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ABSTRACT

Second language research is important for teachers in bilingual programs because it investigates which solutions work best for which problems, in which situations, and with which learners. Research aids practitioners in more effective program planning, implementation, and evaluation. To compensate for the time lag in availability of materials, concerned teachers must keep up with current research, analyze its findings, and apply them to their teaching approaches and instructional materials. This paper presents: (1) an overview of major research areas in second language acquisition and refers to a sample of studies whose findings have clear implications for the classroom, (2) a second language learning model that incorporates many of the recent research findings into a taxonomic scheme, and (3) criteria and guidelines for applying second language acquisition research findings to the bilingual classroom. Four major areas of importance to the classroom teacher in current second language acquisition research are the comparison of first and second language acquisition; social, affective, and cognitive factors; second language input; and second language learning in school settings. (Author/JK)

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Applications of Second Language Acquisition Research to the Bilingual Classroom

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National Clearinghouse for Bilingual Education

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Why is research important to the teacher?

Though more research remains to be done before we have anything approaching definitive answers to the question of how best to promote second language learning, we do know already that some procedures still used in classrooms are contrary to what has been discovered about the second language learning process. Some of the findings of recent second language acquisition research studies can be applied to the bilingual classroom where English is a second language.

Research is important for teachers because it investigates which solutions work best for which problems, in which situations, with which learners. The more practitioners in bilingual programs know about research findings, the more effective they can be in planning, implementing, and evaluating their programs.

All of us encounter a time lag problem in keeping up with research. Months, or even a year or more, usually pass between completion of a study and publication of its results. Additional time lags occur between publication and incorporation into course work in preservice and in-service teacher training. By the time that new research findings are reflected in commercial instructional materials, a good deal of additional time has elapsed. For this reason, many materials for ESL and language development presently in use are no longer current in their methodology or psychological approach. They ask children to practice unnatural sentences that they do not understand; they require meaningless repetition. Both teachers and children are bored by this kind of material, and it is no wonder that little learning takes place.

The only way that concerned teachers can compensate for the time lag in availability of materials that reflect new findings about second language learning is to keep up with current research, analyze its findings, and apply them to their teaching approaches and instructional materials. This is asking a lot of teachers, who are often submerged in the details of daily planning and human interaction in their classes. However, many do find the time to read journals, take advantage of the resources of local university research efforts, and discuss implications of research with their colleagues. Another source of information about current research in bilingual education is the National Clearinghouse for Bilingual Education, which not only maintains a hotline to answer specific questions, but also provides information through its newsletter *FORUM* and through its publications. A new NCBE service is Research On-Line, which enables users to find out about current, unpublished research efforts relevant to bilingual education.

Teachers and administrators who are informed about current research are better prepared to analyze and evaluate instructional methods and materials, changing and adapting them where needed to make them congruent with new knowledge.

This paper first presents an overview of major research areas in second language acquisition, referring to a sample of studies whose findings seem to have clear implications for the classroom. After that, a Second Language Learning Model that incorporates many of the recent research findings into a taxonomic scheme is described. Finally, criteria and guidelines for applying second language acquisition research findings to the bilingual classroom are proposed.

Four major areas of particular importance to the classroom teacher in current second language acquisition research are: comparison of first and second language acquisition; social, affective, and cognitive factors; second language input; and second language learning in school settings. These categories are not mutually exclusive, for many studies consider various of these interrelated aspects of second language acquisition, but they do serve as useful descriptors of research concerns that have significant implications for classroom teachers.

Is second language learning similar to first language learning?

Comparison of first and second language acquisition processes, though not a new area of research, continues to claim the attention of many investigators, impelled perhaps by the increasingly sophisticated research being done on first language acquisition. Present research reveals many similarities between first and second language acquisition, as well as some differences.

For both first and second language learners, meaning is the key to linguistic development. Children remember and use language that is meaningful. They learn through a creative construction process of putting together the bits of the

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language they know, rather than by exact imitation of sentence models. For children—as for all of us—the purpose of language is the communication of meaning, and they will use whatever means is available to them to both understand and communicate the meaning of a message. Both first and second language learners begin to express their meanings through an interlanguage, which is an approximation of the adult or native speaker model and which contains many omissions, overgeneralizations, and errors in grammar, pronunciation, and vocabulary. It resembles telegraphic speech in many ways, for words (and even parts of words) not essential to the meaning are routinely omitted. The stages through which children move in this interlanguage are the same for many children (Chun, 1980), though individual differences in order of acquisition of certain structures have been pointed out by some researchers. Arguments over whether the order of acquisition of grammatical forms is the same for all first language learners, and similar or identical for all second language learners, tend to obscure the fact that is *most* important to teachers—that children do not begin by uttering perfectly formed, grammatically correct sentences when learning a language. They inevitably produce a great deal of incomplete or incorrect language which they gradually correct themselves as they try to match their language to the models they hear. Also important to teachers is the fact that children want to match their language to models they hear. In other words, when children make language errors, teachers should not assume that the fault lies either in the child or in the teaching method, for errors are a natural part of language learning.

Another similarity between first and second language acquisition can be found in the existence of what Krashen (1980) terms the *silent period*, or delay in the onset of speech. In natural learning situations, children apparently need to listen to a great deal of language and make at least some sense of it before they are ready to attempt speech. The implications for the ESL teacher are obvious: more time and attention should be given to listening activities at the beginning stages, and children should not be forced to speak until they feel ready to do so on their own.

Another similarity between first and second language acquisition can be found in the uses to which language is put. The young child just beginning to talk does so for functional purposes: to request something, to get information, to provide information, to express anger, fear, pleasure, or surprise. When these linguistic functions are not fundamental to the second language learning process, children quickly lose interest and are hard to motivate. Few children care about language for language's sake. They want an immediate and practical purpose to which they can put the language. For the teacher, this means creating situations in which children can use the new language for functional ends. Examples would be social interaction with English-speaking children, learning how to get out of trouble by apologizing, making excuses or explaining intentions, and requesting information or services.

The most obvious difference between first language acquisition and acquisition of a second language by a school-age child is the considerable difference in ages. The emergence of speech in a one-year-old is quantitatively and qualitatively different from the beginning stages of second language acquisition in a five- or seven-year-old. The age difference reflects both cognitive and social factors, for the older learner is developmentally more mature and has different social needs than the younger learner. A critical period for second language acquisition has been rejected by many researchers, who have discovered that older learners *can* learn faster than younger ones. Some suggest that second language learners are best at learning certain features of the new language at different ages (Chun, 1980). However, it has been shown that in the long run, children do better at learning a second language than do adults (Krashen, Long, and Scarcella, 1979). Reasons advanced are that children have a longer period of time in which to acquire the second language, and their *affective filter* (Dulay and Burt, 1977) is weaker than an adult's and thus allows more of the new language to get in and become usable input. Ervin-Tripp (1978) studied the acquisition of French by thirty-one English-speaking children in Geneva, ranging in age from four to nine, and found that

About the Author

Anna Uhl Chamot is coordinator of research, reference, and referral services at the National Clearinghouse for Bilingual Education. She holds degrees from George Washington University, Columbia University, and the University of Texas at Austin, and has also studied at Oxford University (England), Lovanium University (Zaire), and Lausanne University (Switzerland). She has taught education courses at the American University and at the University of Houston. She was assistant professor of curriculum and instruction at the Foreign Language Education Center at the University of Texas at Austin, where she taught ESL theory and methodology in the bilingual teacher education program, first and second language acquisition, and foreign language methodology; she was also program adviser for graduate students in TESL.

Dr. Chamot's research interests are reflected in studies on second and third language acquisition which have appeared in the *International Review of Applied Linguistics, Second Language Acquisition* (edited by Evelyn Hatch), *The Acquisition and Use of Spanish and English as First and Second Languages* (edited by Roger Andersen), and in a forthcoming anthology on early reading in one or more languages (edited by Theodore Andersson). Research papers have been presented at TESOL, NABE, Second Language Research Forum, and the Delaware Symposium on Language Studies.

She has also applied current research findings in second language acquisition to the classroom as an ESL textbook author (*English for International Communication*, Books 1-6; *Read Right: Developing Survival Reading Skills*), and as a consultant to schools and universities in the United States, Latin America, Europe, and Africa.

the older children learned phonology, morphology, and syntax faster than the younger children. She attributed this to the fact that older children know more about language through their first language proficiency and that they have developed more sophisticated cognitive strategies for learning in general.

Another obvious difference between first and second language acquisition lies in the absence or presence of a previous language. The young child must acquire language in order to communicate at all with other human beings, whereas the school-age second language learner already has a system of effective communication and may or may not feel the desire to communicate with speakers who do not share this initial communication system. The presence of a first language can help a second language learner in many ways, for a great deal is already known about how language works. Borrowing from the first language is often a successful learning strategy, and when the borrowing is not successful, the learner usually discards it as soon as the correct expression in the second language is learned.

The teacher needs to provide opportunities for children to use their second language for real communicative purposes with English-speaking peers and adults. He or she should also capitalize on what children already know about language through their first language so they can make successful transfers and correct generalizations to the second language.

How do individual differences affect second language learning?

Social and affective factors and differing cognitive learning styles have been found to significantly affect second language learning. The attitude of learners toward the cultural group that speaks the second language and their greater or lesser desire to participate in that group has as much effect on the success of their second language acquisition as do their aptitude and verbal intelligence. According to Lambert (1981), a favorable set of attitudes and motivation can compensate for a lack of natural aptitude for acquiring a second language and can predict successful learning of that language. The implications for teachers are clear. Children can develop positive feelings about native English speakers only if those speakers are concerned, caring individuals to whom limited-English-proficient children can relate personally. Teachers should not only examine their own attitudes, but also strive to establish attitudes of acceptance, appreciation, and esteem in their native-English-speaking students.

Research on differing cognitive styles and types of learning strategies highlights the fact that individual differences must be considered in second language acquisition as well as in all other aspects of learning. Ventriglia (1982) has identified three basic types of language learning style, which she terms *beading, braiding,* and *orchestrating.* Beaders learn words incrementally, and internalize the semantic meanings of individual words before they begin stringing them together. Braiders, on the other hand, use an integrative strategy based on syntactical relationships, and acquire the new language in chunks or phrases, often without conscious analysis. Braiders can produce language chunks much sooner than beaders, because they like to try out unanalyzed phrases in social contexts to see if they work, whereas beaders like to be sure of their understanding of all the words that make up a phrase before they attempt oral production. Orchestrators are children who process the language initially on a phonological basis. They listen to the new sounds and reproduce them accurately. Their understanding is based on a grasp of meaning implied by intonation, and these children, like beaders, spend a great deal of time on initial listening comprehension. Orchestrators start with sounds, and gradually realize how these sounds form syllables, words, phrases, and sentences. They are dependent on oral models for their language learning. The implications for teaching are that no one method or approach will be appropriate for every learner. Teachers need to master many different ways of teaching the new language, and they should observe and capitalize on the preferred learning styles of individual children.

What kind of linguistic models do second language learners need?

Although the importance of language input to the learner is obvious, it is only recently that attention has been turned to the precise nature of such input. Krashen (1980) has proposed an Input Hypothesis, which states that one acquires a second language by understanding linguistic input that is a little beyond one's current level of proficiency. This understanding of new items contained within familiar ones comes about through using clues from the verbal and nonverbal contexts, and through the learner's knowledge of the world and of language in general. Input that is too far beyond the learner's level will be heard only as noise, whereas input at or below the learner's current level will not add to the acquisition process. Another feature of this hypothesis is that language acquisition is not based on analysis of grammatical structure but on meaning. Therefore the input does not have to be in the form of sequenced grammatical structures (as almost all textbooks present it), but must contain meaningful information at a level just beyond the learner's current ability. Natural language contains sufficient repetition of structures to present the grammatical information needed, and appropriate input provides these structures on a functional basis that relates to the communication needs of the learner.

Although it is easy to understand why teachers should provide the right kind of input for their ESL learners, it can be difficult to implement. One method is to tape a complete lesson and then listen critically to the language modeled by the teacher. Is it natural? Is it meaningful? Is it useful and relevant for children? Is it neither excessively simple nor excessively complex, but aimed just beyond the children's present proficiency?

Children need a great deal of language input, and it should come from a variety of speakers. When the speaker has something of real importance or interest to communicate the listener will make every effort to understand, and this very effort will advance the second language acquisition process. Structured drills that have no communicative func-

tion have little value in helping children acquire the new language; useful and natural exchanges do. Other children naturally adjust their language to the needs of the limited-English-proficient child, and will paraphrase, repeat, slow down, explain, or demonstrate in order to get their meaning across. Teachers could well do the same.

What kind of second language proficiency is needed for success in school subjects?

The setting for second language acquisition determines the type of linguistic competence that is learned. Research on second language acquisition in social situations has provided information about the process of natural second language acquisition, and has shown us the importance of communicative competence. This type of process is largely unconscious and is termed language *acquisition* by Krashen (1980), who distinguishes it from language *learning*, which involves formal study and application of the rules of a language. His Monitor Hypothesis claims that the acquisition process accounts for nearly all of a person's proficiency in a language and that the learning process is available only as a monitor, or self-checking device. He further claims that this monitor is used only by those learners whose cognitive style predisposes them to think analytically about a language, and then only when a specific task demands it.

The implications of the distinction between acquisition and learning, and of the monitor, are that correction of errors and formal teaching of grammar are not effective for most students.

Important as the ability to communicate in a social situation is, it does not provide all the second language proficiency needed for academic success. Cummins (1980) makes a distinction between two types of language proficiency. The first he terms BICS, or Basic Interpersonal Communicative Skills. This is the ability to use language to interact socially with others. This fluency is what most of us aspire to when we study a second language, but for the person who must use that second language to progress up the educational ladder, BICS is not enough. The type of language used in school subjects and for achievement tests is quite different from BICS, and Cummins describes it as Cognitive/Academic Language Proficiency, or CALP. This type of language proficiency is related to basic cognitive levels and conceptual knowledge, and for this reason it is highly transferable from one language to another. Thus, knowledge and concepts gained in one language, whether they be concerned with mathematics, grammar, reading, writing, social studies, or any academic subject, can be transferred to a second language just as soon as the learner reaches what Cummins calls the threshold level. Learners are at the threshold level in a second language when they have acquired the appropriate labels to attach to concepts already known in the first language.

The BICS/CALP distinction has many implications for teachers. In language proficiency assessment, care must be taken not to confuse testing results of a child's communicative competence with that child's ability to handle academic tasks in the second language. Learning through a second language should not be expected until children have satisfied two criteria: first, that they have reached the threshold level in the second language; and second, that they have acquired the concepts appropriate to their cognitive/maturational level in the first language. For the ESL teacher, a gradual increase in the amount of subject matter taught through English would be beneficial and should be tied to what children already know in the first language. Some subjects, such as math, could be taught through the second language sooner than others because their vocabulary is limited and their nonlinguistic features aid comprehension. Emphasis on literacy skills in the second language will provide children with essential tools for transferring their first language CALP to the second language.

To sum up, we can say that four statements are borne out by current second language acquisition research:

1. There are more similarities than differences between first and second language acquisition.
2. Social and affective factors and differences in cognitive learning styles play a decisive role in second language acquisition.
3. The appropriate kind of input is required for second language acquisition to take place.
4. Second language communicative competence in social situations does not guarantee success in academic language tasks.

These four general areas of current second language acquisition research are interrelated in many ways, and the findings and hypotheses described work together to determine the degree of success a child experiences in acquiring a second language.

What is the developmental sequence for second language learning?

The second language learning model (Figure 1) is a taxonomic representation incorporating and applying several current research findings. The basic structure is patterned on Bloom's taxonomy, which describes six cognitive levels, each higher one building on the lower ones. Since Bloom's taxonomy identifies internal mental processes, an identifier has been placed next to each one describing the linguistic process that takes place at each level.

1—**Knowledge:** lowest cognitive level—memorization, recall.
2—**Comprehension:** basic meaning—putting elements together in new ways.
3—**Application:** functional use of language for communication.
4—**Analysis:** receiving and giving information, putting facts together, identifying main idea.
5—**Synthesis:** looking beyond facts to find reasons, making comparisons and inferences.
6—**Evaluation:** using skills developed in Levels 1-5 to make decisions.

The line of asterisks seems to correspond to Cummins's threshold, that is, the level at which the learner knows a sufficient amount of the second language to be able to undertake academic tasks in it. The first three levels show the processes that build the Basic Interpersonal Communicative Skills that are essential for social participation in the second language. These are the skills that are acquired mostly through Krashen's acquisition process, that is, through appropriate input.

The three higher levels seem to belong quite distinctly to school settings, as they describe the kinds of skills that are taught in the regular language arts curriculum. These skills depend on developing the learner's cognitive/academic language proficiency as postulated by Cummins. Probably their development requires considerable conscious learning, in Krashen's sense of the word. It may be more likely, though, that rather than engage in conscious application of the Monitor in acquiring these academic second language skills, the learner finds it more economical to transfer previously developed CALP skills from the first language.

The next two columns describe the kinds of specific linguistic tasks that the learner engages in at each level. In the

Figure 1
Second Language Learning Model

Acquisition/ Learning Emphasis[1]	*Language Proficiency Dimension*[2]	*Cognitive Domain Taxonomy*[3]	*Linguistic Process*	*Internal Language Skills*	*External Language Skills*
Acquisition	Basic Interpersonal Communicative Skills (BICS)	1 Knowledge	Recalling	Discrimination of and response to sounds, words, and unanalyzed chunks in listening. Identification of labels, letters, phrases in reading.	Production of single words and formulas; imitation of models. Handwriting, spelling, writing of known elements from dictation.
		2 Comprehension	Recombining	Recognition of and response to new combinations of known words and phrases in listening and oral reading. Internal translation to and from first language.	Emergence of interlanguage/ telegraphic speech; code switching and first-language transfer. Writing from guidelines and recombination dictation.
				SOCIAL INTERACTION	
		3 Application	Communicating	Understanding meaning of what is listened to in informal situations. Emergence of silent reading for basic comprehension.	Communication of meaning, feelings, and intentions in social and highly contextualized situations. Emergence of expository and creative writing.
********** THRESHOLD **********					
Learning	Cognitive/ Academic Language Proficiency (CALP)	4 Analysis	Informing	Acquisition of factual information from listening and reading in decontextualized situations.	Application of factual information acquired to formal, academic speaking and writing activities.
		5 Synthesis	Generalizing	Use of information acquired through reading and listening to find relationships, make inferences, draw conclusions.	Explanation of relationships, inferences, and conclusions through formal speech and writing.
		6 Evaluation	Judging	Evaluation of accuracy, value, and applicability of ideas acquired through reading and listening.	Expression of judgments through speech and writing, use of rhetorical conventions.

[1] See Stephen Krashen, "The Monitor Model for Second Language Acquisition." In *Second Language Acquisition and Foreign Language Teaching*, edited by Roberto C. Gingras. Arlington, Va.: Center for Applied Linguistics, 1978.
[2] See James Cummins, "The Construct of Language Proficiency in Bilingual Education." In *Current Issues in Bilingual Education*. Georgetown University Round Table on Languages and Linguistics 1980, edited by James E. Alatis. Washington, D.C.: Georgetown University Press, 1980.
[3] See Benjamin S. Bloom and David R. Krathwohl, *Taxonomy of Educational Objectives: Handbook I: Cognitive Domain*. New York, N.Y.: Longman, 1977.

first column are those related to language competence, the receptive skills of listening and reading comprehension. The second column lists those related to performance, the productive skills of speaking and writing.

Reading List for Teachers

Asher, James J. *Learning Another Language through Actions: The Complete Teacher's Guidebook.* Los Gatos, Calif.: Skyrak Productions, 1979.

Chun, Judith. "A Survey of Research in Second Language Acquisition." *Modern Language Journal* (Fall 1980): 287-96.

Cummins, James. "The Construct of Language Proficiency in Bilingual Education." In *Current Issues in Bilingual Education.* Georgetown University Round Table on Languages and Linguistics 1980, edited by James E. Alatis. Washington, D.C.: Georgetown University Press, 1980.

Gardner, R.C., and Lambert, W.E. *Attitudes and Motivation in Second Language Learning.* Rowley, Mass.: Newbury House, 1972.

Gingras, Rosario C., ed. *Second Language Acquisition and Foreign Language Teaching.* Washington, D.C.: Center for Applied Linguistics, 1978.

Krashen, Stephen. "The Input Hypothesis." In *Current Issues in Bilingual Education.* Georgetown University Round Table on Languages and Linguistics 1980, edited by James E. Alatis. Washington, D.C.: Georgetown University Press, 1980.

Lambert, Wallace E. "Bilingualism and Language Acquisition." Paper presented at Conference on Native Language and Foreign Language Acquisition, January 1981, at New York Academy of Sciences.

McLaughlin, Barry. *Second Language Acquisition in Childhood.* Hillsdale, N.J.: Lawrence Erlbaum Associates, 1978.

Moskowitz, Gertrude. *Caring and Sharing in the Foreign Language Class: A Sourcebook on Humanistic Techniques.* Rowley, Mass.: Newbury House, 1978.

Omaggio, Alice C. "Successful Language Learners: What Do We Know About Them?" *ERIC/CLL News Bulletin* (May 1978).

Saville-Troike, Muriel. *Foundations for Teaching English as a Second Language: Theory and Method for Multicultural Education.* Englewood Cliffs, N.J.: Prentice-Hall, 1976.

Ventriglia, Linda. *Conversations of Miguel and Maria.* Reading, Mass.: Addison-Wesley, forthcoming (1982).

Obviously, by Level 3 the learner is highly proficient in the second language as far as ability to communicate is concerned, yet there are three more levels to progress through before that learner can function successfully in an academic setting. To make a rough comparison with grade level, the second language learner at Level 3 is at approximately the same level linguistically as the native speaker at the end of first grade or early second grade.

The more years the second language learner is beyond a second grader in age and cognitive development, the more distance this learner has to travel in the three higher levels of the model to reach the point of successful learning through the medium of the second language. Of course, different children can be expected to spend varying amounts of time at each level, but it is obvious that the ten-year-old child who is operating in ESL at Level 3 still is about two years behind the native speaker in language proficiency. Recent Canadian research shows that whereas the LEP child requires only about two years to reach native speaker proficiency in BICS, it takes five to seven years to reach a CALP level comparable to the native speaker (Cummins, 1981).

At this point, the transferability of CALP from the first language becomes crucial. If CALP has been developed to the appropriate cognitive level in the first language, the transfer of academic skills such as reading for information, making inferences, writing logically, and speaking formally can be transferred to the second language in a shorter period of time through the medium of the second language.

In this model, reading and writing have been included from the first level. It is assumed, of course, that initial reading skills have been taught in the first language. Although audiolingual methodology delayed the introduction of the written language, cognitive approaches emphasize the fact that different learner styles profit from exposure to all four language skills from the beginning level. An additional reason for the early introduction of reading and writing lies in the importance of literacy to the development of CALP and the ability to study school subjects in the second language.

How can bilingual classroom teachers apply these research findings in teaching English as a second language?

Because second language learning is similar to first language learning, teachers should:

- Expect errors and consider them as indicators of progress through stages of language acquisition;
- Respond to the intended meanings children try to communicate;
- Provide context and action-oriented activities to clarify meanings and functions of the new language;
- Begin with extensive listening practice, and wait for children to speak when they are ready;
- Avoid repetitive drills and use repetition only as it occurs naturally in songs, poetry, games, stories, and rhymes.

Because social and affective factors, and differences in cognitive learning styles influence second language learning, teachers should:

- Foster positive, caring attitudes between limited- and native-English-speaking children;
- Plan for small-group and paired activities to lessen anxiety and promote cooperation among all children;
- Provide for social interaction with English-speaking peers;
- Vary methodology, materials, and types of evaluation to suit different learning styles;
- Build understanding and acceptance of cultural diversity by discussing values, customs, and individual worth.

Because the appropriate type of input is necessary for second language acquisition to take place, teachers should:

- Ensure that they model language that is meaningful, natural, useful, and relevant to children;
- Provide language input that is a little beyond children's current proficiency level, but can still be understood by them;
- Plan for a variety of input from different people, so that children learn to understand both formal and informal speech, different speech functions, and individual differences in style and register.

Because communicative competence in a second language does not provide children with sufficient skills to study successfully through the medium of that language, teachers should:

- Develop children's concepts and subject matter knowledge in their stronger language during the second language acquisition process so that later they will be able to transfer these concepts to the new language;
- Use the second language for subject matter instruction when children reach the linguistic threshold needed to attach new labels to known concepts;
- Initiate subject matter instruction in the second language in linguistically less demanding subjects, such as math;
- Emphasize reading and writing activities in the second language as soon as children are literate in the first language;
- Realize that tests of communicative competence evaluate children's ability to function in social settings, not their ability to perform successfully in academic settings.

References

Bloom, Benjamin S., and Krathwohl, David R. *Taxonomy of Educational Objectives: Handbook I: Cognitive Domain.* New York: Longman, 1977.

Chun, Judith. "A Survey of Research in Second Language Acquisition." *Modern Language Journal* (Fall 1980): 287-96.

Cummins, James. "The Construct of Language Proficiency in Bilingual Education." In *Current Issues in Bilingual Education.* Georgetown University Round Table on Languages and Linguistics 1980, edited by James E. Alatis. Washington, D.C.: Georgetown University Press, 1980.

———. "Age on Arrival and Immigrant Second Language Learning in Canada: A Reassessment." *Applied Linguistics* 11, no. 2 (Summer 1981): 132-49.

Dulay, Heidi, and Burt, Marina. "From Research to Method in Bilingual Education." In *International Dimensions of Bilingual Education.* Georgetown University Round Table on Languages and Linguistics 1978, edited by James E. Alatis. Washington, D.C.: Georgetown University Press, 1978.

Ervin-Tripp, Susan. "Is Second Language Learning Like the First?" In *Second Language Acquisition: A Book of Readings,* edited by Evelyn M. Hatch. Rowley, Mass.: Newbury House, 1978

Krashen, Stephen. "The Monitor Model for Second Language Acquisition." In *Second Language Acquisition and Foreign Language*

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Teaching, edited by Rosario C Gingras. Washington, D.C.: Center for Applied Linguistics, 1978

_____. "The Input Hypothesis." *Current Issues in Bilingual Education* Georgetown University Round Table on Languages and Linguistics 1980, edited by James E. Alatis Washington, DC: Georgetown University Press, 1980

_____ ; Long, M.A.; and Scarcella, R C. "Age, Rate and Eventual Attainment in Second Language Acquisition." *TESOL Quarterly* 13 (1979): 573-82.

Lambert, Wallace E. "Bilingualism and Language Acquisition." Paper presented at Conference on Native Language and Foreign Language Acquisition, January 1981, at New York Academy of Sciences.

Ventriglia, Linda. *Conversations of Miguel and Maria* Reading, Mass.: Addison-Wesley, forthcoming (1982).

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