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SLA research in the classroom/ SLA research for the classroom

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INTRODUCTION

Second language acquisition (SLA) research is one of many sources that second and foreign language (SL/FL) teachers may draw on in making decisions about their pedagogical practice. In Lightbown (1985a), I proposed ten generalisations that I considered relevant to SL/FL teaching[1]. In Lightbown (2000), I revisited those generalisations, looking at research that has been published more recently and giving special attention to studies that have been carried out *in the classroom.* The generalisations are reviewed and updated here. Of particular interest are studies in instructional settings where communicative language teaching (CLT) and content-based language teaching (CBLT) have replaced more traditional approaches[2].

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

Krashen (1982 and elsewhere) made a distinction between *acquisition* (language knowledge that develops incidentally as learners focus on *meaning* in comprehensible input) and *learning* (knowledge about language gained through formal instruction or metalinguistic analysis). Research has provided support for the hypothesis that second language (L2) learners acquire some linguistic features without intentional effort on their part or pedagogical intervention on the teacher's part. For example, young English-speaking students in French immersion classes focus their attention on following instructions and learning the subject matter of their school programme. In addition, they acquire the ability to understand both written and spoken French and to produce it with a considerable degree of fluency and confidence (Lambert and Tucker, 1972; Swain, 1991)[3].

Research on peer interaction 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 they do when interacting with the teacher, (3) can provide each other with feedback, in the form of clarification requests and negotiation for meaning, and (4) benefit from more one-to-one conversation than they can get in a teacher-centred 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.

The effectiveness of "comprehensible input" in language acquisition has been explored in a number of studies. Krashen and his students have carried out studies 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". Elley (1991) reviewed a number of studies, including his own, in which young L2 learners read or were read to in the target language. The findings consistently showed that students who had access to more reading activities learned more of the second language than students in audio-lingual instruction. However, learners benefited even more when their reading was supplemented by interaction with a teacher (Elley, 1989; see also Zimmerman, 1997).

Lightbown (1992) reported on a programme in New Brunswick, Canada, where 8- to 10-year-old francophone learners of English as a second language had their entire instructional experience in the form of listening/reading sessions. Students spent daily half-hour classes with a book they had chosen from a large collection displayed in the classroom. Each book had an accompanying audio

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tape that students listened to, using 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[4]. At the end of three years of this programme, the students in the listening/reading 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 listening/reading programme did not perform as well on most measures as students who had more opportunity for oral and written production tasks with the guidance of a teacher (Lightbown, Halter, White and Horst, 2002).

Thus, while there is wide agreement that learners come to know things that were never the subject of explicit teaching, there is also evidence that instruction can enhance language acquisition.

2. The learner creates a systematic interlanguage which is often characterised by the same systematic errors as a child makes when learning that language as his/her first language, as well as others which appear to be based on the learner's own native language

Corder (1967) suggested that learners' errors provided insight into the system underlying their language use, and innumerable studies have confirmed that learners develop an "interlanguage" (Selinker, 1972) with 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 interlanguage patterns that do not match what they have been taught (Lightbown, 1991).

In the early 1970s, SLA researchers emphasised the importance of looking at actual samples of learner language rather than at contrastive analyses that predicted what learners would find easy or difficult (e.g. Richards, 1973). Many studies revealed similarities in the interlanguages of students with different first languages (L1). Some researchers took quite radical positions, suggesting that the learner's L1 had relatively little influence on the interlanguage (e.g. Dulay, Burt and Krashen, 1982). Others, such as James (1971), Kellerman (1977) and Schachter (1974), continued to show that L1 influence needed to be taken into account, and studies of L1 influence regained their place in the mainstream of SLA research (Gass and Selinker, 1983; Odlin, 1989).

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. Harley and King (1989) found that the verbs used in the written French of English-speaking children in French immersion classes 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. 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*".

L1 influence is seen not only in the language that learners produce. What students perceive and what they believe to be grammatical sentences are also influenced by L1. For example, on a sentence correction task, French speaking students learning English accepted questions such as "Can you play outside?" but rejected "Can the children speak Spanish?" (Lightbown and Spada, 2000; and Spada and Lightbown, 1999). 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).

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

Classroom research 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 that they follow is not substantially altered by instruction (e.g. R. Ellis, 1989). When classroom input is very restricted or when learners' production consists largely of memorised formulas, there is sometimes the appearance of difference (Weinert, 1987). The restricted or distorted samples of the target language that learners are exposed to in some types of language instruction can lead to a developmental path that appears to reflect 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 sequence of acquisition of certain linguistic features.

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The research on developmental sequences makes it clear that *progress* 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, while systematic, is still far from target-like (see Bley-Vroman, 1983). For example, early stage learners may ask formulaic questions correctly (What's your name?) before they *progress* to asking incorrect questions which are original and reflect their developmental stage (*Why the children want to play?). The latter questions are less "accurate" than the former because they do not conform to the target language. But they reflect developmental progress beyond the memorised formulas of the earlier stage and the learners' developing knowledge of the way questions are formed.

Pienemann's (1985) "teachability hypothesis" grew out of earlier research (Meisel, Clahsen and Pienemann, 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 operationalising an idea that teachers have always intuitively held: learners can be taught only what they are ready to learn. Pienemann (1988, 1999) tested this hypothesis with learners of different ages and in different learning environments. 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 that included many examples of forms typical of a particular developmental stage in English questions did not appear to be more effective for learners at the "right" stage. Nevertheless, the learners who made progress in this instructional environment moved forward according to the sequence of English question development proposed by Pienemann, Johnston and Brindley (1988).

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. There are some obvious practical difficulties. Detailed descriptions of developmental sequences exist for only a few language features in a very small number of languages; determining the level of all students in a given classroom is not feasible. Even if the practical difficulties were solved, such a proposal could lead to the teaching of language features in isolation – a practice that has been largely discredited – at least as the *primary* approach to teaching language (see Lightbown, 1998 for discussion). The value of developmental sequences research is in helping teachers adapt their expectations of how progress can be seen in something other than an increase in accuracy.

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4. Practice does not make perfect

This does not mean that practice, broadly defined, is not an essential part of language learning! In stating this generalisation in 1985, I was thinking of practice as it was often defined in audio-lingual classrooms – pattern practice and drill in isolation from meaningful language use. As suggested under generalisation number 3, when learners drill and memorise language material that 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 memorised chunks, can drop and then rise 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 recognising the components which make up the chunks of language they are frequently exposed to. For example, Harley (1993) showed that French immersion students cannot always distinguish between "je", (the first person singular pronoun) and "j'ai" (the pronoun plus the verb "have"). Students who "practise" "**J'ai aime ça*" (translated word-for-word as "I-have like that") will have to unlearn, or at least reanalyse, these sentences.

Several researchers have pointed out the positive role for formulaic material in L2 acquisition, both in and out of classroom contexts (Mitchell and Martin, 1997). Myles, Hooper and Mitchell (1998) and Myles, Mitchell and Hooper (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 have examined the way in which learners use rote-learned material outside the situations in which it was originally taught. Learners used the complex material for its communicative value while at the same time beginning to use the less target-like language that was more typical of their developmental level.

The extent to which learners use the complex, memorised 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, some current research 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 (N. Ellis, 1996; Wray, 1999).

When practice is defined as experience in using language for meaningful interaction, including opportunities for thoughtful retrieval of language features that have emerged in learners' interlanguage but have not become automatic, then practice is likely to be more predictive of long-term success.

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

The relationship between knowing "rules" for language use and actually using language in a way that is consistent with those rules is not straightforward. Native speakers use language fluently and accurately but are rarely able to articulate the rules that characterise their use of the language. Second language learners who have had extensive instruction in the language may, in contrast, be able to articulate rules that their spontaneous language use does not reflect. However, classroom SLA research has shown that learners do benefit from instruction that focusses their attention explicitly on language form, albeit not necessarily in the form of "rule" learning (N. Ellis, 1995; Spada, 1997). Schmidt (1990, 1994) has argued that learners do not acquire features in the target language that they do not first "notice", and the role of instruction may lie primarily in increasing the likelihood that learners will have better opportunities to notice how the language works. R. 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 the ability

to use those features if they are developmentally ready to do so (see also Lightbown, 1998).

J. White (1998) tried to help young francophones learn the English gender agreement rule for possessive determiners *his* and *her* by exposing them to "enhanced input" (Sharwood-Smith, 1993) in the form of many, many examples in stories, games, puzzles and poems. She enhanced the input by using bold type, underlining or italics to highlight *his* and *her* in the texts students read. She found that students exposed to this type of input made more developmental progress than students who were not exposed to such a flood of enhanced input. In a follow-up study, she provided learners with more explicit information about the relationship between the determiners and the nouns that determine their gender (J. White, 1999). She found that these learners used possessive determiners at a more advanced stage on an oral communication task than those who had been exposed to correct input but had not learned the rule.

L. White (1991) has argued that L2 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. White points to the example of francophone learners who quickly learned that English (unlike French) allows adverbs between the subject and the verb (I always take the bus = **Je toujours prends l'autobus*). However, they had difficulty getting rid of the incorrect generalisation that English (like French) also allows adverbs between the verb and object (*I take always the bus = *Je prends toujours l'autobus*). Once they have begun to use sentences with adverbs between verb and object, they will have difficulty noticing that proficient speakers of the L2 are *not* doing this[5]. White argues that, in order for students to retreat from this overgeneralisation, they require "negative evidence" in the form of instruction or corrective feedback. 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 effective in getting learners to use and accept correct Subject-Adverb-Verb-Object sentences, but learners continued to use and to accept the incorrect Subject-Verb-Adverb-Object sentences. However, more explicit instruction, including corrective feedback, did help learners recognise the ungrammaticality of the nontarget sentences (White, Spada, Lightbown and Ranta, 1991).

Other researchers have also found evidence for a relationship between explicit knowledge and L2 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 R. Ellis, 1998). A number of other studies have also 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 support for the inclusion of focus on form in the CLT and CBLT classroom (see Long, 1991). Norris and Ortega's (2000) meta-analysis confirmed that form-focussed instruction does make a positive difference for classroom SLA. Nevertheless, there continues to be a 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

Learners' spontaneous language use does not suddenly change when they are told that they have made an error. This does not mean, however, that feedback on error is not beneficial. The evidence suggests that error feedback can be an effective type of form-focussed teaching if it is focussed on something that learners are actually capable of learning and sustained over time. Lightbown (1991) observed a teacher who offered frequent, often humourous, 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 a boy beside the table." This error had occurred 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.

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One type of feedback that has been the subject of a good deal of SLA research in CLT classes is the "recast". In a recast, a teacher 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). Studies where learners interact one-to-one with a more proficient interlocutor have shown beneficial effects of focussed recasts, that is, recasts in which a single linguistic feature is targeted for recasting (Leeman, 2000; Long, Inagaki and Ortega, 1998; Mackey and Philp, 1998). Findings from classroom studies are not as clear (see Nicholas, Lightbown and Spada, 2001 for review). For example, in a descriptive study of corrective feedback in French immersion classes, Lyster and Ranta (1997) showed how difficult it can be for students in CBLT to distinguish between feedback that confirms the content of what they have said from feedback that provides information about linguistic accuracy or pragmatic appropriateness. 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. Lyster and Ranta (1997) reported that the recast was the most frequent type of teacher

feedback, but it was also the type of feedback least likely to lead to uptake (an immediate response by the student).

Lyster (1998) 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, whether the form was correct or not. It is likely that, without other cues, learners cannot tell whether their teacher's recast is intended as a non-corrective repetition, rephrasing a correct response, or an indication that, while content is correct, there is an error in the form of the original utterance. Students were more likely to produce uptake when the teacher made it clear that a change was expected (see also Chaudron, 1977).

In an experimental classroom study, Doughty and Varela (1998) used a two-step technique that 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. Using a "corrective recast" technique, the teacher first repeated a student's erroneous utterance, usually adding emphasis to the incorrect form that 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. This technique gave students clear information about what the teacher wanted them to pay attention to. Students who received the experimental feedback treatment improved in their use of past tense forms. The students who continued in the regular science classes without such feedback did not show the same improvement.

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These findings with respect to feedback on error are congruent with Spada's (1997) and N. Ellis' (1995) reviews of research on the role of form-focussed instruction in SLA (see also Norris and Ortega, 2000). Both concluded that the studies showing an effect for instruction in the context of CLT were those in which there was an element of explicitness in the instruction.

7. For most adult learners, acquisition stops ... before the learner has achieved native-like mastery of the target language[6]

... and ...

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 that focusses on the long-term outcomes of L2 learning (see Long, 1990 for a review)[7]. The Critical Period Hypothesis is often interpreted simplistically as "younger is better" for L2 acquisition. However, in the context of the foreign language classroom, the relevance of the Critical Period Hypothesis is questionable. Native-like mastery of a target language is rarely attained, even when learners begin foreign language instruction 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. All other input comes from learners like themselves, and learners who hear and understand each other inevitably reinforce some of the non-target aspects of their shared 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 quality and 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. They have thousands of hours of contact with the language. The number of hours for FL/SL learning is far smaller. Furthermore, in programmes where learners begin learning at an early age but are not able to continue with appropriate classes, the proficiency they develop may be lost. In instructional settings where the total amount of time is limited, instruction may be more effective 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 use the language outside the classroom[8].

Research in Quebec has shown that students who had 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, Halter, Lightbown and Spada, 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

Learning the vocabulary, morphology, syntax and pronunciation of a new language is a very great challenge, and many students never achieve mastery of these aspects of a foreign language. As noted above, native speakers and learners who are exposed to a second language in their family

or community from early childhood will have thousands of hours of exposure to the language, while classroom learners usually count their exposure in terms of hundreds of hours at best. The magnitude of the task of learning a second language, especially one that belongs to a different language family, can hardly be overstated. To be sure, there are individual differences in language learning aptitude, and these differences make the task more manageable for some learners than for others. Even for "talented" learners, however, language learning is a lifelong challenge.

Furthermore, learning a language means more than learning vocabulary and morphosyntax. Students in foreign language learning environments face a particular challenge because their classroom exposure to the language usually leaves them without adequate opportunities to learn appropriate pragmatic and sociolinguistic features of the language (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 learn only a "classroom register" of French and do not learn the informal register appropriate for use with adolescent francophones who would be their peers. Lyster (1994) found that they also have few opportunities to learn the formal register appropriate for dealing with adult strangers such as the respectful second person singular pronoun *vous* or the conditional form of verbs[9].

10. A learner's ability to understand language in a meaningful context exceeds his/her ability to comprehend decontextualised 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 that 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 CBLT. However, a number of researchers have observed that some features of language 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, L. 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 while teaching history lessons, thereby reducing the frequency with which students were exposed to past tense forms in contexts referring to past events.

Even when forms are frequent 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). One francophone 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.

VanPatten has gone beyond Krashen's hypothesis by making a more precise claim about the kind of comprehensible input that is beneficial to learners. His pedagogical recommendations are also different. Unlike Krashen, he does not assume that learners will find the input they need when they simply get the general meaning of the utterances they hear. Instead, VanPatten argues that input must be adapted in very specific ways so that learners will process it for language acquisition as well as for comprehension (see also Sharwood-Smith (1986) for discussion of this distinction). VanPatten and Cadierno (1993) observed that, by using contextual cues and world knowledge, university students of Spanish as a foreign language gave the false impression that they understood the flexible word order rules of Spanish. The researchers created instructional activities in which understanding the meaning of a sentence required learners to focus on specific linguistic features. This led to improvements in learners' ability to interpret sentences with flexible word order. VanPatten and Oikkenon (1996) replicated the study with high school students. Some students got both explanation of the flexible word order rules and contrived input, while others were exposed only to the contrived input. They confirmed that it was not the explanation that led to improvement but rather the necessity of giving their full attention to how the language form encoded meaning.

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In educational institutions where L2 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, students may continue to experience difficulty with language that 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.

Spada and Lightbown (2002) 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. 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. In that same study, we asked students to perform tasks that forced them to rely on language alone to understand or express relatively complex ideas. We found that many students, whose education had been entirely in French or English for five or more years, were still struggling with the second language in situations where they could not depend on rich contextual information to make the meaning clear.

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CONCLUSION

There is a rich literature of SLA research that 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 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. In my view, such recommendations for pedagogical practice are not consistent with much classroom SLA research cited above. Furthermore, they encourage teachers to engage in pedagogical behaviour that is not compatible with their understanding of their role as teachers. This is not to say that anything that goes against teachers' intuitions is incorrect. For one thing, our pedagogical intuitions are partly shaped by the theories of language acquisition on which our own training was based. Current research challenges 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 that has been done in contexts that 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.

Since 1985, much SLA research has addressed pedagogical concerns, and many young teachers 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. SLA research is an important source of ideas for SL/FL teaching, but it is not the only or even the principal source of information to guide teachers in the art and science of SL/FL teaching. 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 organisation 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. There is a great need for replication studies in many areas of research (Valdman, 1993) and this need is particularly acute in classroom SLA research. Pedagogical innovations must be implemented and adapted according to local conditions including the strengths of individual teachers and students, the available resources, the age of the learners, and the time available for teaching.

1 The ten generalisations were first discussed in *Applied Linguistics* (Lightbown, 1985a, 2000) published by Oxford University Press.

2 The emphasis is on research carried out with primary and secondary students.

3 Although English and French are Canada's official languages, the day-to-day reality for French-speaking children learning English in Quebec and English-speaking children learning French in other parts of Canada is that they are essentially in a foreign language environment. That is, they do not have more opportunities to hear the language outside of school than would, for example, a British child learning French in the UK.

4 Allan Forsyth, the person responsible for the development of that innovative comprehension-based approach to ESL learning, did not base his programme on Krashen's Comprehensible Input Hypothesis. His inspiration for the programme 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.

5 In classrooms where students share the same L1, this is especially problematic, because learners actually do hear other speakers produce the same non-target forms.

6 In Lightbown (1985a), the word "fossilizes" appears where the ellipsis sign appears here. I now think (and should have known then) that this is not a proper use of Selinker's (1972) term. It is much more useful to think of 'fossilization' in terms of the persistence of

errors which, given the learner's overall level of language development, would be expected to have been overcome. What this definition points to is that the learner may reach a high level of proficiency, and may continue to develop in a variety of ways – learning new vocabulary, new ways of interacting, new idiomatic expressions, etc. but that certain underlying features that are similar to features of the L1 remain just below the surface and tend to emerge in the learner's production under certain conditions.

[7] Some researchers argue that there is limited support for the Critical Period Hypothesis, even for long-term outcomes (see, for example, Birdsong, 1998; Bialystok, 1997; Singleton, 1989; White and Genesee, 1996).

[8] 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).

[9] 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.

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