

# Anniversary Article

## Classroom SLA Research and Second Language Teaching

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In Lightbown (1985a), I summarized SLA research by stating ten generalizations which were consistent with the research to that date. I concluded that SLA research could not serve as the basis for telling teachers what to teach or how. One of the reasons for that was the limited scope of SLA research at that time. Another reason was that most of the research had not been designed to answer pedagogical questions. However, I suggested that SLA research was one important source of information which would help teachers set appropriate expectations for themselves and their students. In this paper, following a review of language teaching practices of the past fifty years, I reassess the ten generalizations in light of the considerable amount of classroom-based SLA research which has been carried out since 1985, especially that which has addressed pedagogical concerns in primary and secondary school foreign and second language classes. For the most part, this research tends to add further support to the generalizations, and this gives them greater pedagogical relevance. Nevertheless, I argue that teachers need to continue to draw on many other kinds of knowledge and experience in determining the teaching practices which are appropriate for their classrooms.

In 1985 *Applied Linguistics* published a paper which I wrote about the relationships between second language acquisition (SLA) research and second language teaching (Lightbown 1985a). In that paper, titled 'Great Expectations', I observed that, while many of the changes which had occurred in second language teaching were compatible with SLA research, most of those changes predated and/or were quite independent of the SLA research which provided empirical support for them. SLA research was still a young field, and I argued that it was not yet possible to assume that it had progressed far enough to be used as a major source of guidance for either the 'how' or the 'what' of second language teaching. I suggested that the proper role for SLA research in teacher education was to help in setting realistic expectations for what language teachers and learners could accomplish in a second/foreign language classroom. SLA research in areas such as orders of acquisition, cross-linguistic transfer effects, and age factors could potentially explain why some things were so difficult, in spite of effort and good will on the part of both teachers and learners. I outlined ten 'generalizations' which I believed to be consistent with what SLA research had turned up to that point (see Figure 1).

*Ten Generalizations from SLA Research*

1. Adults and adolescents can 'acquire' a second language.
2. The learner creates a systematic interlanguage which is often characterized by the same systematic errors as the child learning the same language as the first language, as well as others which appear to be based on the learner's own native language.
3. There are predictable sequences in L2 acquisition such that certain structures have to be acquired before others can be integrated.
4. Practice (does not make perfect).
5. Knowing a language rule does not mean one will be able to use it in communicative interaction.
6. Isolated explicit error correction is usually ineffective in changing language behaviour.
7. For most adult learners, acquisition stops . . . before the learner has achieved native-like mastery of the target language.
8. One cannot achieve native-like (or near native-like) command of a second language in one hour a day.
9. The learner's task is enormous because language is enormously complex.
10. A learner's ability to understand language in a meaningful context exceeds his/her ability to comprehend decontextualized language and to produce language of comparable complexity and accuracy.

*Figure 1: Ten Generalizations from SLA Research (from Lightbown 1985a)*

In discussing the possible applications of SLA research findings to the practice of foreign/second language (FL/SL) teaching, I endorsed Evelyn Hatch's (1978) reminder that research findings should be 'applied with caution' and that the only research question a researcher should answer is the one that he or she had asked in designing the research. I suggested that '*only* research which is pedagogically based and which asks pedagogical questions can be expected . . . to answer pedagogical questions' (1985a: 183). Few of the SLA researchers whose work was reviewed in 1985 were asking questions about SLA in the classroom. However, in the years since the publication of that paper, the number of studies designed to ask pedagogical questions has increased dramatically. In this paper, I want to look at some of the classroom-based SLA research in order to revisit the question of how SLA research might influence second language teaching.<sup>1</sup>

## CHANGES IN APPROACHES TO FL/SL TEACHING

In 1998, I was teaching a course in a university teacher training program in Quebec. Readings for the course covered a variety of issues related to the impact of instruction and feedback on second language acquisition (SLA) in the classroom. Early in the term, the students read Lightbown and Spada (1990), a paper based on an analysis of the classroom practices of four teachers of English as a second language (ESL) in Quebec. One of the students opened the discussion of the paper with the following comment and question: 'You're going to hate me for this for the rest of the term but I just have to ask. I really thought this article was very interesting and I agree with what you said. But do you really have to do *research* to show that it is better for students to get a mixture of communicative interaction and form-focussed instruction? Doesn't everybody *know* that?'

At the end of the 1990s, this student and the other pre-service teachers in my class assumed that, as second language teachers, they would be responsible for creating opportunities for their students to *hear* and *read* interesting and motivating samples of the target language and to *interact* in group- and pair-work. In addition, they anticipated that they would sometimes need to provide *form-focussed instruction* and *feedback* to help students make progress on some particularly difficult features in the language they were learning. These were student-teachers whose training had convinced them that second language classrooms should be characterized by a variety of activities, with an emphasis on those which engage students in meaningful interaction, but with an awareness on the part of the teacher that some attention to language form is also necessary. I was struck by the contrast between the assumptions of these new teachers and those of both pre-service and experienced teachers who had been in my classes in earlier years. Those teachers had been persuaded of the validity of different pedagogical practices—ranging over the years from strict step-by-step drill to open-ended communicative interaction.

The student who asked me about the usefulness of stating the obvious gave me a reason to take the class through some recent history of language teaching and research on second language teaching in the classroom. I could have gone back '25 centuries' (Kelly 1969), but I stayed with what I had experienced in my own lifetime as a learner, teacher, and researcher in classroom second language acquisition. Like the student in my class, a layperson, not familiar with research and practice in second language teaching and learning, would very likely also find it odd that researchers would feel compelled to seek empirical support for the notion that learners could benefit from both focussed instruction and the freedom to use the language communicatively. It is only in the context of understanding how 'experts' have viewed the process of FL/SL teaching and learning that the conclusion requires explanation. It is important to keep in mind that what 'everybody knows' is not always consistent with the facts.

In the 1950s and 1960s, when I was a student in high school and university,

'everybody knew' that foreign languages were learned through reading and translating literary texts, learning grammar rules, and memorizing vocabulary lists. In North America, that type of teaching and learning was challenged by the advent of audio-lingual teaching, and by the time I began teaching high-school French in the late 1960s, 'everybody knew' that language was learned through imitation, repetition, and drill, leading to the formation of habits of correct language production (Brooks 1964; Lado 1964).

In the 1970s, when I began to work as a teacher trainer and classroom SLA researcher in Quebec, the challenge I faced when talking with experienced or recently trained teachers was to convince them that it was all right to relinquish some control of their structure-by-structure audio-lingual lessons. Even though there were many articles in the North American theoretical literature which questioned the role of audio-lingual FL/SL teaching (see, e.g., Carroll 1966; Chastain 1971), teachers who, like me, had been trained in the late 1960s saw their responsibility as making sure that students practised and overlearned every dialogue and drill. We had been taught that we should not allow students to venture into 'free' use of the language for fear that unstructured language production would inevitably lead to errors, interfering with the establishment of correct habits. At that time, there was little available SLA research, and the 'Language Acquisition' courses I taught made reference mainly to research in child language acquisition. I taught my students about the growing evidence that the model of language acquisition which underlay audio-lingual teaching had been challenged as inadequate to explain child language acquisition (e.g., Miller 1965). The SLA research which I could find seemed of little relevance to my students. Much of the American SLA research published in the 1970s dealt with university students or other learners—both adults and children—whose exposure to the second language included a significant amount of informal as well as instructed learning. Most of the pre-service and in-service teachers in my class were oriented to the teaching of English in the primary and secondary schools of Quebec, a setting which is more like English as a foreign language in Europe than like ESL teaching in the United States. I made frequent appeals to Savignon's (1972) study of university students learning French as a foreign language. There were few studies of classroom foreign language learners of elementary or school age and few studies of learners whose principal exposure to the language was in the classroom. In the absence of such studies, students found their Language Acquisition courses 'interesting' but not very 'practical'. The hypothetical similarity of FL/SL acquisition to child language development (see, e.g., Corder 1967) remained to be confirmed. Meanwhile, teachers were more at ease with their textbooks based on Lado's (1964) 'scientific approach' to FL/SL teaching. It was clear that there was a need for classroom-based SLA research to determine the extent to which L1 research and non-classroom SLA research findings had relevance to classroom teaching.

By the late 1980s, the pendulum had swung, and communicative language teaching (CLT) had swept through many FL/SL classes, including those in

Quebec. By this time, 'everybody knew' that exposure to *comprehensible input* and the opportunity to interact in group work would give students what was necessary for language acquisition to proceed. The teachers my research group and I observed in the late 1980s often told us that it was not good to point out students' errors or to focus on any single linguistic feature. Rather, it was enough to engage students in interesting and meaningful interaction. The language would 'take care of itself'.<sup>2</sup> The syllabus developed by the Ministry of Education was based on ideas drawn from the British notional/functional syllabus (see below), but in contrast to the intentions of at least some of the British proposals, the pedagogical approach in Quebec had evolved as a version of CLT which seemed to exclude any focus on language form in the second language classroom. Recently trained teachers and teachers who attended teachers' conferences and workshops were very aware of ideas about language teaching which are associated with Krashen's (1982) views of language acquisition and learning. Within a few more years, these ideas had become so integrated in the language teaching mainstream that many teachers were not aware of their origin. Nevertheless, they were confident that any attention to language form would cause students to feel stressed or anxious without really helping them become more proficient in the second language. It was in this context of rejection of form-focussed instruction that we had 'stated the obvious' in Lightbown and Spada (1990).

Even though the influence of SLA research was clearly reinforcing the shift to CLT in Quebec in the 1980s, the original influence for this change was not SLA research but rather the notional-functional syllabus movement in Great Britain (see, e.g., Wilkins 1976). In Great Britain, and throughout the world where British teachers taught English as a foreign language, the emergence of CLT was very much influenced by the work of British applied linguists such as Breen, Brumfit, Candlin, Widdowson, and Wilkins. The reference lists of articles and books on language teaching published in Britain in the 1970s include such names as Halliday, Hymes, Lyons, and Searle. The case for approaches to language teaching that were eventually subsumed under the name of CLT was not based on SLA. It came partly from a debate within linguistic theory and partly from discussions among language teachers and textbook writers about what students really needed and wanted to *do* with the language they were trying to learn and whether strictly structure-based approaches could lead to the accomplishment of their goals. The linguists and applied linguists who had such a profound influence on the development of several varieties of CLT were dissatisfied with pedagogical approaches which treated language as a set of morpho-syntactic rules rather than as a richer system of communication involving many kinds of competence other than the purely syntactic. For the developers of new approaches, CLT reflected a move away from linguistics as the main or only basis for deciding what the units of language teaching would be. They wanted more emphasis on language in context, language in use for a purpose, language to *do something* with, not just language form for its own sake. Their concerns had to do with authenticity—

teaching real language rather than contrived examples of grammatical rules. They also anticipated that more communicative interaction would have a positive effect on learners' motivation. In Europe, advocates of notional-functional syllabuses argued that a syllabus might be ordered in terms of the uses to which language would be put (e.g., Munby 1978). Thus, it was proposed that rather than starting from 'the verb *to be* in simple sentences', a syllabus might begin with greetings and introductions and progress through invitations, expressions of thanks, apologies, compliments, reporting and seeking information, etc. Students who were learning languages for specific purposes would need vocabulary or structures which were found to be appropriate for their fields of study or work. This approach was debated among the proponents of CLT who argued that this was simply another way of breaking language down into isolated units and urged that language be taught in ways which better reflected the reality of complex discourse in context (Widdowson 1978). Nevertheless, the primary cause of change in language teaching in Great Britain was not the findings of language acquisition research, but rather the reflections of educators and applied linguists who wanted to see a greater emphasis on the rich complexity of language use (Mitchell 2000).

To be sure, one of the reasons that SLA research was not referred to in the British language teaching literature was that there was so little of it! Some researchers expressed an interest in the emerging research about child language acquisition, and there was an expectation that SLA research might eventually play a role (e.g., Corder 1967; Wilkins 1974). Early attempts to propose pedagogical practices on the basis of the very first SLA research findings brought forth several cautionary warnings (e.g., Hatch 1978; Tarone *et al.* 1976). SLA research exploded in the late 1970s, and in 1984, Littlewood produced a valuable book which gave teachers and teacher trainers an optimistic but cautious overview of SLA research and its possible relationship to teaching.

Approaches to language teaching changed in the United States as well. The changes were influenced by cognitive psychology and by the sea change in linguistic theory which followed Chomsky's challenge to Skinner's view of verbal learning. It also grew out of teachers' frustrations with the implementation of audio-lingual teaching in contexts for which they felt it was not well-suited. Critics of the audio-lingual approach to teaching argued that second language learners, especially older children and adults, could use their general cognitive and problem-solving abilities in learning a second language, and that the rote memorization and drill approach failed to capitalize on these abilities (Ausubel 1964; Chastain 1971). As SLA research studies began to appear with rapidly increasing frequency in the 1970s, the compatibility of SLA findings with the independently motivated rejection of audio-lingual teaching tended to strengthen the move toward more 'communicative' or 'cognitive' approaches to language teaching (Brown 1980).

Another significant development in FL/SL teaching which predates SLA research is the Canadian experience with French immersion. This experiment in second language teaching was motivated by parents' dissatisfaction with traditional language teaching, and it began in the mid-1960s, well before there was a body of SLA research to support the idea of comprehension-based or content-based language teaching. In the very first widely circulated reports on French immersion, students were said to have excellent listening comprehension and the ability to use French to learn subject matter. It was reported that their spoken French still contained many errors, even after several years of immersion, but the quality of students' spoken French was not at the top of the list of topics given close scrutiny for the first few years of French immersion programs. Concern about oral production ability was overshadowed by issues such as subject matter learning, mother tongue maintenance, and personal identity, and on these measures, the results were overwhelmingly reassuring (Lambert and Tucker 1972). In the late 1970s and increasingly in the 1980s, SLA researchers began to look at French immersion classes as a valuable context for studying aspects of second language acquisition. The success of French immersion programs, together with evidence from SLA research and theory of the early 1980s, led to the development of content-based and 'sheltered' FL/SL courses in the 1980s (e.g., Ready and Wesche 1992). However, by the mid-1980s, researchers were raising questions about the adequacy of a purely comprehension- or content-based approach to language teaching for achieving high levels of proficiency in language production (Harley and Swain 1984; Swain 1985, 1988).

In summary, FL/SL teaching changed dramatically in the years between 1960 and 1985, but the changes were due largely to factors other than findings from research which was carried out in classrooms or which was designed to answer pedagogical questions. As I noted in 1985, even 'the natural approach' (Krashen and Terrell 1983)—the approach which is *most* closely related to SLA research and theory of the 1970s—was first developed out of Terrell's experience as a teacher (Terrell 1977) and later reinforced by Krashen's interpretation of the early research in SLA (Terrell 1982). Language teachers and curriculum designers felt the need for change, but although the changes were sometimes influenced or reinforced by the SLA research which had been reported at the time, they could not have been based mainly on classroom SLA research because so little SLA research had been done in classroom contexts up to that point.

## SLA RESEARCH IN THE CLASSROOM

In the year 2000, the scope and volume of SLA research are quite different from that which I summarized in 1985. At the end of that paper I noted that SLA researchers whose work was focussed on solving theoretical puzzles were increasingly separating their research activities from those of researchers whose questions were more pedagogical in nature. That trend has continued,

and there are now several conferences and journals where SLA research is viewed entirely within one theoretical framework or another. At the same time, there has been a huge increase in SLA research which is either carried out in the classroom or which has been designed to answer questions related to FL/SL pedagogy. The research orientations range from classroom ethnographies to experimental interventions to test hypotheses about feedback techniques. Since 1985, numerous books (see the Appendix for a partial list) and hundreds of articles, theses, and conference papers have focussed on research in FL/SL classrooms and on the relationship between SLA research and FL/SL learning in the classroom. The specific goals of the various research projects differ, but there is a unifying desire to identify and better understand the roles of the different participants in classroom interaction, the impact that certain types of instruction may have on FL/SL learning, and the factors which promote or inhibit learning. We are a long way from finding answers to all these questions, and it is clear that no single type of research can address them all. It is important not only that we continue to do classroom-based research but also, as Van Lier urges, that the research 'be *open* rather than *closed*, that is, [that it be] formulated and designed in such a way that it can be used to maintain a dialogue between [interpretive and experimental] types of research' (1988: xiv). The dialogue needs to include not only researchers with different orientations but also teachers and students whose experiences we seek to understand and, eventually, to enhance.

In 2000, it is no longer correct to say that changes in language teaching have not been influenced by SLA research. The influence of SLA research is now evident in textbooks and teacher training programs and in proposals for curriculum design (see, e.g., Long and Crookes 1992). Some aspects of SLA research and theory have become so completely integrated into mainstream FL/SL pedagogy that they are referred to without reference to their sources. Notions such as *the silent period*, *focus on form*, or *developmental stages* are often taken for granted by teachers trained since the 1980s. There remain many unanswered questions about the relationship between SLA research and the classroom. Researchers and practitioners still have good reason to ask whether, and if so how, SLA research should influence pedagogy. As Crookes says, 'If the relationship were simple, or not a source of concern, I do not think it would come up so often' (1998: 6).

### SLA RESEARCH GENERALIZATIONS (1985) REVISITED

I would like now to review the generalizations I proposed in 1985, looking at the extent to which SLA research which has been carried out *in the classroom* provides support for the relevance of these generalizations to classroom learning or raises questions for further research. Each generalization is accompanied by references to some related classroom-based studies related to the generalization, with special emphasis on research carried out in primary and secondary FL/SL classrooms.



## 1. Adults and adolescents can 'acquire' a second language

In the original 1985 discussion of this generalization, the term 'acquire' was used to acknowledge the distinction that Krashen (1982 and elsewhere) made between linguistic abilities which learners develop in the absence of metalinguistic instruction (acquisition) and what they come to know about the language through formal instruction or metalinguistic analysis (learning). Classroom research has provided additional support for the conclusion that some linguistic features are acquired 'incidentally'—without intentional effort or pedagogical guidance. While there is wide agreement that learners in both classroom and informal learning environments come to know things that were never the subject of explicit teaching, there are different views about the extent to which this really takes place without the learner's 'awareness'. Schmidt (1990, 1994) has been particularly influential in pointing out the difference between performance which appears to be automatic and the acquisition of the knowledge which underlies that performance. He has argued that, in order for development to take place, learners must 'notice' the difference between their interlanguage and the target language. The nature of such noticing is the topic of considerable ongoing debate, but all would agree that it cannot be equated with (or limited to) the content of the formal instruction to which learners have been exposed.

Classroom research in French immersion contexts provides some evidence for learners' ability to acquire language in the absence of direct instruction of particular linguistic features. In these classes, young English-speaking students, whose attention was focussed on following classroom instructions and learning the subject matter of their school program, also acquired the ability to understand both written and spoken French and to produce it with a considerable degree of fluency and confidence (Swain 1991). Similarly, in intensive ESL courses with 11- and 12-year-old francophone children in Quebec, where teachers engaged students in a variety of communicative interactions with little or no focus on language itself, students acquired the ability to use English with ease in simple communicative situations (Lightbown and Spada 1994).

There have been many studies of group work and the interaction between learners in pairs in classrooms or in simulated classroom contexts. This research has shown that learners (1) are able to give each other FL/SL input and opportunities for interaction, (2) do not necessarily produce more errors than when they are interacting with the teacher, (3) can provide each other with feedback on error, in the form of clarification requests and negotiation for meaning, and (4) benefit from the opportunity for more one-to-one conversation than they can get in a teacher-centered whole class environment (Gass and Varonis 1994; Long and Porter 1985; Pica 1987; Yule and Macdonald 1990). Most of this research has involved adult learners, but Oliver (1995) has shown that even young children are successful in using interaction to get appropriate input. Kowal and Swain (1994) have found that

adolescents are able to benefit from pair work activities in which students work together to reconstruct dictated texts. Much of the research on group and pair work has been carried out in the framework of Long's (1985) hypotheses about the importance of modified interaction in second language acquisition. Swain (1999) and others (e.g., Donato 1994) have used Vygotsky's theory of the role of social learning to explain how interaction contributes to language development.

Krashen's hypothesis that comprehensible input is the one necessary building block for language acquisition has also been explored in a number of studies. Elley (1991) reviewed a number of studies, including his own, in which young second language learners benefitted from reading or being read to in the target language. The findings consistently showed that students who had access to more reading activities learned more of their second language than students in audio-lingual instruction. Krashen and his students have carried out studies of the impact of extensive reading as a source of comprehensible input (e.g., Krashen 1989; Pilgreen and Krashen 1993). These studies are said to show strong support for the comprehensible input hypothesis, especially that corollary of the hypothesis which suggests that the best form of comprehensible input is 'reading for pleasure'. However, there is some evidence that learners benefit even more when their reading is supplemented by interaction with a teacher (Elley 1989). Zimmerman (1997) and others have found that adult students who received some guided instruction in addition to extensive reading acquired more vocabulary than those who had only extensive reading.

Lightbown (1992) reported on an ESL program in New Brunswick, Canada, in which young (grades 3 to 5) learners of English as a second language had their entire instructional experience in the form of listening/reading sessions. The course was designed so that students spent their half-hour classes with a book which they had chosen from a large collection displayed in the classroom. Each book had an accompanying audio tape that students listened to using earphones attached to individual tape players on their desks. Teachers were available mainly to help students with technical problems, not to 'teach' in any formal sense of the term.<sup>3</sup> At the end of three years of this program, the students in the comprehension-based group performed as well as or better than students in a more traditional, modified audio-lingual program. Three years later, however, students who had continued to participate in this type of comprehension-based program did not perform as well on most measures as students who had had the guidance of a teacher and more opportunities for oral and written production tasks (Lightbown *et al.*, in preparation).

**2. The learner creates a systematic interlanguage which is often characterized by the same systematic errors as the child learning the same language as a first language, as well as others which appear to be based on the learner's own native language**

This generalization is at the heart of modern SLA research. Corder (1967) suggested that learners' errors provided insight into the system underlying second language learners' language use, and in the years since that time, innumerable studies have confirmed that learners develop an 'interlanguage' (Selinker 1972) which has systematic properties that are not explained in any simple way by the input learners have been exposed to. Even when students are exposed to the L2 primarily in structure-based classes, they create their own systematic interlanguage patterns which do not simply reflect the patterns they have been taught (Lightbown 1991).

A number of researchers emphasized the fact that a learner's first language was not the only influence on the shape of the interlanguage and emphasized the importance of looking at actual samples of learner language rather than at contrastive analyses which predicted what learners would find easy or difficult (e.g., Richards 1973.) Some researchers took quite radical positions in rejecting a role for the L1.<sup>4</sup> It soon became evident, however, that the role of the first language needed to be reintegrated into interlanguage studies, and L1 influence regained its place in the mainstream of SLA research (see e.g., Gass and Selinker 1983; Kellerman and Sharwood Smith 1986; Zobl 1980a, b).

Research with young classroom learners has shown how subtly the first language can affect both learners' production and their perceptions of what is grammatical in the target language. In a study of learners' production of written French, Harley and King (1989) found that the verbs used by English-speaking children in French immersion reflected the English pattern for showing direction of motion. In English, prepositions or adverbials are used to indicate the direction of the motion expressed by the verb, while, in French, the direction of motion is often included in the verb itself. English learners of French tended to use expressions such as *aller en bas* (go down) in contexts where French speakers themselves preferred *descendre*.

These effects of L1 are not limited to production of the language. Spada and Lightbown (1999) found that, on a sentence correction task, French-speaking students learning English readily accepted questions such as 'Can you play outside?' and 'Do you like pepperoni pizza?' while, at the same time, they rejected questions such as 'Can the children speak Spanish?' and 'What is your father doing?'. Although their interlanguage included 'inversion in questions', they appeared to have brought over from French the prohibition on inversion with full nouns (*Peux-tu venir chez moi? \*Peut-Pierre venir chez moi?*) (see Zobl 1979). Even when questions with pronoun subjects were quite well-established in both oral and written production, they continued to reject

the use of inversion with full noun phrases or proper names. This accounted for their apparently different levels of performance on different tasks. That is, to the extent that the task allowed or required questions with pronoun subjects, they were able to perform with a high level of target-like accuracy. When noun subjects occurred, however, they gave the impression of being 'less advanced'. In fact, the behaviour was quite systematic and reflected their own understanding of the constraints on English quite well.

### 3. There are predictable sequences in L2 acquisition such that certain structures have to be acquired before others can be integrated

This generalization is related to the previous one, and classroom research since 1985 has added support to the early SLA research evidence that many linguistic features are acquired according to a 'developmental sequence' and that, although learners' progress *through* a sequence may be speeded up by form-focussed instruction, the sequence which they follow is not substantially altered by instruction (e.g., Ellis 1989). When classroom input is very restricted or when learners' production consists largely of memorized formulas, there is sometimes the appearance of difference (Weinert 1987). Sometimes, the restricted or distorted samples of the target language which learners are exposed to can contribute a developmental path which reflects the acquisition of something other than the target language (Lightbown 1985b). Nevertheless, when learners have adequate opportunities to understand and use their second language, they show considerable similarity in the acquisition sequences.

One important implication of this generalization is that we cannot rely on the assessment of students' target-like use of the second language as the only evidence for growth or change in their interlanguage knowledge (see Bley-Vroman (1983) for an early warning about this practice). The research on developmental sequences makes it clear that *progress* in a learner's interlanguage will not necessarily show up as greater accuracy. That is, the developmental stages through which learners pass on their way to higher levels of proficiency include stages in which their performance is still far from target-like. For example, early stage learners may ask a few formulaic questions correctly (What's your name? What do you want?) before they *progress* to asking incorrect questions which are original and reflect their developmental stage ('What your brother's name?' 'Why the children want to go there?') The latter questions are less 'accurate' than the former because they do not conform to the target language. But they reflect the learner's ability to create new questions, placing the *wh*-word at the front of a declarative sentence to form a question. This change shows developmental progress beyond the memorized formulas of the earlier stage.

Pienemann's (1985) 'teachability hypothesis' grew out of earlier research (Meisel *et al.* 1981) in which developmental sequences were identified in the

acquisition of German word order by learners who were getting *no* classroom instruction. This hypothesis suggested ways of operationalizing an idea that teachers have always intuitively held: that learners can be taught only what they are ready to learn. Pienemann (1988, 1999) himself tested this hypothesis with learners of different ages and in different learning environments—both informal and instructed. He observed that instruction was most effective when it reflected the stage just beyond the learners' current stage of interlanguage. In apparent contrast, Spada and Lightbown (1993, 1999) found that communicative input which included many examples of forms typical of a particular developmental stage in the formation of English questions did not appear to be more effective for learners at the 'right' stage. Nevertheless, when learners made progress, they moved forward according to the sequence of English question development proposed by Pienemann *et al.* (1988).<sup>5</sup>

Keenan and Comrie's (1977) accessibility hierarchy for relative clauses was developed in a typological study of the languages of the world, but it has inspired considerable classroom-based research. Gass (1982) was the first to experiment with the idea that teaching the most marked structures in a hierarchical sequence of the relative clauses would lead learners to acquire the least marked structures in that hierarchy without explicit instruction. Numerous published studies followed Gass's lead showing that instruction could speed learners along in their acquisition of certain structures, but that the sequence of acquisition is not changed by the instruction (see Hamilton 1994 for a review). Most of this research has been done with university-level learners, but Ammar (1996) obtained similar results with young secondary school learners of English as a foreign language in Tunisia.

Teachers are often fascinated by research on developmental sequences and wonder whether they should plan their lessons in terms of these patterns. In my view, there are many reasons why such a proposal is neither feasible nor desirable (see Lightbown 1998 for discussion). However, the developmental sequences research should help teachers identify progress in ways other than an increase in target form accuracy.

#### 4. Practice does not make perfect

In stating this generalization in 1985, I was thinking of practice as it was often defined in audio-lingual classrooms, practice which was characterized as rote-learning outside meaningful language use. When 'practice' is defined as opportunities for meaningful language use (both receptive and productive) and for thoughtful, effortful practice of difficult linguistic features, then the role of practice is clearly beneficial and even essential. Nevertheless, research evidence shows that communicative practice in the classroom, as valuable as it is, is not sufficient to lead learners to a high degree of fluency and accuracy in all aspects of second language production.

The original generalization was related to the emerging SLA research on

developmental sequences. As noted under generalization 3, when learners drill and memorize language material which is beyond their current level of development, they may eventually exhibit 'U-shaped' behaviour (Kellerman 1985). That is, their apparently high level of accuracy, based on the use of memorized chunks, suddenly drops and then rises again as they come to create novel sentences. Even when instruction is not oriented to the rote learning of whole phrases or sentences, learners may have difficulty recognizing the components which make up the chunks of language they are frequently exposed to. For example, Harley (1993) has shown that French immersion students cannot always distinguish between *je*, the first person singular pronoun, and *j'ai*, the pronoun plus the verb 'have'. When students produce sentences such as *J'ai aime ça* (which would be translated word-for-word as 'I-have like that'), they are not moving in a straight line toward perfection because they will have to unlearn, or at least reanalyze, these sentences. Nevertheless, several researchers have pointed out the positive role for formulaic material in second language acquisition, both in and out of classroom contexts (Mitchell and Martin 1997).

Myles *et al.* (1998, 1999) have carried out an extensive study of the use of language chunks which learners have practised in French as a foreign language classes in Britain. They examined the way in which learners use rote-learned material outside the situations in which it was originally taught. They showed how learners used the complex material for its communicative value while at the same time they were beginning to use the less target-like language which was more typical of their developmental level. The extent to which learners use the complex, memorized chunks for language acquisition by breaking them down for analysis remains controversial, but it seems very likely that the communicative effectiveness and the confidence-building associated with the ability to produce longer, albeit formulaic, utterances can play a role in maintaining learners' motivation. Furthermore, current research which adopts a connectionist or emergentist perspective on language acquisition suggests that formulaic chunks or high frequency collocations account for a great deal more of our fluent language use than is reflected in some recent linguistic theories (Ellis 1996; Wray 1999).

## **5. Knowing a language rule does not mean one will be able to use it in communicative interaction**

This generalization is one which has been apparent to language teachers and language learners for as long as languages have been taught. Teachers have always observed that students can do well on a test but still fail to use the same features when they engage in spontaneous conversation. Students complain that, after years of language study, they still can't 'order breakfast'. Krashen (1982) went further and argued that the kind of knowledge which learners get when they learn metalinguistic rules will be of little use to them in natural communication unless they have time to 'monitor' their

performance. That is, in his view, the metalinguistic information does not have any direct effect on what he called 'acquired' knowledge. Ellis (1993) has adopted what he calls a 'weak interface' position, suggesting that instruction draws learners' attention to language features and permits them to develop knowledge of those features if they are developmentally ready to do so (see also Lightbown 1998).

A considerable amount of classroom research in SLA has focussed on the role of instruction in helping learners to move beyond their current interlanguage state. In classroom instruction, Long (1991) makes a distinction between what he calls focus on *forms*—discrete point, step by step grammar instruction, and focus on *form*—corrective feedback which is fully integrated within ongoing communicative activities. There has been little experimental research which directly compares form-focussed instruction which is provided as the need arises within a communicative interaction (Long's focus on form), and form-focussed instruction in isolated grammar lessons (Long's focus on forms). However, a number of studies have compared learners' language development in CLT *without* focus on form to that which is achieved in CLT *with* focus (e.g., Doughty and Varela 1998; Harley 1989; Lightbown and Spada 1990; Lyster 1994). The results have provided strong support for the inclusion of focus on form in the CLT classroom. In fact, there has been enough research on this topic that Norris and Ortega (2000) have been able to conduct a meta-analysis of such studies. They conclude that the research confirms that instruction which includes focus on form does make a positive difference for classroom SLA.

J. White (1998) tried to improve the ability of young francophone learners of English to learn the English agreement rule for possessive determiners by exposing them to 'enhanced input' (Sharwood Smith 1993) in the form of many, many examples of *his* and *her* in stories, games, puzzles, and poems. She enhanced the input by using bold letters, underlining, or italics to highlight these forms in the texts students read. She found that students exposed to this type of input did make more developmental progress in their use of possessive determiners than students who were not exposed to such a flood of enhanced input. In more recent research, she has provided learners with more explicit information about the relationship between the determiners and the nouns to which they are attached (J. White 1999). She found that learners who were taught a rule of thumb used possessive determiners at a more advanced stage on an oral communication task than a comparison group of students who had not been taught the rule. She suggests that knowing the rule had enabled the experimental group to notice and incorporate the English way of assigning gender to the possessive determiners.

L. White (1991) has argued that second language learners are far more likely than child L1 acquirers to develop grammars which are too general. This appears to be because they draw on features of the L1 as well as input from the L2. This places learners in the position of needing to notice that proficient speakers of the L2 are *not* saying something which the learners are saying.

This is especially problematic in classes where students share the same L1, of course. White argues that they require 'negative evidence' in the form of instruction or corrective feedback. The classroom research comparing input floods with more explicit instructional intervention takes up this issue. For example, Trahey and White (1993) exposed learners to a meaning-focussed flood with very large numbers of sentences with correct adverb placement. This input flood was not effective in getting learners to stop using an interlanguage form which was never present in the input except from other learners. However, corrective feedback and explicit instruction did have this result (White *et al.* 1991).

Other researchers have also found evidence for a relationship between explicit knowledge and language performance that is closer than that which exists in L1 speakers or that which is suggested by Krashen's acquisition/learning hypothesis (see, e.g., Green and Hecht 1992; Han and Ellis 1998). Nevertheless, there continues to be debate about the extent to which explicit rule knowledge shapes learners' underlying L2 linguistic competence or influences L2 performance in genuinely communicative situations (see Bialystok 1994 and Schwartz 1993 for two theoretical perspectives).

## 6. Isolated explicit error correction is usually ineffective in changing language behaviour

I believe that the evidence still supports this generalization. Learners' interlanguage behaviour does not change suddenly when they are told that they have made an error. This does not mean, however, that feedback on error is not beneficial. The evidence seems to suggest that error feedback can be effective, but it must be sustained over a period of time, and it must be focussed on something which learners are actually capable of learning. In typical CLT or content-based instruction, it may be necessary to provide some explicit indication to learners that feedback is directed to language *form* instead of or in addition to the meaning of a student's utterance.

Lightbown (1991) observed a teacher who offered frequent, often humorous, corrections each time the francophone students in her class used 'you have' rather than 'there is' as an introducer form in sentences such as 'You have (=There's) a boy beside the table.' This error had been observed in the oral production of hundreds of students whom we had observed in similar intensive ESL classes. Unlike students in classes where teachers ignored the error, the students in this teacher's class eventually stopped making the error and, more importantly, they were still using the correct form months later when they were no longer receiving the corrective feedback.

One type of feedback that has been the subject of a good deal of SLA research in CLT classes is the 'recast'. A recast is an utterance by a teacher or other, usually more proficient, speaker which rephrases the utterance of a learner, preserving the original meaning, but correcting the error(s) that occurred in the original utterance (Long and Robinson 1998). Laboratory-based studies and



studies where learners interact one-to-one with a more proficient interlocutor have shown evidence for the beneficial effects of focussed recasts, that is, recasts in which a single linguistic feature is targeted for recasting (Leeman 2000; Long *et al.* 1998; Mackey and Philp 1998; Oliver 1995). Findings from classroom studies are not as clear.

In a descriptive study of corrective feedback in French immersion classes, Lyster has shown how difficult it can be for students in content-based classrooms to distinguish between feedback which confirms the content of what they have said from feedback which is meant to provide information about linguistic accuracy or pragmatic appropriateness. In immersion and other content-based instruction, teachers feel a primary responsibility to ensure that students learn the subject matter of the course—science, social studies, or mathematics. For this reason, they do not always draw attention to errors in form, as long as the students show that they understand the content. In this meaning-focussed context, Lyster and Ranta (1997) report that recasts were the most frequent form of teacher response to students' sentences containing errors. However, recasts were the least likely type of feedback to lead to uptake (an immediate response to teacher feedback). In further analysis, Lyster (1998a) found that teachers tended to use the same praise markers (e.g., 'bravo') and the same proportion of recasting and non-corrective repetition when the content of student utterances was correct content, whether the form was correct or not. It is likely that, without other cues, learners could not tell whether their teacher's feedback was intended as a non-corrective repetition or rephrasing of a correct response, or an indication that, while content was correct, there was an error in the form of the original utterance. A student's assumption that the teacher's feedback was a confirmation of a correct response was further supported by the fact that teachers did not tend to wait for students' uptake following a recast, and the classroom conversation typically just moved on after the recast. Students were more likely to produce uptake when the teacher made it clear that a change was expected, for example, when the teacher recast only part of the student's utterance and waited for him/her to complete it with the desired form (see also Chaudron 1977). In a further analysis, Lyster (1998b) observed that different types of errors (lexical, phonological, grammatical) were affected differently by different types of feedback, and that phonological errors were most likely to receive student uptake following recasts. Like other researchers studying the impact of classroom feedback, Lyster (1998a) has emphasized that 'it is unwarranted to equate learner uptake with L2 learning' (p.75). Nevertheless, an immediate response does provide some evidence that learners are noticing the feedback and interpreting it as a focus on the form instead of (or in addition to) the meaning.

In an experimental classroom study, Doughty and Varela (1998) used a two-step technique which they called 'corrective recasts' in a science class for ESL students at the elementary school level. The teacher in the experimental condition provided students with feedback on their use of past tense forms in

the context of reports on science experiments. In the 'corrective recast' technique, the teacher first repeated a student's erroneous utterance, usually adding emphasis to the incorrect form of the verbs which the student had used. Then, if the student did not spontaneously repair the sentence, the teacher provided the correct form as a recast, and sometimes had students repeat the correct form after it had been provided. This two-step technique gave students clear information about what the teacher wanted them to pay attention to. Students who received this experimental feedback treatment improved in their use of past tense forms, using fewer incorrect forms and showing an increase in the use of both target-like forms and interlanguage forms that they had not used prior to the experiment. The control group students who continued in the regular science classes without such feedback did not show the same improvement. Indeed, on some measures, their performance grew worse.

These findings with respect to feedback on error are congruent with Spada's (1997) and Ellis' (1995) reviews of research on the role of form-focused instruction in SLA. They concluded that the research studies which showed an effect for instruction in the context of CLT were those in which there was an element of explicitness in the instruction. That is, the effects of instruction were observed when students' attention was more directly focussed on the feature to be learned than when the object of learning was not made clear.

7. **For most adult learners, acquisition stops . . . before the learner has achieved native-like mastery of the target language**
8. **One cannot achieve native-like (or near native-like) command of a second language in one hour a day**

The Critical Period Hypothesis—that post-puberty learners of a second language will always be distinguishable from learners who have had sustained substantial exposure beginning in early childhood—continues to find support in research which focusses on the long-term outcomes of earlier and later exposure to second languages (see Long 1990 for a review). The research is not without controversy, however, and some researchers point to ways in which the hypothesis needs to be refined (see, for example, Birdsong 1998; Bialystok 1997; Singleton 1989; White and Genesee 1996).

The Critical Period Hypothesis is often confused with the notion that 'younger is better' in second language acquisition. In many places, children who speak minority languages or languages without political status are placed in second language instructional settings before they have an opportunity to develop literacy skills in their L1. Such practices, based on political imperatives, as well as the belief that young children will easily acquire a second language, sometimes result in poor mastery of either language and in

educational difficulties with long-term negative consequences (Cummins 1991; Wong Fillmore 1991).

In the context of the foreign language classroom, the relevance of the Critical Period Hypothesis is questionable. The reality is that perfect mastery of a target language is rarely attained, even when learners begin at an early age. There are many reasons for this. One is that learners in a foreign language environment usually have only the teacher as a model of a proficient speaker, and even the teacher may not provide a native-like language model. All other input comes from learners like themselves, and learners who hear and understand each other's interlanguage varieties inevitably reinforce some of the non-target aspects of that interlanguage (Lightbown 1985b; see also Wong Fillmore 1991). For many years, classroom-based research has suggested that, in instructional settings, the age at which instruction begins is less important than the intensity of the instruction and the continuation of exposure over a sufficient period of time (Burstall 1975; Stern 1983).

The most important reason for incomplete acquisition in foreign language classroom settings is probably the lack of time available for contact with the language. Children learning their first language and young children living in a second language environment are in daily contact with the target language community. Through friends as well as schooling, they have thousands of hours of contact with the language. When FL/SL learning is limited to classroom instruction, the number of hours is much more limited. Furthermore, in programs where learners begin learning at an early age and then do not continue with the language, the proficiency which was developed may be lost. In instructional settings, if the total amount of time is to be limited, it is likely to be more effective to begin instruction when learners have reached an age at which they can make use of a variety of learning strategies, including their L1 literacy skills, to make the most of that time (Harley and Hart 1997; Muñoz 1999; Singleton 1989). In addition, a later start may mean that learners will have more opportunity to sustain contact with the language into adolescence and adulthood and to have opportunities to use the language outside the classroom. The advantages of older learners are less apparent in contexts where learners have a great deal of sustained informal exposure outside the classroom (Slavoff and Johnson 1995).

The intensity of the exposure and the opportunity to continue using the language over a long period of time is as important as the starting age in the effectiveness of classroom instruction. Our research in Quebec has shown that students who have intensive exposure to the second language near the end of elementary school have an advantage over those whose instruction was thinly spread out over a longer period of time. That is, even though students began at the same age and received a comparable number of hours of instruction, the more compact instruction was more effective (Collins *et al.* 1999; Spada and Lightbown 1989). Students whose exposure to the language was sustained into high school, through enriched ESL courses or through contact

with the language outside of school maintained this advantage (Dussault 1997; Lightbown and Spada 1991). Similar results have been observed in French immersion (Genesee 1987; Turnbull *et al.* 1998).

### **9. The learner's task is enormous because language is enormously complex**

In stating this generalization in 1985, I was thinking mainly in terms of the morphosyntactic complexity of language. The challenge learners face in this regard remains daunting. As noted above, learners need a great deal of time, as well as opportunities for exposure to language in a variety of contexts, before they can master its many subtleties. Many students never reach that mastery of the morphosyntax or of the lexicon. In addition, students in foreign language learning environments face a particular challenge because their classroom exposure to the language leaves them without adequate opportunities to learn appropriate pragmatic and sociolinguistic features of the language (Lyster 1994; Bardovi-Harlig and Dörnyei 1998). Tarone and Swain (1995) point out that students in French immersion settings who do not have out-of-school exposure to French fail to learn the informal register appropriate for use with adolescent francophones who would be their peers. Lyster (1994) found that they also had few opportunities to learn the highly formal register appropriate for dealing with adult strangers. Specifically, they did not have opportunities to hear markers of formality and politeness such as *vous* as a respectful second person singular pronoun and conditional form of verbs in a French immersion class.<sup>6</sup>

### **10. A learner's ability to understand language in a meaningful context exceeds his/her ability to comprehend decontextualized language and to produce language of comparable complexity and accuracy**

There is plenty of evidence that learners are able to get the meaning from the language they hear, even if they do not understand all of the linguistic features which contribute to making the meaning. They do this by using contextual cues and world knowledge. This is a very positive factor in the success of CLT and content-based language teaching. However, ongoing research has not tended to confirm Krashen's hypothesis that exposure to comprehensible input will lead learners to high levels of proficiency without some pedagogical guidance. As Swain (1985, 1995) and others have pointed out, learners need more and different language knowledge in order to produce language which is as complex and accurate as the language which they appear to 'understand'.

A number of researchers have observed that there are some features of language which either develop quite slowly, or never seem to develop fully, in learners who are exposed to the language in contexts where the emphasis is

exclusively on getting the meaning and never (or almost never) on learning specific linguistic features. This may be due to the very low frequency of some linguistic forms in classroom interaction or to other limitations inherent in the types of interactions which occur in classrooms. For example, White (1991) found that sentences containing adverbs were rare in the classroom language to which francophone students were exposed in Quebec ESL classes. Swain (1988) found that teachers in French immersion classes often used the historical present or future (e.g., 'How do you think that these plantations are going to change life in the Antilles?') while teaching history lessons, thereby reducing the frequency with which students were exposed to past tense forms in contexts referring to past events (Swain 1988: 71. Translation from French is in the original).

Even when forms are frequently present in classroom input, learners may filter them out because of characteristics of their L1 or their current interlanguage. Correct use of gender forms is notoriously difficult for students in French immersion and yet virtually every time a noun is used in French, the sentence contains one or more indicators of the grammatical gender (see Harley 1998). Francophone students in intensive ESL classes fail to produce English plurals correctly, even when they are fairly advanced. One ESL student insisted to me that 'English people don't always add the -s.' The plural -s exists in written French, but it is not pronounced in the oral language. Apparently this student 'heard' unpronounced plurals in oral English.

In their research, VanPatten and his colleagues create situations in which understanding the meaning of a sentence requires learners to focus on the specific linguistic features which, in other situations, they overlooked because they could interpret the sentences with the help of contextual clues. VanPatten and Cadierno (1993) observed that university students of Spanish as a foreign language used contextual clues and thus gave the appearance of understanding the flexible word order rules of Spanish. However, when they had to depend on the language alone, they made errors based on their lack of knowledge of word order. For example, they interpreted *Lo sigue el gato* as meaning 'It [the dog] follows the cat' rather than the correct meaning 'The cat follows it [the dog]'. In this misreading of the sentence, students were showing that the clue in the form of the [object] pronoun was less powerful than their expectation, carried from English, their L1, and confirmed in much Spanish input, that sentences would follow subject-verb-object order. VanPatten and Oikkenon (1996) replicated the study with high school students and found confirmation that it was not the explanation which was provided to learners that led to improvement, but rather the opportunity to give their full attention to understanding how the language form encoded meaning. In his research, VanPatten has maintained the hypothesis that the processing of input for meaning is at the heart of language acquisition. He has adapted Krashen's input hypothesis, however, by making a more precise claim about the kind of input that is beneficial to learners. His pedagogical recommendations are also different in that he proposes that the input needs to

be adapted in very specific ways rather than assuming that, in communicative situations, learners will find the input they need.

In educational institutions where second language learners must learn both their second language and the subject matter of the school, researchers have found that there can be a very long period between the development of an ability to understand language in social contexts and the ability to understand complex ideas which are conveyed in the second language. Collier (1989), Cummins (1984), Hus (1997), and others have shown that after years of education in a second language environment, second language speakers may continue to experience difficulty with language which refers to complex cognitive/academic contexts and in situations where the meaning cannot be derived from contextual cues or prior knowledge. In these situations, gaps in their knowledge of the *language* become apparent. Lightbown and Spada (in press) report on interviews in which teachers in Northern Quebec were asked about the difficulties Inuktitut-speaking learners were having with doing their school work in a second language. Nearly all teachers felt that the students' difficulties were largely due to their lack of mastery of the second language. In that same study, we asked students to perform tasks which forced them to rely on language alone to understand or express relatively complex ideas. We found that many high school students, whose education had been entirely in French or English for five or six years (since grade 3), were still struggling with the second language in situations where they could not depend on rich contextual information to make the meaning clear. When we spoke with some school administrators, however, we were assured that students were very comfortable in using the language and that their academic difficulties could not be due to a lack of language proficiency. Further discussion soon revealed that what these administrators had observed was the students' ability to use the language at the local store or at the hockey arena, not in the context of a history or science lesson.

## CONCLUSION

Some things have changed a lot since I was working on 'Great Expectations' in the early 1980s. The biggest change, perhaps, is the sheer volume of SLA research which has focussed on pedagogical questions. There is no doubt that there is now a rich literature of SLA research which can help shape teachers' expectations for themselves and their students, and provide valuable clues to effective pedagogical practice. Nonetheless, there remain a number of concerns regarding the application of research findings to classroom practice, and Evelyn Hatch's (1978) admonition to 'apply with caution' is as pertinent now as it was then. Unfortunately, such caution is not always used. For example, Truscott (1996, 1999) uses SLA research findings to support the recommendation that feedback on error has no place in the FL/SL classroom, and Krashen (1989) claims that research confirms that pleasure reading will eliminate the need for guided instruction in L2 vocabulary acquisition. Such

recommendations for pedagogical practice concern me for two reasons. First, I don't believe that they are consistent with much of the classroom SLA research cited above. A second concern is that they invite teachers to engage in pedagogical behaviour which is not compatible with their understanding of their role as teachers. This is not to say that anything which goes against teachers' intuitions is incorrect. For one thing, as the review in the first section of this paper makes clear, our pedagogical intuitions are partly shaped by the theories of language acquisition on which our own training was based. Current researchers challenge those theories, and future research is quite likely to challenge the views we hold now. Thus, it is completely appropriate for teachers and researchers to question intuitions about FL/SL pedagogy and to explore their validity. But when researchers make strong claims that are at odds with the views teachers have developed through their experience with learners, and when those claims are made on the basis of research which has been done in contexts which do not reflect reality as the teachers know it, they are likely to alienate teachers and lead them to dismiss researchers as ivory tower oddities.

It is essential for SLA researchers to enter into dialogue with classroom teachers—not only so that teachers can know what researchers are saying, but also so that researchers can hear what teachers are saying. This may be done in a number of ways. Some examples of fruitful collaboration between SLA researchers and classroom teachers are Merrill Swain's work with Maria Kowal (Kowal and Swain 1994, 1997), Catherine Doughty's with Elizabeth Varela (1998), and Joanna White's with Céline Goulet (1995). Another way to increase the communication is for researchers to present their work at teachers' conferences and to engage teachers in candid discussion of their ideas. In Quebec, members of the university research community regularly submit a colloquium on 'teacher-friendly research' for the meetings of the ESL teachers' association, which attracts mainly primary and secondary school teachers. The audience often includes the teachers in whose classes the research was carried out. In some years we have been disappointed not to have a larger audience since we were in competition with more 'practical' workshops. But the evidence suggests that the information presented in these sessions does gradually circulate and become part of teachers' professional knowledge.

Since 1985, much SLA has addressed pedagogical concerns, and many young teachers, being trained in university departments where SLA has been given importance, will have SLA as one component of their knowledge base for teaching. This component will shape their expectations about what they can achieve in the classroom. However, it is only when they have tried out some of the pedagogical applications suggested by SLA research that they will understand what it really means for their own teaching context. A study of how grade 6 francophone students in intensive ESL classes in Quebec acquire question forms requires interpretation and reflection before it can be seen as relevant to other language learning situations. Indeed, my own students

constantly ask me about the relevance of our studies of learning in intensive ESL to the learning which can be achieved in the two-hour-a-week ESL classes which are offered to most francophone students in Quebec. How much less might they be immediately interpretable and applicable in an ESL classroom for Hmong-speaking adolescents in Minneapolis? An elementary classroom for Inuktitut-speaking children in Northern Quebec? Students of English as a foreign language in a German Gymnasium? A classroom with 80 students in South Africa?

Differences in both the opportunity and the need to use the language outside of school, differences in L1 literacy experiences, differences in L1–L2 language distance, differences in the organization of the school and classroom, and many other factors contribute to differences in the kinds of classroom practices which will be effective in different contexts. The existence of these different realities reinforces the need for more classroom-based research in an even wider range of contexts. As Valdman (1993) argued, there is a great need for replication studies in many areas of research. This need is particularly acute in classroom SLA research. In light of the number of influences on language teaching in different contexts, the need for replication studies as well as action research by individual teachers is even greater.<sup>7</sup> Nevertheless, it is not the details of the individual studies that can be ‘applied’ but rather the general principles which they reflect.

SLA research findings do not constitute the only or even the principal source of information to guide teachers in their daily practice of the art and science of second and foreign language teaching. Teachers will make their decisions on the basis of many different factors. That has always been true. In 1966, Carroll characterized teachers as, on the one hand, the ‘standpat traditionalist,’ who has found all the right answers and is determined not to let anyone persuade him/her that there is any reason to change and, on the other hand, the ‘impressionable adventurer,’ who is convinced that whatever is new is better than what was there before. Carroll says, ‘Somewhere between these two extremes I hope we find the majority of teachers, teachers who have convictions about the soundness of their teaching techniques but are open-minded and interested in new ideas, materials, and techniques that stem from research and development, with a readiness to try out these techniques in their classrooms’ (1966: 95). No matter how sound the research on which new ideas, materials and techniques are based, pedagogical innovations must be implemented and adapted according to local conditions, the strengths of individual teachers and students, the available resources, the age of the learner, and the time available for teaching. Everybody knows that.

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## NOTES

- 1 In this paper, for reasons of space and also because of my own research focus, I will concentrate on research which has been carried out with primary and secondary school learners. In addition, and for the same reasons, I will focus on North American research. Happily, Rosamond Mitchell's (2000) anniversary article covers some of the history of language teaching and related research in Britain.
- 2 It has to be acknowledged that some experienced teachers, especially at the secondary school level, remained sceptical of the dramatic changes in pedagogical practice and made few if any changes in their way of teaching. See also Mitchell and Hooper (1991), Rampton (2000), and Spielmann (1992), for evidence that in many other places as well, CLT has not replaced structure-based teaching. Other teachers took from the new approach what they thought was good and retained what they liked from their previous pedagogy. Nevertheless, new teachers as well as many experienced teachers, especially at the primary school level, embraced CLT with enthusiasm.
- 3 Allan Forsyth, the person responsible for the development of that innovative comprehension-based approach to ESL learning, did not base his program on Krashen's comprehensible input hypothesis, however. His inspiration for the program design was his observation of his young francophone children's Saturday morning ritual of watching television cartoons in English. He was struck by the fact that they were completely relaxed and receptive to the language input provided by the short, simple, and entertaining television shows.
- 4 Of course, many researchers never lost sight of the importance of the first language as one of the significant contributors to the shape of learners' interlanguage, and L1 was an integral part of the original interlanguage hypothesis (Selinker 1972). Even though some argued that L1 had relatively little impact on SLA (e.g., Dulay *et al.* 1982), others, such as James (1971), Kellerman (1977), Schachter (1974) continued to remind their colleagues that learners' interlanguage might be misinterpreted if L1 influences were not taken into account.
- 5 As one of the reviewers pointed out, Spada and Lightbown (1999) report that two students in their study 'went up 2 stages' between the pre-test and the post-test. There is no reason to believe that students who 'went up 2 stages' had skipped the intervening stage. It is at least as likely that we had missed the transition since there was a period of several weeks between the tests. The more general finding among the students in the study, however, was that there was no *stage* change at all. This was attributed to the students following the French-influenced rejection of inversion with nouns which is mentioned under generalization 2.
- 6 European readers may find this surprising, but French immersion teachers do not always insist on the polite *vous* when students address them. Furthermore, many

French Canadian teachers use *tu* in addressing the whole class: *Tu prends ton cahier et tu écris la date.* ['You (singular) take your (singular) and you (singular) write the date.'] Thus French immersion students often remain confused about the use of the

different forms of 'you' even after years of immersion instruction.

7 But see Polio and Gass (1997) for a discussion of some of the reasons such replications are so rare.

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## APPENDIX

Some of the books, published since 1985, which are devoted to classroom research on SLA or the impact of SLA research on classroom learning.

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