Facilitating Adult Learner Interactions to Build Listening and Speaking Skills

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Background on Adult Learners

Adult education programs serve both native English speakers and learners whose first, or native, language is not English. Native English speakers attend adult basic education (ABE) classes to learn basic skills needed to improve their literacy levels; they attend adult secondary education (ASE) classes to earn high school equivalency certificates. Both ABE and ASE instruction help learners achieve other goals related to job, family, or further education. English language learners attend English as a second language (ESL), ABE, or workforce preparation classes to improve their oral and literacy skills in English and to achieve goals similar to those of native English speakers.

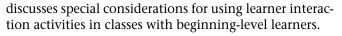
Audience for This Brief

This brief is written for teachers, program administrators, education researchers, and policy makers to ensure that those who work with adult English language learners understand the value of classroom interaction and know how to include appropriate interaction activities in ESL classes. It will be especially useful for teachers who want to incorporate more interactive activities in their classes.

Introduction

The development of oral interaction skills is paramount for adult English language learners. Speaking and listening skills are essential to their ability to participate effectively in the workplace and community: for example, talking with their co-workers and employers, discussing their children's education with teachers and school officials, or negotiating a lease for an apartment or a loan for a house or car. Oral interaction skills are also important for literacy and beginning-level learners, because they form the basis for English literacy development.

This brief begins by examining the research on learner interaction and summarizing the positive effects of classroom interaction on language learning. It then describes three areas of focus for teachers who want to promote successful language learning interactions in the adult education classroom. Next, it provides examples of activities that can be used throughout a language lesson to structure and enhance classroom interactions. Finally, it



Research on Learner Interaction

Interaction is face-to-face communication with particular "prosody, facial expression, silence, and rhythmical patterns of behaviour between the participants" (Crystal, 2003). Research on interaction in second language learning has its roots in Long's interaction hypothesis, which states that learners receive comprehensible input (language at a level they understand) when they interact with speakers of the language they are learning and that comprehensible input aids language learning (Long, 1985, 1996). Proficient speakers tend to modify their speech in various ways to make themselves understandable to language learners. They may speak more slowly, enunciate more clearly, or use grammatical constructions or vocabulary words different from those they used earlier that did not appear to have been understood. Through these natural interactions, researchers have seen language learners grow in their linguistic ability (Gass & Mackey, 2006; Long, 1985, 1996; Mackey, 2002; Pica, 2008).

Much of the research on interaction and second language acquisition has examined teacher-learner interactions; however, in recent studies, peer interactions also have been examined. This brief encompasses both teacher-learner and peer interactions. The research suggests that both types of classroom interaction offer benefits to second language learners as described below.

Opportunities to Receive Comprehensible Input and Feedback

Classroom interaction provides learners with opportunities to receive comprehensible input and feedback from their interaction partners (Ellis, 2005; Gass, 1997; Hellermann, 2007; Long, 1996; Pica, 1994; Reigel, 2008) and to focus on their own linguistic output (Swain, 1995). This occurs in a collaborative environment in which learners attempt to communicate clearly, understand, and be understood (Lantoff, 2000).

During interaction, the learner and the teacher, or two peer learners, work together to achieve a common understanding. As they negotiate meaning, learners have the opportunity to "notice the gap" (Schmidt &



Frota, 1986) between the language they are using and the correct, or target-like, language used by their interaction partners. When they notice the gap and realize that their message was not understood as intended, or that their partner is saying the same thing in a different way, they can modify their message accordingly (Philip, 2003; Pica, 2008; Schmidt & Frota, 1986).

Language Output as a Source of Language Learning

As learners negotiate meaning with a teacher or with each other, they begin to produce new grammatical forms, words, and word combinations, thus expanding their language ability (Izumi, 2002). They can test their hypotheses about language forms and receive immediate feedback on whether or not their hypotheses are correct (Izumi, 2002; McDonough, 2005; Skehan, 1998).

Feedback Through Recasts

Recasts-that is, when teachers or conversation partners respond to incorrect forms by using correct forms in their responses-have been the subject of much linguistic research. McDonough and Mackey (2006), for example, studied whether recasts contributed to the learning of question formation. They found that recasts were a significant predictor of the ability of English language learners to form questions correctly. When listeners recast an incorrect form into the correct form in their responses, their conversation partners tended to then use the correct form in their subsequent utterances. However, research conducted with Somali adult learners with limited literacy showed that recasts may not always contribute to the language development of beginning and literacy-level learners. This study found that literate, educated learners were able to use the information provided in recasts to modify their speech more often and more correctly than learners with lower levels of literacy (Bigelow, Delmas, Hansin, & Tarone, 2006).

Learning Gains

A small number of studies have found that opportunities to interact can result in learning gains. Mackey (1999) found that task-based interaction during class can increase the pace of language acquisition; in particular, the results of her study support a link between interaction and grammatical development. In a recent study, Reigel (2008) examined about 28 hours of digital recordings of adult learner interactions from classrooms at the Portland State University Laboratory School. He coded over 1,500 of these recordings that contained tokens of positive feedback and found that when learners received positive feedback (e.g., expressions such as "good," "nice," "okay"), they tended to use correct grammatical forms in their subsequent utterances. Through multivariate analysis, Reigel was able to demonstrate that positive feedback rate can be an effective predictor of courselevel promotion: The more positive feedback the learners received, the more likely they were to be promoted to the next level course.

In another study, learners were given tasks to do outside the classroom that included interacting with native speakers: for example, ordering food at a fast food restaurant. The researchers found that these students learned more as measured in movement on standardized tests than those students who were not given such tasks (Condelli, Wrigley, & Yoon, in press).

Promoting interaction both within and outside the language classroom can have a positive impact on language learning. It gives learners opportunities to receive comprehensible input and feedback, try new hypotheses about how English works, and listen to and incorporate feedback received in the form of recasts. As a result of interactions, learners may increase the pace of their acquisition of English, leading to improvement in performance on standardized tests and increasing the probability that they will move to a higher course level in their language program.

Preparing for Classroom Interactions

The literature on classroom interaction points to three important areas for teachers to consider when using interactive activities in their classrooms: carefully selecting topics for interactions, helping learners understand diverse communication styles, and giving students specific tools for interacting successfully (Ellis, 2005; Schaetzel & Shen, 2002). Teachers' attention to these three areas will help learners who are unfamiliar with interaction in American classrooms, work settings, and social situations to develop their interaction skills and increase their English proficiency.

Selecting Topics for Interaction

It is important that learners have specific topics about which to converse. This helps to provide focus for their interactions and introduces specific vocabulary and grammatical structures associated with the topic. With adult English language learners, these topics are best taken from real-life situations in which learners need to communicate, such as comparing sale items at a grocery store, asking for assistance with a task at work, or discussing work with a supervisor or co-worker (Sharan & Sharan, 1992; Weddel & Van Duzer, 1997). Topics of high interest to many adult learners include those related to work, health, music, sports, and community services. As part of a needs assessment, learners can be asked what topics they want to talk about (Ellis, 1991), and a list of topics can be developed. Topics that are difficult to discuss in some cultures, such as gender roles, and those that may create division in the class, such as political

or religious topics, may best be avoided. As a teacher comes to know the students and their interests, topics that learners want to discuss can be selected more easily. Learners at the intermediate level or above might discuss topics chosen from short stories or other texts that they have read or listened to. Some students may feel more at ease discussing characters in a story than talking about themselves or people they know (Garvin, 1991; Schaetzel & Shen, 2002).

Discussing Diverse Communication Styles

Teachers may find it useful to raise the issue of cultural differences in communication styles and preferences. Different cultural groups have different ways of interacting (Mahbubani, 2002). For example, Jin and Cortazzi (1998, 2006) describe cultural differences in classroom interactions. They examine interaction styles of Chinese learners and British teachers in mainland China and the United Kingdom. Chinese learners are accustomed to teacher-directed lectures and do not see classroom discussion or dialogue as part of language learning. When British teachers use dialogue, discussion, and small-group work for language learning, Chinese learners think that the teachers are being lazy and that the activities are a waste of time.

Teachers need to explain the rationale for the different types of activities they assign (e.g., discussion, dialogue, small-group work) and the ways that these activities can build language skills. They may also want to

- Discuss how learners should address their teachers, employers, colleagues, and classmates, because terms of address are culturally specific and learners will feel more comfortable with interaction if they know the culturally appropriate ways to address people
- Create guidelines for classroom communication that facilitate comfortable personal space, speech volume and intonation, and body language
- Be cautious about introducing personal ideas and opinions, because students accustomed to a teacher-controlled classroom may feel ill at ease disagreeing with a teacher (Christensen, 1991; Schaetzel, 2004)

Teaching Specific Communication Skills

Because communication styles vary from culture to culture, learners who are not familiar with the communication styles found in American classrooms and workplaces need information and specific tools to help them interact successfully (Schaetzel, 2004; Schaetzel & Shen, 2002). For example, teachers may need to teach learners how to agree and disagree with each other and how to ask for elaboration and clarification. This instruction might include a focus on how to speak politely, for example, using phrases such as "I don't agree with that; I think ..." or "That's an interesting point; my experience is different because" (Ellis, 1996; Myles, 2004; Schaetzel & Shen, 2002).

Activities to Increase Peer Interaction and Feedback

Opportunities to interact can be included in all phases of a language lesson—preview, presentation, practice, and evaluation. Table 1 provides examples of activities that can be used during each phase of a lesson. The activities are described in more detail following the table.

Table 1: Activities to increase Peer interaction	
LESSON STAGES	TYPE OF ACTIVITIES
Preview Activate prior knowledge	Discussion questions
	Conversation grids
	Peer interviews
Presentation Introduce new content	Jigsaw reading/writing
	WebQuests (directed online research with associated tasks)
	Focused listening tasks and dictogloss
Practice Use new content and skills	Problem-based learning
	Task-based learning
	Structured discussion
Evaluation Determine effectiveness of learning and determine next steps	Note cards and forms for formative evaluation
	Reflection activities

Table 1: Activities to Increase Peer Interaction

Preview Activities

During the preview stage of the lesson, teachers prepare learners for the new content and skills to be learned. This might be done through the following types of activities:

Discussion questions are prepared by the teacher or the students in line with learners' levels of English language proficiency. For example, an intermediate class preparing for a lesson on comparative and superlative forms might discuss the question, "What do you think about the proposed increase in bus fare?" A literacy-level class preparing for the same topic might answer the question, "What do you like about the transportation in our city?"

Conversation grids have the learners' names vertically down the side of the grid with questions they can ask one another listed horizontally across the top. Conversation grids promote learner interaction with everyone in the class or within a small group. For example, in the intermediate class described above, learners might ask their classmates what kind of transportation they take to work and to class and how much it costs. (For more examples, see www.seniorserviceamerica.org/pdf/CALGuide-CommunicationsSkills.pdf.)

Peer interviews allow learners to engage in interaction to get information from a classmate. Learners develop or are given a set of questions to ask a partner. For example, in preparation for learning comparative forms to discuss different modes of transportation and their costs, an intermediate class might be given the questions, "How do you go to work? How much does it cost? How do you come to class? How much does it cost?" Learners then summarize their partner's responses and report back to the class.

Presentation Activities

Presentation of new content or skills may be done interactively through jigsaw readings, WebQuests, and various kinds of focused listening tasks.

Jigsaw activities provide students with the opportunity to work together on content comprehension and to teach content to other students (Buehl, 2001; Center for Adult English Language Acquisition, 2007). Students are divided into groups, and each group is given a section of a reading and a few questions about key points in their section. Each group reads their section, discusses its content, and answers the questions. Then new groups are formed so that each group has one person from each of the previous groups. Each learner teaches the content learned in their previous group to the members of their new group. These interactions provide all learners with instruction in the content of every section of the reading. For the intermediate class described earlier, an editorial from a community newspaper about the increase in bus fare might be divided into sections and used for a jigsaw reading. For a high intermediate or advanced class, each group might read a different editorial and in this way learn several opinions about the increase in bus fare.

WebQuests, which involve guided online research, can be done in learner pairs to provide another interactive means of learning new content and skills. WebQuests guide learners to information as they follow the Quest. In some WebQuests, the new content is also applied to the learner and his or her life. For many examples of WebQuests, see www.nelliemuller.com/WebQuests_for_ Adult_Learners.htm.

Focused listening tasks can include interactive components that are used to discuss, summarize, and integrate content material. Podcasts and online sound and video clips about a specific topic can be used in focused listening activities. They can provide a springboard for interaction in pair and group work, as well as offering

listening repetition as needed. For examples, see http:// iteslj.org/links/ESL/Listening/Podcasts/. Focused listening tasks are especially helpful in presenting new content to a multilevel class. For example, a multilevel class with beginning and intermediate students can listen to the same radio clip about the increase in bus fare, with each group listening for different pieces of information based on their language level. Beginning students might listen for the name of the bus company and the amount that the bus fare will increase, while intermediate students might listen for the reasons for the fare increase and people's opinions regarding it.

One specific focused listening technique, a *dictogloss*, is reviewed by Jacobs and Small (2003). During a dictogloss, the teacher reads a text twice at normal reading speed. The first time, the learners just listen; the second time, each learner takes notes. Learners then work together in pairs or small groups to reconstruct the text in complete (but not exact) sentences. Finally, they check their work against the text script.

Practice Activities

Practice is a critical factor in second language acquisition, and interactive practice of new content and skills can help learners incorporate skills and knowledge from their first language into their learning of English. Practice can include focused learning tasks such as problem-based learning, task-based learning, and structured discussions.

Problem-based learning allows learners to interact in a pair or small group to solve a problem. First they are introduced to the problem. Then they explore what they do and do not know about the problem, generate possible solutions, consider the consequences of each solution, and together choose the most viable (Mathews-Aydinli, 2007). For example, in an intermediate class, learners might work in groups to figure out the cheapest transportation to use to come to class, considering an impending increase in bus fare.

Task-based learning has the teacher assign a specific task (e.g., comparing two pictures or texts to find the differences, finding out how to lease a car, learning what houses cost or rent for in a specific area of their city), and learners work together in pairs or small groups to find the information they need and present it to other groups (Ellis, 2003; Willis, 1998). Topics and tasks should reflect learner interests and language proficiency levels, curriculum requirements, and time available. Teachers should provide clear step-by-step directions with examples, including products to be developed (e.g., a chart comparing two pictures or texts, a list of steps for leasing a car, a brochure for an apartment or house for rent or sale), evaluation criteria, and deadlines.

Structured discussions involve helping learners lead and participate in discussions of topics of interest to them. Current events, both local and global, can provide immediate opportunities for structured discussions. For example, learners can discuss arguments for and against the proposed bus fare increase. A teacher might draw a chart with arguments for the increase in one column and arguments against the increase in another column; learners can write the ideas raised in their discussion in the appropriate column. Structured discussions can allow learners to discuss a problem orally in a less extended assignment than in a problem-based learning activity. In a multilevel class, for example, advanced-level learners might identify and discuss a problem (e.g., what to do when teenagers follow their peers' wishes rather than their parents' wishes) and consider possible solutions and possible consequences of these solutions; beginninglevel learners might be given a problem (e.g., a teenage son who stayed out all night with his friends) and asked to identify one possible solution.

Evaluation/Feedback Activities

Interaction activities can also be used to evaluate learner progress. Teachers can evaluate learner interactions by using note cards, and learners can reflect on their interactions to see when they were successful in communicating their message and when they were not. In all feedback and evaluation activities, clear criteria are needed so learners know what their teacher will be listening for and what they themselves should examine when they reflect on their interactions.

Using note cards helps teachers give learners immediate feedback. When learners interact in groups or pairs, teachers can listen to their discussions, make notes on note cards about an individual's strengths and weaknesses (e.g., pronunciation, grammar, use of formulaic phrases for agreeing and disagreeing, interrupting). At the end of the interaction, teachers can discuss what they have observed with learners and give them these note cards as immediate, formative feedback (Schaetzel, 2004). Teachers can also use a grid or form to give more formal feedback to learners about their class interaction and participation (Barnett, 1999).

Reflecting on interaction facilitates learners' knowledge and acquisition of new grammatical forms. Learners can reflect individually on their interactions and think about when they were understood and when they were not understood; they can then share their perceptions with a partner and receive their partner's feedback. Teachers can help learners to focus their reflections by using a grid or feedback form and asking learners to think about when they were comfortable and when they were uncomfortable during the interaction. Learners can also be videotaped when they are interacting with each other. They can then watch themselves and each other and analyze their strengths and weaknesses (Schaetzel & Shen, 2002).

Interaction Activities With Beginning and Literacy-Level Students

Beginning and literacy-level learners will benefit from opportunities to interact orally. When literacy-level learners begin to develop their literacy skills, the activities described below, which focus on oral interaction rather than use of print materials, can be used to scaffold their interactions.

Structured dialogues can lead into more open-ended dialogues as learners' vocabulary and grammar knowledge expand. Learners might listen to a dialogue about a picture as the teacher writes the main questions from the dialogue on the board. Learners can build their own dialogues and perform them for a group or for the class. For example, the teacher might use a picture from the front page of the newspaper and write on the board, "What happened?" or use an advertisement and write the question, "Will you buy this?" The teacher can help learners answer the questions and then ask them to use the same questions to talk in pairs about another picture from the newspaper or another advertisement.

Conversation grids include a few spaces for peer interaction and previously learned vocabulary. For example, the grid may have pictures of different kinds of food on it. Learners can discuss whether or not they like this food, whether this food is available in their country, and how they might cook this food. The grid may be used over a period of time for review.

Games, pictures, and short videos also work well to help begin conversations at this level. For example, the teacher may show a video of a boss and an employee greeting each other in the morning. Learners can roleplay how they greet their bosses or how they greet their friends and begin to learn culturally appropriate terms of address.

Conclusion

Interaction activities can be incorporated into classrooms at any language level and at any point in a lesson. With careful planning and support, opportunities for interaction can make classroom learning more meaningful. Seeing the benefits that learners reap from interaction activities—in increased proficiency and confidence and ability to move to higher levels of classes—teachers may want to examine their current classroom practice and incorporate more opportunities for interaction.

References

- Barnett, M. (1999). Encouraging students' participation in discussions. *Teaching Concerns*. Retrieved June 28, 2008, from http:// trc.virginia.edu/Publications/Teaching_Concerns/Spring_1999/ TC_Spring_1999_Barnett.htm
- Bigelow, M., Delmas, R., Hansen, K., & Tarone, E. (2006). Literacy and the processing of oral recasts in SLA. *TESOL Quarterly*, 40(4), 665-689.
- Buehl, D. (2001). *Classroom strategies for interactive learning*. Newark, DE: International Reading Association.
- Center for Adult English Language Acquisition. (2007). *CAELA guide for adult ESL trainers*. Washington, DC: Center for Applied Linguistics. Retrieved June 17, 2008, from www.cal.org/caela/scb/guide.html
- Christensen, C. R. (1991). Premises and practices of discussion teaching. In C. R. Christensen, D. A. Garvin, & A. Sweet (Eds.), *Education for judgment: The artistry of discussion leadership* (pp.15-36). Boston: Harvard Business School Press.
- Condelli, L., Wrigley, H. S., & Yoon, K. S. (in press). What works for adult literacy students of English as a second language. In S. Reder & J. Bynner (Eds.), *Tracking adult literacy and numeracy: Longitudinal studies of adult education*. New York: Routledge.
- Crystal, D. (2003). *A dictionary of linguistics and phonetics*. Malden, MA: Blackwell.
- Ellis, N. (1996). Sequencing in SLA: Phonological memory, chunking, and points of order. *Studies in Second Language Acquisition*, 18(1), 91-126.
- Ellis, R. (1991). *Second language acquisition and language pedagogy*. Clevedon, England: Multilingual Matters.
- Ellis, R. (2003). *Task-based language learning and teaching*. Oxford, England: Oxford University Press.
- Ellis, R. (2005). Principles of instructed language learning. Asian EFL Journal, 7(3). Retrieved June 10, 2008, from www.asian-efljournal.com/September_05_re.php#3a
- Garvin, D. A. (1991). Barriers and gateways to learning. In C. R. Christensen, D. A. Garvin, & A. Sweet (Eds.), *Education for judgement: The artistry of discussion leadership* (pp. 3-14). Boston: Harvard Business School Press.
- Gass, S. M. (1997). *Input, interaction, and the second language learner*. Mahwah, NJ: Erlbaum.
- Gass, S. M., & Mackey, A. (2006). Input, interaction and output: An overview. *AILA Review*, 19, 3-17.
- Hellermann, J. (2007). The development of practices for action in classroom dyadic interaction: Focus on task openings. *The Modern Language Journal*, 91(1), 83-96.
- Izumi, S. (2002). Output, input enhancement, and the noticing hypothesis. *Studies in Second Language Acquisition*, 24, 541-577.
- Jacobs, G., & Small, J. (2003) Combining dictogloss and cooperative learning to promote language learning. *The Reading Matrix*, 3(1), 1-15.
- Jin, L., & Cortazzi, M. (1998). The culture the learner brings: A bridge or a barrier? In M. Byram & M. Fleming (Eds.), *Language learning in intercultural perspective: Approaches through drama and ethnography*. Cambridge, England: Cambridge University Press.
- Lantoff, J. (2000). Second language learning as a mediated process. *Language Teaching*, 33, 79-96.
- Long, M. H. (1985). Input and second language acquisition theory. In S. Gass & C. Madden (Eds.), *Input and second language acquisition* (pp. 377-393). Rowley, MA: Newbury.

- Long, M. H. (1996). The role of the linguistic environment in second language acquisition. In W. C. Ritchie & T. K. Bhatia (Eds.), *Hand*book of research on language acquisition: Vol. 2. Second language acquisition (pp. 413–468). New York: Academic Press.
- Mackey, A. (1999). Input, interaction, and second language development: An empirical study of question formation in ESL. *Studies in Second Language Acquisition, 21,* 557-587.
- Mackey, A. (2002). Beyond production: Learners' perceptions about interactional processes. *International Journal of Educational Research*, *37*(3-4), 379-394.
- Mahbubani, K. (2002). Can Asians think? Singapore: Times Books International.
- Mathews-Aydinli, J. (2007). *Problem-based learning and adult English language learners*. Washington, DC: Center for Adult English Language Acquisition. Retrieved June 28, 2008, from www.cal .org/caela/esl_resources/briefs/problembased.html
- McDonough, K. (2005). Identifying the impact of negative feedback and learners' responses on ESL question development. *Studies in Second Language Acquisition, 27, 79-103.*
- McDonough, K., & Mackey, A. (2006). Responses to recasts: Repetitions, primed production, and linguistic development. *Language Learning*, 56, 693-720.
- Myles, F. (2004). From data to theory: The over-representation of linguistic knowledge in SLA. *Transactions of the Philological Society*, *102*(2), 139-168.
- Philip, J. (2003). Constraints on "noticing the gap": Nonnative speakers' noticing of recasts in NS-NNS interaction. *Studies in Second Language Acquisition, 25,* 99-126.
- Pica, T. (1994). Research on negotiation: What does it reveal about second-language learning conditions, processes, and outcomes? *Language Learning*, 44, 493–527.
- Pica, T. (2008). SLA in the instructional environment. *Working Papers in Educational Linguistics*, 23(1), 1-27.
- Reigel, D. (2008). Positive feedback in pairwork and its assocation with ESL course level promotion. *TESOL Quarterly*, 42(1), 79-98.
- Schaetzel, K. (2004). Teaching discussion skills for project work. In B. T. Ho, J. A. Shek, & S. C. A. Chang (Eds.), *Managing project work in schools: Issues and innovative practices*. Singapore: Prentice Hall.
- Schaetzel, K., & Shen, X. (2002). Helping Asian students learn discussion skills. Changing Asian Foreign Language Education, 2, 3-16.
- Schmidt, R., & Frota, S. (1986). Developing basic conversational ability in a second language: A case study of an adult learner of Portuguese. In R. Day (Ed.), *Talking to learn: Conversation in second language acquisition* (pp. 237–326). Rowley, MA: Newbury.
- Sharan, Y., & Sharan, S. (1992). *Expanding cooperative learning through group investigation*. New York: Teachers College Press.
- Skehan, P. (1998). *A cognitive approach to language learning*. Oxford, England: Oxford University Press.
- Swain, M. (1995). Three functions of output in second language learning. In G. Cook & B. Seidelhofer (Eds.), *Principle and practice in applied linguistics: Studies in honor of H. G. Widdowson* (pp. 125-144). Oxford: Oxford University Press.
- Weddel, K., & Van Duzer, C. (1997). Needs assessment for adult ESL learners. Washington, DC: National Clearinghouse for ESL Literacy Education. Retrieved July 18, 2008, from www.cal.org/caela/ esl_resources/digests/Needas.html
- Willis, J. (1998). Task-based learning: What kind of adventure? *The Language Teacher*, 22(7). Retrieved June 28, 2008, from http://jalt-publications.org/tlt/files/98/jul/willis.html

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