciprocity particularly initiating conversation, using topic changes, and avoiding closed questions. In the present study, changes in the willingness of students to answer questions without prompting appeared to increase naturally and extend to conversational dyads.

Several observations specific to articulation merit further investigation. First, students demonstrated notable errors in auditory discrimination and identification of English phonemes. Second, their auditory memory for English sounds, words, and phrases was weak and therefore shaped the way in which sounds were introduced and practiced. Auditory discrimination activities that contrasted correct and incorrect production of sounds using real and nonsense words was particularly effective. The feedback tube proved amusing to students and they wore the tubes around their necks and frequently practiced listening and discrimination activities outside of class. They even jokingly began to correct each other’s articulation errors. As there was no evaluation of language, students showed less anxiety about "talking good" [sic] and began to listen and feel sounds as they were made and to talk more. McLaughlin (1992) suggests that phonology teaching methods for a second language may differ from those used in first language acquisition. It is here that the speech-language pathologist may be of great help to the ESL/EFL teacher by providing therapeutic approaches to articulation that would be useful in class.

Question 4 asked whether a focus on suprasegmentals increases the use of volume and inflection. Suprasegmentals are important to consider, and as Compton (1983) notes, “learning the new sounds, rhythms, and intonations of a language is a separate process from acquiring the vocabulary and grammar” (p. 2). Since students demonstrated many prosodic variations that interfered with "natural" communication and were aware of the impact on the listener, several components of prosody and non-verbal communication were discussed and modelled by the investigator. These included inflection (described as vocal variety), stress, rhythm, facial expression and eye contact. Results of the questions regarding use of intensity and inflection showed some changes, although they were not statistically significant. However, six of the eight students’ demonstrated differences in both volume and prosody, thus the question remains open for future investigation. Conversational rules and pragmatics are important elements of communicative effectiveness for both children and adults (Cohen & Olshtain, 1981; Ervin-Tripp,
and the results of the present study suggest that in fact, it is possible to change certain of these behaviours.

Due to the limitations imposed by the pilot study including an n of eight, these results should be interpreted with caution. An experimental design that allows replication of the Communicative Responsibility Model will be necessary to determine its internal validity. Anecdotal comments, an increase in speaking time, and ethnographic interviews with students indicate that the issues concerning motivation and attitude are indeed primary in increasing discourse.

Despite criticism regarding ethnographic research, particularly the subjective involvement of the researcher and subjects, ethnography emerges as a viable approach to the study of behaviour, particularly language and speech behaviours. Qualitative research provides a rich source of information that may then be used to answer additional or different questions. In this study, the use of qualitative research proved positive in providing student feedback and interaction. Perhaps best stated when addressing the value of ethnographic research is Nunan’s comment, “Whereas experimental research seeks to generalise from samples to populations, such statistical generalisation is not possible in ethnography, where there has been no random assignment of subjects to experimental and control treatments. Rather than seeking generalisability, ethnographers seek validity in terms of comparability and transferability” (1992, p. 69).

**Conclusion**

Focusing on the conditions and feelings that surround speech and language acquisition allows one to consider different ways in which students may learn and utilize English, particularly spoken English, as a second language. Approaching early second language instruction solely from a functional and phonological perspective, rather than a structural perspective, may be more effective in encouraging more natural and less stressful use of English. It is helpful to remember that new speakers have mixed feelings about using spoken English. On one hand, they desire to learn and are responsive to drill, repetition, and practice within the English instruction environment. At the same time, they are uncomfortable and insecure about using English. This is the time when deep-seated cultural barriers become operational. It is more comfortable for the educator to back off. However, this is not a viable option. Anxiety must be acknowledged but the student must still be encouraged to take "speech risks." This need to create a comfortable atmosphere, recommended by Cheng (1992), is strongly supported by the present investigation.
This study made no attempt to evaluate or teach language. The investigator, a speech-language pathologist, focused on the pragmatics of communication, phonology, and intelligibility. The pilot study represents one attempt to increase new EFL speakers’ speaking comfort, and subsequent use of English. The environment created, though not “natural” as in first language acquisition, represents one approach to induce communication in a pleasant, non-threatening manner. These young adults particularly responded to talking and speaking activities and demonstrated their willingness in the classroom and community. Visits to the investigator’s home reveal the value of the informal setting, though admittedly, this was more easily accomplished than is generally possible as faculty lived on the campus with students. Though students showed measurable increases in their use of identified skills, far more important is the fact that, they communicated. Schumann (1978) stresses the importance of the relationship of the group, and this study used humour, acceptance and positive attitudes towards communication to develop these relationships. ESL/EFL instructors might consider greater focus on increasing students’ positive attitudes about communication, particularly for those who exhibit speaking anxiety. In attempting to develop a new speaking attitude, an environment that encourages relationships between students and the teachers and facilitates a positive-non-threatening environment, where speakers are not concerned with form but with the messages they convey, should be considered.

Communication is a dynamic process that begins with the parent-child interaction, contains both verbal and nonverbal features, and is critical in the utilization of appropriate social communication interaction. In teaching a new language to students, familiar concepts inherent in the new language but also related to the student’s native culture should be included. Therefore, when English is first taught, it is sensible to utilize and integrate the native culture and familiar environment as much as possible. When students are reticent about speaking English, sensitivity and comparisons to communication patterns of the native culture may be used to demonstrate familiarity. Both verbal and nonverbal aspects of the new language should be addressed and an emphasis on functional communication that includes “vocal play” may be used. Students should be aware that there is no wrong speech or answer when the goal is to communicate. Mowrer (1958), comments that parents speak to communicate, not to teach. Second language classes should do the same. Some students are able to take speech risks; others are too afraid and need a great deal of encouragement. It would be easier if risk-taking were encouraged when English is first introduced. Pivotal is a focus on listening, speaking, and providing a safe speaking environment, just as in the first time one learns to speak.
Implications

This study was based on the assumption that changes would occur in students’ use of spoken English if a natural, non-threatening environment were created. Much has been said regarding motivation, attitudes and success. Positive attitudes are related to success in most activities and thus, the environment for creating a speaking situation is crucial. Though the present study was conducted in an EFL setting with Japanese students, it may relate to any adult language learner in either EFL or ESL settings. For example, with the revival of English in Malaysian education, particularly at the university level, enhancing communicative competence has been identified as one objective of the MUET (ESL Language Centres, n.d.) as a goal for lifelong learning. Considering motivation of newer culturally and linguistically diverse language users may now be an appropriate area in which to turn to achieve the goals of lifelong learning and communicative competence.

Beebe’s (1988) emphasis on alternate perspectives to study language acquisition including the need for classroom-centred research, suggests that a Teaching Research Model may be particularly appropriate. Teaching Research is highly conducive to issues of language, diversity, and behaviour and provides an opportunity to experiment with real teaching situations in a classroom setting. Altering the environment, student-student and student-teacher interaction, may provide opportunities for exploring alternative methodologies for learning, and using English as a second or foreign language.
References


Merrill.


Author Notes

This study was prepared while the author was on the faculty at the City University of New York, Lehman-Hiroshima College, Japan. The author is indebted to the students who participated; to Orlando Taylor for his comments on an earlier version of this paper and for his profound influence; to Eliot Borenstein for his editing suggestions; and to Leo Harvill for his statistical advice. Dr. Kosta is a Professor and Director of the Communication Disorders Department at Mercy College.

Inquiries should be sent to Joan C. Kosta, Ed.D., Communication Department, Mercy College, Dobbs Ferry, New York, 10522. jkosta@mercy.edu or jkosta23@yahoo.com.

Key Words: communicative responsibility, prior educational experience, ESL, speech anxiety, playing with speech, parent-child interaction, and adult second language use.