

## SOME FUNDAMENTAL PRINCIPLES OF LANGUAGE TEACHING AND LEARNING

*Dr. Marjo Mitsutomi  
School of Education  
University of Redlands  
PRICESG Member*

The new ICAO English proficiency standard requires that pilots and air traffic controllers on international routes be able to speak and understand English in a mutually intelligible way. The standard affects both native and non-native speakers of English in that all are expected to be able to modify their speech in such a way that communication is made as easy and seamless as possible. In some instances this means that some form of further English training will be required for the professional's ability for clear communication to develop. As both individual aviators and companies wrestle with training issues, it is important to understand a few basic principles about language learning and teaching.

### **Language Learning:**

Children learn their first language subconsciously with relative ease and little if any stress. When all circumstances are normal, most children learn the basic structures and vocabulary of their first language within the first four years of their life. The language continues to develop through life in sophistication and complexity depending primarily on the child's eventual level of education and use of the language in question. Generally speaking, all people are successful in the acquisition of their first language, and their speech tends to be marked by the accent and regional expressions of the area where they grow up.

Although people are capable of learning any number of languages during their lifetime, many experience failure to different degrees in the process of learning other languages. Adults often complain that the target language (second/foreign language) is difficult to understand or pronounce. Anyone who has ever seriously attempted to master another language knows that it is a time consuming and challenging effort. Yet, research and experience demonstrate that the only area most negatively affected by a "late" onset of language study is pronunciation; in other words, a second language speaker can often be recognized by an accent caused by the characteristics of the first language phonology; few second language learners can ever "disguise" themselves as native speakers of the target language. This issue is of no concern, however, since there are so many distinctly different accents and even varieties of English itself throughout the world that all English speakers have an accent in someone else's ears.

If one considers language study to mean only the memorization of some vocabulary and sentence structures with "good" pronunciation, the entire effort is doomed to failure from the beginning. The study of another language is far more extensive than that. The reader should refer to Freeman and Freeman (2004) for a simply and clearly written explanation of the components of language which one needs to know in order to teach language. In short, the linguistic components the learner and the teacher need to delve into are syntax (sentence structure), phonology (sound system), lexicon (vocabulary), semantics (meaning), and pragmatics (usage). Language is a complex whole, the mastery of which requires the learner's total commitment for life, especially if the standard sought is the educated native speaker. Language learning is a process which takes time under the best of circumstances, when the learner is motivated and has everything available to help him to reach his goals.

It is important to note that language learning is never a linguistic phenomenon only. It is affected by several sociolinguistic and psychological factors which are all intertwined in unique ways in the case of each learner. The learner's prior experience as a student in general and self-image specifically as a language learner will determine how the learning task is viewed, whether it, for example, will seem impossible or doable. The person's prior knowledge, attitudes, personality, learning styles and skills and motivation, to mention a few, are all factors related to the eventual outcome of the language study. (For a comprehensive overview of the process of second language acquisition, see Brown 2004.) The most critical element, however, which appears to determine the relative failure or success of language acquisition, is the learning environment itself.

### **Language Teaching:**

Languages are taught and learned in various places, some in informal settings, others in formal contexts, such as classrooms. It is common knowledge that regardless of the method used, second language learners achieve mastery of the target language to varying degrees. Although 10 individuals may be in the same language class for a year, their eventual proficiency level and profile will be different from one another. This is the result of a combination of the factors briefly mentioned above, compounded with the pedagogical methods that the learner has encountered. Generally speaking, it can be stated that most individuals learn to communicate basic information through a conversation in the target language in the first few years of active language study (provided that there are opportunities to use the language to create personal meaning). It is important to note that mere exposure or contact with the target language in most cases is not sufficient to result in productive language skills.

Second language development follows a developmental process, which resembles that of the first language. Yet, adults, unlike children, are often more critical of themselves and have fears, which children do not experience. Adult learners are also more affected by the type of language input they experience and often control its quantity and quality, meaning that they can either “tune out” the language if so desired, or they can seek opportunities to speed up the learning process. Adult learning is a relatively conscious process. Most language learners seem to be able to articulate whether they are “good” at learning languages or not, whether they seem to enjoy it or not, and whether they want to pursue it or not. Since adults have cognitive tools available to them which they use to study other subjects in general, these same study skills can assist them in identifying personally effective and meaningful learning routes to second language acquisition.

Cummins (1988) in his classic work has separated language skills into two major categories of proficiency. Basic Interpersonal Communication Skills (BICS) typically requires a few years to develop. This means that the language learner is able to converse about every day affairs and often appears to be a competent user of the language, being fluent and able to respond to most concrete stimuli. However, according to Cummins, Cognitive Academic Language Proficiency (CALP), the ability which allows the learner to discuss and study conceptual, academic, material in the second language takes several years longer, being the result of years of extended study in the target language. In other words, although a person may be perfectly capable of carrying on a conversation in the target language, that same individual may not be equipped with the skills needed to study abstract concepts in the same language. That requires academic knowledge of complex sentence structures, understanding of the written and spoken rhetoric of the language, and possession of a sophisticated fine-tuned vocabulary. This level of language proficiency is attainable only through directed academic study and, therefore, can be achieved only through hard work, native speakers included.

Working adults often have the need to acquire new knowledge as quickly as possible; yet, language places its own timetable on the learner and tends not to respond to “cramming.” Language requires its own time, for the learning of a language is, indeed, a process. The process can be speeded up by intensive language courses in those cases where the focus is solely on the systematic study of language for several hours each day. Students who, for example, have the opportunity to attend intensive language courses may be able to advance sooner and take greater leaps of advancement than those who lack the time or the resources to do the same.

### **Instructional Context:**

No matter how seconds are languages studied, the instructional context – whether formal or informal – must contain certain key components to foster success. Van Lier (1996) notes that language learning efficiency is enhanced by the learner’s own understanding of what he is doing and why (awareness), being able to make some personal decisions about the process (autonomy), and being introduced to materials which are relevant, meaningful and practical (authenticity). The learner, in other words, must be mentally present in the learning situation and must have some desire to put forth the effort towards acquiring another language.

Krashen (1988) for the last two decades has emphasized the role of “comprehensible input” in language teaching (see summary of his complete updated theory in Krashen 2003). This means that the instructor must create learning situations which are not too difficult for the student. The language material should be appropriately and developmentally sequenced so that it is slightly above the learner’s current level of mastery. Swain (1993) believes that in addition to comprehensible input, “meaningful output” cannot be underestimated: the learner must actively participate in the production of the language. The learner must

engage in the language, solve problems with it, create one's own ideas in "home-made" sentences, and negotiate meaning in the target language; in other words, passive listening or note-taking of someone else's language use will never result in proficiency in the production of the language.

In short, interaction in the language is needed in order for the learner to communicate personal meaning in the target language (Cummins and Swain 1986). Language practice which takes place in relevant context will then result in the acquisition of the language. In other words, the learner will not only learn about the language but he will learn to use the language. Knowing about the language and knowing the language are not always synonymous.

The other crucial components of any organized language program are the methods and materials used to enhance students' learning experiences. There is no one correct way to teach language nor is there any one text or computer program which will suffice in its entirety. Since teaching must be based on the students' needs and diagnosed levels of ability, the instructor is in the key position to determine what the students should learn and how they should be taught. All this, however, must be encased in the identified goals of the program itself. The entrance requirements must match the abilities of the admitted students. The exit exams should test whether the program was successful in delivering its content or not. What happens during the course must be tailored to meet realistic and locally appropriate program goals. These decisions should be made together with selected experts in language teaching pedagogy and the local aviation authorities. Both groups together can determine the most efficient and practical ways to create a well-informed and grounded language program, one in which the students can thrive while they develop their second language skills. Learning should be a pleasant experience for the students as well as the instructors.

The ICAO standard focuses specifically on aviators' ability to speak and understand English in the aviation context. In terms of instruction, this implies that the focus be placed on the practice of speaking and listening. In other words, to learn to speak one must speak. To learn to listen, one must engage in listening exercises. There is no other short cut to developing either skill. The ICAO expectation is that pilots and controllers have sufficient ability to express themselves in English and to communicate clearly enough with others on the same radio frequency. This does not require the ability to give speeches or read classic literature in the language. It does not require familiarity with the popular culture nor does it assume linguistic skill to be graceful in social situations. What the standard does mean is that the language user has sufficient language facility in the work context to respond to various situations when the predetermined phraseology is not enough. The point is to be able to ask and answer questions, paraphrase and clarify information, and modify one's speech so that the message is as clear as possible. And, this is a goal that is quite achievable for most any dedicated professional who sees language as one tool among others, all of which have been designed to promote safety in the flight environment.

### **Summary:**

Language learning and teaching is a complex package of issues. There is no one-size-fits-all prescription to guarantee everyone's success at the same rate. Therefore, in planning a language-training program, some basic questions must first be explored. What follows is a list of a few of them:

Who do we admit? How should the candidates be selected? Do we accept all potential candidates/pilots/controllers or only those who have already met the minimum language proficiency standard? What should be the minimum entrance requirement to enter either our company or the language program specifically?

Among the current student or employee population, who is it that needs English training? How do we know or test that?

Should we plan to do in-house language training or should we contract some other agency to handle the language situation?

What should be the content of the instruction? Should it focus primarily on language instruction? Should aviation content be integrated into the instructional design?

How and when should the instruction take place? How long should it last? Who should pay for it? What kind of teaching material and equipment is needed?

Who is qualified to deliver the instruction? Is it enough that the instructor be a trained language teacher, or should she also know something about flying and air traffic control, and if so, how much? If a flight instructor is selected to do the teaching, how much language pedagogy should she master before entering the classroom?

In other words, program directors must make some fundamental decisions about their goals, based on their resources, which determine the type of response that is most appropriate for their particular situation. These decisions, then, will translate into practical guidelines such as whether they admit beginners in the language, or whether they will accept candidates or employees who already have met the standard. These decisions will fundamentally alter the nature and length of whatever else remains to be done in terms of the training curriculum of these professionals. Since language is an ever-evolving skill, attention must also be paid to whether language support will be continuous or offered intermittently to ensure maintenance of the critical language proficiency level.

As tempting as it may be to settle for quick solutions, the reality is that language learning and teaching is an endeavour which absolutely requires time, energy and often funds. Programs which promise language success in a matter of hours or weeks are surely not based on empirical research and evidence. Learning a language is an achievable goal, but it must be approached with systematicity, proven methods which work, and common sense. Language learning does not happen because someone requires it. It happens with personal effort. It is always an individual challenge and journey. When the learner is persistent and endures till the desired standard has been achieved, the rewards of being bilingual are not only professionally but also personally satisfying. Bilingual people have unique cognitive pathways at their disposal for problem solving which can only enhance their ability to think and perform. This is one of the many bonuses of knowing more than one language.

The ultimate goal of the ICAO language proficiency requirement is aviation safety through communication. It is another safety net in the complicated web of international traffic. That communicative web stays knit together only if all those who have a part in it take their responsibility seriously. Native and non-native English speaking pilots and controllers share this burden of linguistic responsibility. They also share the joy of knowing that they are communicatively competent regardless of the nature of the operational situation. And, this linguistic confidence is yet another bonus added to an already interesting and challenging career.

### References:

Brown, H. D. (2000). *Principles of language learning and teaching* (4<sup>th</sup> ed.). New York: Longman

Cummins, J. (1988). Second language with bilingual educational programs. In L. M. Beebe (Ed.), *Issues in second language acquisition*, Boston, NMA: Heinle & Heinle, 145-166.

Cummins, J. & Swain, M. (1986.) *Bilingualism in education*. New York: Longman.

Freeman, D. E. & Freeman, Y. W. (2004). *Essential linguistics: What you need to know to teach Reading, ESL, spelling, phonics, and grammar*. Portsmouth, NH: Heinemann.

Krashen, S. (1985). *The input hypothesis: Issues and implications*. London: Longman.

Krashen, S. (2003). *Explorations in language acquisition and use*. Portsmouth, NH: Heinemann.

Swain, M. (1993). The output hypothesis: Just speaking and writing aren't enough. *The Canadian Modern Language Review* 50, 158-164.

Van Lier, L. (1996). *Interaction in the language classroom*. London: Longman.