*Annual Review of Applied Linguistics* (2000) **20**, 199–212. Printed in the USA.
Copyright © 2000 Cambridge University Press 0267-1905/00 $9.50

# FRENCH IMMERSION RESEARCH IN CANADA: RECENT CONTRIBUTIONS TO SLA AND APPLIED LINGUISTICS*

**Merrill Swain**

## INTRODUCTION

This review chapter addresses two questions: What has the recent research conducted in French immersion programs in Canada contributed to our understanding of second language acquisition (SLA)? What has it contributed to the broader field of applied linguistics? In this chapter, I also consider briefly what the research contributions of the coming decade might be and discuss some of the obstacles that may be faced in Canada in continuing to conduct research concerned with French immersion education.

## FRENCH IMMERSION EDUCATION AS A TYPE OF BILINGUAL EDUCATION

Bilingual education has been defined as "schooling provided fully or partly in a second language with the object in view of making students proficient in the second language while, at the same time, maintaining and developing their proficiency in the first language and fully guaranteeing their educational development" (Stern 1972). Depending on the social, linguistic, educational, and political contexts, these goals of bilingual education can be achieved in many ways, immersion education being one of them.

French immersion (FI) education in Canada takes several forms, but the underlying common element is that students study content material such as mathematics, history, geography, and science for at least 50 percent of the school day using French, a language which they are also simultaneously learning. Learning through the medium of a second language (L2) is certainly not a new phenomenon, but a number of characteristics combine to make immersion education different from other forms of bilingual education. In addition to the L2 being a medium of instruction, a number of further characteristics, discussed in Swain and Johnson (1997), identify the Canadian immersion curriculum:



https://doi.org/10.1017/S0267190500200123 Published online by Cambridge University Press

- The immersion curriculum parallels the local L1 curriculum;
- Overt support exists for the L1;
- The classroom culture is that of the local L1 community;
- Students enter with similar (and limited) levels of L2 proficiency;
- Exposure to the L2 is largely confined to the classroom;
- The teachers are bilingual;
- The program aims for additive bilingualism.

There are presently over 300,000 students enrolled in elementary or secondary French immersion programs in Canada (Office of the Commissioner of Official Languages 1996).

French immersion programs have prospered in Canada for over three decades, fostered by the educational, political, and economic motives of those involved. Simultaneously, research has contributed to the growth and development of FI by allaying the fears of anxious parents and educators with its positive findings (e.g., Genesee 1987, Lambert and Tucker 1972, Swain and Lapkin 1982) and by enhancing our understanding of aspects of second language acquisition and applied linguistics.

## CONTRIBUTIONS OF FI RESEARCH TO APPLIED LINGUISTICS

The major contributions of FI research to the field of applied linguistics have been threefold. First, immersion education has heightened our recognition of the influence of societal conditions on the outcomes of bilingual education, in particular, of the importance of the distinction between minority and majority language groups. But it has also shown how a particular model of bilingual education can be adapted and extended by different groups in society to serve their own particular purposes. Johnson and Swain (1997) provide examples of immersion being used outside Canada by majority language groups to learn a minority language (e.g., Swedish in Finland), a foreign language (e.g., French in Australia), or a language of power (e.g., English in Singapore), and by minority groups for language revival and language support (e.g., Basque in Spain).

Second, the contributions of disciplinary knowledge and related research paradigms to applied linguistics have been amply demonstrated in the FI research literature. Recent work has drawn on a variety of disciplines, for example, linguistics (Warden 1997), psycholinguistics (Harley and Hart 1997), sociolinguistics (Tarone and Swain l995), anthropology (Weber and Tardif 1991), and education (Kowal 1997). Correlational (Rehner and Mougeon in press), experimental (Day and Shapson 1991), observational (Lyster and Ranta 1997), and ethnographic and case study (Dagenais and Day 1998; in press) methodologies have all been used in reaching a deeper understanding of the processes and products of FI education.

https://doi.org/10.1017/S0267190500200123 Published online by Cambridge University Press

Third, French immersion research has contributed directly to various subfields of applied linguistics. An annotated bibliography published by the Canadian Association of Immersion Teachers (CAIT) documents the range of issues which have been investigated concerning FI education in Canada. Tardif and Gauvin (1995) list theses and research projects that have been conducted between 1988 and 1994 by researchers based at Canadian universities. Recent research includes contributions to language policy (e.g., Hart, Lapkin and Swain 1998, Turnbull, Lapkin, Hart and Swain 1998), second language pedagogy (see Lyster l995 and Harley 1998a for recent reviews; see also Swain 1996), and SLA. Its contributions to SLA form the basis of the next section.

## CONTRIBUTIONS OF FI RESEARCH TO SLA

FI research has added to our understanding of SLA in several important ways. I will consider these under the following headings: 1) output and SLA; 2) negative feedback and SLA; 3) focus on form and SLA; 4) the role of L1 and SLA; 5) age and SLA; and 6) language testing and SLA. Immersion research provides a more controlled environment in which to study pedagogical issues than is typically the case in ESL research where outside exposure to the language may overwhelm classroom effects. This control gives added weight to immersion findings.

### 1. Output and SLA

The notion that output, not just input, is important for SLA derives largely from the research in FI. Across a number of studies, it has been shown that, in spite of considerable amounts of rich comprehensible input, immersion students' otherwise fluent oral and written French is markedly non-native, most obviously in its grammatical features. Swain (1985) suggested that this may be due, in part, to the relatively few opportunities students have to use their French: Producing French may force learners to pay more attention to (or to notice) how the language is used to express one's intended meaning than does comprehending it. That is, while attempting to produce the target language, learners may notice that they do not know how to say (or write) precisely the meaning they wish to convey, bringing to their attention something they need to discover about their second language. This need to know, in turn, triggers cognitive processes that might generate new linguistic knowledge or consolidate their existing knowledge (Swain 1995, Swain and Lapkin 1995).

Supporting evidence for this claim comes from an observational study conducted in three grade-two FI classes (Netten and Spain 1989). Of the three classes, one class (Class A) had a low average scholastic ability score (54th percentile) relative to the other two classes, yet performed unexpectedly well on a test of French reading comprehension and much better than Class C whose average scholastic ability score was much higher (73rd percentile). Observations in these classes revealed that, in Class A, students "...were constantly using, and experimenting with, the second language as they engaged in communications of an

https://doi.org/10.1017/S0267190500200123 Published online by Cambridge University Press

academic and social nature with their peers and the teacher…," whereas in Class C, students "…had limited opportunities to use the second language to engage in real communication acts" (1989:494).

A second way in which producing language may serve the language learning process is through hypothesis formation and testing. Swain and Lapkin (1995) provide examples in which grade-eight FI learners used their output as a means of trying out new language forms (hypotheses) in situations in which feedback from external sources was not available; thus, there was nothing to test their hypotheses against except their own internalized knowledge. In more usual circumstances, however, learners are able to obtain information from external sources about the accuracy of their hypotheses, leading them to modify their output. Swain (1993) suggested that this modified (reprocessed) output may be considered to represent the leading edge of a learner's interlanguage.

A third function of output is its metalinguistic function—learners use language to reflect on their own, or others', language use (Swain 1995). This metatalk is a surfacing of language used to solve linguistic problems encountered during language production, and, as such, represents language used for the cognitive purposes of learning language. Metatalk surfaces naturally when students collaborate on language production tasks (Swain and Lapkin 1998).

The above perspective on output has been instrumental in determining the sort of exploratory studies conducted recently in French immersion classes by researchers at the Ontario Institute for Studies in Education of the University of Toronto (OISE/UT) (Kowal 1997; 1998, Kowal and Swain 1994; 1997, LaPierre 1994, Spielman to appear, Swain 1998a; 1998b, Swain and Lapkin 1998). In these studies, we have begun to try out in grade-seven and grade-eight FI classes different tasks that are communicatively oriented, but in which communication is, in part at least, about language; that is, students engage in tasks in which they will talk about—and consciously reflect on—their own output. Our findings provide evidence that the metatalk students engage in represents second language learning in progress. In these studies, later language use has been traced back to dialogues occurring as the students worked collaboratively to express their intended meaning and carry out the language production task at hand. The study of the roles of output in SLA has thus evolved into the study of collaborative dialogue: These dialogues (in the first language or target language) engage speakers in linguistic problem solving and knowledge building (Swain in press).

2. <u>Negative feedback and SLA</u>

Lyster (1998a; 1998b; 1999, Lyster and Ranta 1997) has carried out a set of descriptive studies in primary (grades four and five) FI classes. His main purpose has been to identify different ways in which teachers provide corrective feedback to their students and the effectiveness of these types of feedback as indicated by immediate learner repair (uptake). His data (consisting of over 900

https://doi.org/10.1017/S0267190500200123 Published online by Cambridge University Press

error sequences in 18 hours of recordings of French language arts and content classes) reveal that these FI teachers used a number of different correction techniques: recasts, explicit corrections, and what Lyster labels "negotiations of form" (i.e., elicitations, metalinguistic clues, clarification requests, and repetitions of error). Negotiation of form techniques "push" learners to reprocess their output; that is, teachers guide their students to draw on their own resources and repair their own (or other's) errors, thus actively engaging students.

Lyster examined which type of corrective feedback tended to be used with different types of student errors (grammatical, lexical, or phonological), and which type of feedback was most likely to lead to student uptake. He found that negotiation of form tended to follow lexical errors, while recasts tended to follow grammatical and phonologicial errors. Interestingly, negotiation of form led to more frequent immediate repair by learners than recasts or explicit corrections for lexical and grammatical errors. Phonological repairs, however, were more likely to follow recasts, suggesting that the various types of negative feedback may be differentially effective for different types of errors.

Lyster examined further the recasts (377 in all) in his classroom-based data, comparing their pragmatic functions to the teachers' much more frequent use of noncorrective repetition. His findings led him to question the potential of recasts to be noticed as negative feedback by students in these FI classes. Specifi-cally, Lyster found that "...recasts and noncorrective repetition fulfill identical functions distributed in equal proportions" (1998b: 51). Furthermore, unlike other forms of negative feedback, recasts included indications of teacher approval (positive response to the content of students' ill-formed utterances) in a little over one quarter of all recasts. Approval also accompanied the same proportion of noncorrective repetitions and teacher topic-continuation moves immediately following errors when no corrective feedback was provided.

Lapkin and Swain (1996) also describe their observations in an immersion class. They were interested in examining how the teacher integrated language (particulary vocabulary) and content teaching. In this grade-eight class, while teaching a science lesson, the teacher pushed his students to make accurate and sophisticated use of target words and associated grammatical constructions. The corrective feedback provided in the context of this science lesson facilitated the students' attempts to express what they wanted to say at the very moment they were struggling to produce it, a particularly useful time to support language learning (Lightbown 1998). The reason we asked this teacher if we could observe in his class was because his students had outperformed students in other classes in French, all of whom were part of a large-scale evaluation of 26 grade-eight immersion classes (Lapkin, Hart and Swain 1991).

https://doi.org/10.1017/S0267190500200123 Published online by Cambridge University Press

## 3. Focus on form and SLA

Each of the studies considered under the previous two headings could also be considered under this more general heading: Output and negative feedback are both thought to play a role in SLA precisely because they lead learners' to notice and attend to language form. Several additional studies have also considered this phenomenon. These studies differ from those mentioned above in that curriculum materials with form emphases were prepared in advance and were used to teach FI students over a prolonged period of time. The instructional materials emphasized a focus on form through enhanced input, drew particular attention to form/function links, ensured that students had opportunities to produce the language feature being focused on through group work and collaborative learning, and provided students with feedback about the correctness of their language use. The performance of FI students receiving the focused instruction has been compared with other FI students who did not receive it using oral and written pre-, post-, and delayed post-tests.

A number of early experiments followed this paradigm. Harley (1989) provided grade-six FI students with focused input and output opportunities over an eight-week period to promote the perception and accurate use of form/meaning distinctions between the imperfect and the compound past verb tenses. Day and Shapson (1991; 1996) focused on teaching grade-seven FI students the use of the conditional in hypothetical situations and in polite requests over a six-week period. Lyster (1994) focused on teaching grade-eight FI students sociolinguistic aspects of French over a five-week period. Findings are consistent in showing superior results with the experimental groups relative to the comparison groups. However, sometimes the superiority was not maintained in the long run, or was not evident for all measures.

More recent experiments include Harley (1998b), Harley, Howard and Hart (1998) and Warden (1997); the focus of instruction for these studies was grammatical gender at grades two and eleven respectively. Harley's study suggests that a focus on form can have an impact even on young children. The instructional materials included a variety of children's games designed so that success depended on getting the gender right. For example, students played "Simon Says" in which they performed contrasting actions according to the gender of the noun they heard. The treatment extended over a five-week period for about 20 minutes a day. The results showed that the students in the experimental classes became more accurate in assigning gender to familiar nouns than did the comparison students. However, the experimental students were not able to assign the correct gender to unknown nouns based on their characteristic endings, suggesting item learning rather than system learning. Harley (1998b) suggests that, perhaps because so many new words were presented to the children, they were preoccupied with learning and remembering their meaning and were thus unable to pay full attention to the formal aspects that were the intended focus of the experimental treatment. Perhaps, too, "learners base their formal generalizations on prototypical items rather than on a plurality of items, as was the assumption in this study" (Harley 1998b:170).

https://doi.org/10.1017/S0267190500200123 Published online by Cambridge University Press

In Warden's (1997) study with grade-eleven students, the treatment was quite different, and one more appropriate for older students. Also, the issue was not so much a preventive one, but rather one of reversing fossilization: Gender errors were still prevalent in the spoken and written French of these grade-eleven students. The treatment period lasted approximately eight weeks and consisted of form-focused activities designed to make the students aware of word-ending regularities which serve as clues to the gender of French nouns and provide opportunities to use gender markings correctly. Activities included working in groups to find nouns in the dictionary with specific endings and creating and playing games focusing on gender. The experimental students' performance was superior to that of comparison students on discrete-point tests of grammatical gender, but not in a writing assignment or speaking task. However, a fine-grained analysis of the written assignment showed that the experimental students had become more accurate on the nouns whose specific endings were included in the treatment activities.

Overall, the set of experiments conducted in FI classes suggests that there is value in focusing on language form through the use of pre-planned curriculum materials in the context of content-based language learning. Yet, there are indications that if we knew more about how students were processing the target language while engaging in the activities, we might be better able to structure the learning materials. One route to such understanding is to listen to learners as they talk with each other while carrying out specific activities. Their collaborative dialogues can be a source of considerable insight (Spielman to appear, Swain in press).

## 4. The role of L1 and SLA

The role of L1 in SLA is typically considered from the perspective of its positive or negative influence on target language use. Harley (1992), for example, has examined patterns of French language development with cross-sectional samples of grade-one, -four, and -ten FI students. She focused on the French verb system and found considerable transfer from English in the students' production. Students tended to assume not only equivalence in verb meaning across English and French, but also in the constructions that verbs enter into. As Wright (1996) demonstrated with grade-four and grade-five FI students, increasing exposure to verbs through reading materials and related analytical activities, including explicit discussion of L1-L2 contrasts, may lead to lasting improvement in the use of the target verbs.

A different perspective on the role of the L1 in SLA is reflected in our own ongoing research with FI immersion grade-eight students as they work collaboratively on language-focused communicatively-oriented tasks (Swain 1999). As they do so, the students often use English, their L1. We have examined the transcripts of student pairs in an attempt to understand their use of L1. Working from the data, we have isolated three categories of L1 use: 1) using L1 to move the

https://doi.org/10.1017/S0267190500200123 Published online by Cambridge University Press

task along (working out the sequencing of the story being reconstructed, comprehending the meaning of parts of the story, and managing the task); 2) using L1 to talk about the L2 (searching for vocabulary, focusing on form, and translating); and 3) using L1 to establish and maintain interpersonal relations (agreeing/ disagreeing and talking off-task). In the case of the first category, students were using their L1 to mediate their understanding of the task, both in its substantive content and in what was required of them to complete the task. In the case of the second category, the L1 was clearly mediating students' learning of French. And in the case of the third category, it would appear that English was being used to create the affective environment needed to get the task done.

5. Age and SLA

A recent study conducted by Harley and Hart (1997) tested the hypothesis that different components of language aptitude (associative memory, memory for text, and analytical ability) come into play in SLA, depending on the age at which second language learning begins. At the time of testing, all students in this study were enrolled in grade-eleven FI classes. Some of the students had begun learning French in grade one (early immersion group), others in grade seven (late immersion group). All students completed a set of L2 proficiency tests (vocabulary recognition, listening comprehension, cloze test, written production task, and an individual oral test). For the early immersion students, memory for text was the main predictor of proficiency scores; whereas for the late immersion students, analytical ability was the main predictor. These findings suggest that older learners rely on different cognitive abilities than early learners do, with analytical language ability being more closely associated with success in L2 learning for later learners. Additionally, as the L2 proficiency results of the younger and older learners were not substantially different, the results support other evidence that older learners are more efficient learners than younger learners (e.g., Genesee 1981) and do not support the contention (e.g., Felix 1985) that analytic, problem-solving abilities of older learners will interfere with their L2 learning success.

6. Language testing and SLA

Recently the interfaces between SLA and language testing have been questioned and explored in some detail by Bachman and Cohen (1998). In conducting our FI classroom-based research (e.g., Swain and Lapkin 1998), we have come to the full realization that tests used in SLA research can at best measure what researchers assume students will learn from a teacher's or researcher's intervention. However, what students actually learn may be quite different and will depend on a number of factors, including the learner's current knowledge and affective state. Although the tasks we used in our research encouraged students to pay attention to accuracy and form-function links, the students established their own goals and agenda as to what they focused on. Thus, it would seem crucial, if we are to measure the learning that occurs as a result of the research "treatment," that we tailor our tests to what happens during that treatment. Some of this adapting

https://doi.org/10.1017/S0267190500200123 Published online by Cambridge University Press

can be uncovered in the dialogue of students as they interact with their peers during task performance, providing insight into what it is that students do and do not know, and how they come to know it—the real goal of SLA research.

## OBSTACLES TO FURTHER FI RESEARCH IN CANADA

Given the political situation in Canada three decades ago, the innovative FI immersion programs appeared promising as a way to reduce the gap between Canada's two linguistic and cultural solitudes. The federal government was interested in supporting their growth, and it, along with provincial governments across Canada which were concerned about the educational implications of FI, provided the financial support for many program evaluations and related research. However, recent decades have brought political change. The issues are complex and have much to do with Quebec's current moves to separate from the rest of Canada in order to preserve its linguistic and cultural distinctiveness. In this political climate, the goodwill which led many Anglophone parents to enroll their children in FI programs appears to be waning, and enrollments in FI programs have leveled off after a long period of continuous growth. Even the interest of the federal and provincial governments has decreased, as indicated by the considerably reduced amounts of financial support given to subsidize FI programs and to continue research projects. So, as perhaps with any innovation, the biggest threat to its continued existence is its "normalcy." FI programs have become a regular, accepted type of education in Canada, and although pedagogical and political issues still provide a background to their existence, they are no longer seen as exceptional with respect to their challenges, problems, and difficulties. As a result, it is more and more difficult to persuade funders that FI holds considerable promise in furthering our understanding of second language learning and teaching.

## CONTRIBUTIONS OF FI RESEARCH IN THE COMING DECADE

Of course, it is impossible to predict with any certainty the contributions of FI research in the coming decade. However, I think it is likely that the studies reviewed in this chapter have paved the way for further research which will contribute in particular to our understanding of second language teaching and learning processes.

Lyster plans to follow up his classroom observational work with experimental studies: "*nous reconnaissons que l'effet de la négociation de la forme sur l'apprentissage du français langue seconde reste encore à démontrer et à préciser experimentalement*" (1999:378). [We recognize that the effect of negotiation of form on the learning of French as a second language still remains to be demonstrated with experimental rigour.] Harley is continuing her investigations of second language processing at different ages. For our part, we intend to continue to pay close attention to what learners say to each other as they carry out different tasks. Using stimulated recall and more precise measuring instruments, we hope to refine our understanding of FI students' perceptions of French and how

https://doi.org/10.1017/S0267190500200123 Published online by Cambridge University Press

they learn it. Our long-term goal, as with other FI teachers and researchers, is to enhance the learning context for FI immersion students.

There is other research that needs to be done. For example, given the origins of FI in Canada, it is important to know what use immersion graduates are making of their French in the workplace and in social situations with francophones (cf. MacFarlane and Wesche 1995)—we need to understand the "fit" between the reality of FI instruction and the expectation that FI would help to close the gap between Canada's English and French solitudes. And, we need to ask what has been the effect of immersion education in Quebec compared to the rest of Canada. These are highly complex and politically charged questions in the Canada of today, and having some answers would contribute to the growing discipline of applied linguistics.

## NOTES

* My thanks to Alister Cumming, Birgit Harley, Sharon Lapkin, and Miles Turnbull for reading and commenting on an earlier version of this review.

## UNANNOTATED BIBLIOGRAPHY

Bachman, L. and A. Cohen (eds.) 1998. *Interfaces between second language acquisition and language testing research.* Cambridge: Cambridge University Press.

Dagenais, D. and E. Day. 1998. Classroom language experiences of trilingual children in French immersion. *Canadian Modern Language Review.* 54.376–393.

_____________________ In press. Home language practices of trilingual children in French immersion. *Canadian Modern Language Review.* 56.

Day, E. and S. Shapson. 1991. Integrating formal and functional approaches to language teaching in French immersion: An experimental study. *Language Learning.* 47.25–58.

_____________________ 1996. *Studies in immersion education.* Clevedon, UK: Multilingual Matters.

Felix, S. 1985. More evidence on competing cognitive systems. *Second Language Research.* 1.47–72.

Genesee. F. 1981. A comparison of early and late second language learning. *Canadian Journal of Behavioral Sciences.* 13.115–128.

Genesee. F. 1987. *Learning through two languages: Studies of immersion and bilingual education.* Rowley, MA: Newbury House.

https://doi.org/10.1017/S0267190500200123 Published online by Cambridge University Press

Harley, B. 1989. Functional grammar in French immersion: A classroom experiment. *Applied Linguistics*. 10.331–359.

_________ 1992. Patterns of second language development in French immersion. *French Language Studies*. 2.159–183.

_________ 1998a. French immersion research in Canada: The 1990's in perspective. *Mosaic*. 6.3–10.

_________ 1998b. The role of form-focused tasks in promoting child L2 acquisition. In C. Doughty and J. Williams (eds.) *Focus on form in classroom second language acquisition*. Cambridge: Cambridge University Press. 156–174.

_________ and D. Hart. 1997. Language aptitude and second-language proficiency in classroom learners of different starting ages. *Studies in Second Language Acquisition*. 19.379–400.

_________, J. Howard and D. Hart. 1998. Grammar in grade 2: An instructional experiment in primary French immersion. In S. Lapkin (ed.) *French second language education in Canada: Empirical studies*. Toronto: University of Toronto Press. 177–193.

Hart, D., S. Lapkin and M. Swain. 1998. Characteristics of the bilingual private sector job market with special reference to French immersion graduates: Exploratory studies. In S. Lapkin (ed.) *French second language education in Canada: Empirical studies*. Toronto: University of Toronto Press. 56–85.

Johnson, R. K. and M. Swain (eds.) 1997. *Immersion education: International perspectives*. Cambridge: Cambridge University Press.

Kowal, M. 1997. French immersion students' language growth in French: Perceptions, patterns and programming. Toronto: University of Toronto. Ed.D. diss.

_________ 1998. Grade 8 immersion students' understanding of French: Insights and pedagogical implications. In S. Lapkin (ed.) *French second language education in Canada: Empirical studies*. Toronto: University of Toronto Press. 144–176.

_________ and M. Swain. 1994. Using collaborative language production tasks to promote students' language awareness. *Language Awareness*. 3.73–93.

______________________ 1997. From semantic to syntactic processing: How can we promote it in the immersion classroom? In R. K. Johnson and M. Swain (eds.) *Immersion education: International perspectives*. Cambridge: Cambridge University Press. 284–309.

Lambert, W. E. and G. R. Tucker. 1972. *The bilingual education of children: The St. Lambert experiment*. Rowley, MA: Newbury House.

LaPierre, D. 1994. Language output in a cooperative learning setting: Determining its effects on second language learning. Toronto: University of Toronto. M.A. thesis.

Lapkin, S., D. Hart and M. Swain. 1991. Early and middle immersion programs: French language outcomes. *Canadian Modern Language Review*. 48.11–40.

https://doi.org/10.1017/S0267190500200123 Published online by Cambridge University Press

_________ and M. Swain. 1996. Vocabulary teaching in a grade 8 French immersion classroom: A descriptive case study. *Canadian Modern Language Review*. 53.242–256.

______________________ with S. Shapson. 1990. French immersion research agenda for the 90s. *Canadian Modern Language Review*. 46.638–674.

Lightbown, P. 1998. The importance of timing in focus on form. In C. Doughty and J. Williams (eds.) *Focus on form in classroom second language acquisition*. Cambridge: Cambridge University Press. 177–196.

Lyster, R. 1994. The effect of functional-analytic teaching on aspects of French immersion students' sociolinguistic competence. *Applied Linguistics*. 15.263–287.

_________ 1995. *Instructional strategies in French immersion: An annotated bibliography*. Canada: Canadian Association of Immersion Teachers.

_________ 1998a. Negotiation of form, recasts and explicit correction in relation to error types and learner repair in immersion classrooms. *Language Learning*. 48.183–218.

_________ 1998b. Recasts, repetition, and ambiguity in L2 classroom discourse. *Studies in Second Language Acquisition*. 20.51–81.

_________ 1999. La négociation de la forme: La suite…mais pas la fin. [The negotiation of form: The follow-up…but not the end.] *Canadian Modern Language Review*. 55.355–384.

_________ and L. Ranta. 1997. Corrective feedback and learner uptake: Negotiation of form in communicative classrooms. *Studies in Second Language Acquisition*. 19.37–66.

MacFarlane, A. and M. Wesche. 1995. Immersion outcomes: Beyond language proficiency. *Canadian Modern Language Review*. 51.250–274.

Netten, J. E. and W. H. Spain. 1989. Student-teacher interaction patterns in the French immersion classroom: Implications for levels of achievement in French language proficiency. *Canadian Modern Language Review*. 45.485–501.

Office of the Commissioner of Official Languages (OCOL). 1996. 1995 Annual Report. Ottawa: OCOL.

Rehner, K. and R. Mougeon. In press. Variation in the spoken French of immersion students: To 'ne' or not to 'ne,' that is the sociolinguistic question. *Canadian Modern Language Review*. 56.

Spielman, S. To appear. Collaborative learning of the conditional in a grade eight French immersion classroom. Toronto: University of Toronto. Ph.D. diss.

Stern. H. H. 1972. Introduction. In M. Swain (ed.) *Bilingual schooling: Some experiences in Canada and the United States*. Toronto: OISE Press. 1–6.

Swain, M. 1985. Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. Gass and C. Madden (eds.) *Input in second language acquisition*. Rowley, MA: Newbury House. 235–253.

Swain, M. 1988. Manipulating and complementing content teaching to maximize second language learning. *TESL Canada Journal*. 6.68–83. [Reprinted in R. Philipson, E. Kellerman, L. Selinker, M. Sharwood Smith and M.

https://doi.org/10.1017/S0267190500200123 Published online by Cambridge University Press

Swain (eds.) *Foreign/second language pedagogy research*. Clevedon, UK: Multilingual Matters. 234–250.]

_________ 1993. The output hypothesis: Just speaking and writing aren't enough. *Canadian Modern Language Review, Golden Anniversary Issue*. 50.158–164.

_________ 1995. Three functions of output in second language learning. In G. Cook and B. Seidlhofer (eds.) *Principle and practice in applied linguistics: Studies in honour of H. G. Widdowson*. Oxford: Oxford University Press. 125–144.

_________ 1996. Integrating language and content in immersion classrooms: Research perspectives. *Canadian Modern Language Review*. 52.529–548.

_________ 1998a. Focus on form through conscious reflection. In C. Doughty and J. Williams (eds.) *Focus on form in classroom second language acquisition*. Cambridge: Cambridge University Press. 64–81.

_________ 1998b. The output hypothesis, second language learning and immersion education. In J. Arnau and J. M. Artigal (eds.) *Immersion programmes: A European perspective*. Barcelona: Universitat de Barcelona. 127–140.

_________ 1999. The role of L1 in L2 learning. Paper presented at the Leeds symposium on task-based learning. Leeds: University of Leeds, January 1999.

_________ In press. The output hypothesis and beyond: Mediating acquisition through collaborative dialogue. In J. Lantolf (ed.) *Sociocultural theory and second language learning*. Oxford: Oxford University Press.

_________ and R. K. Johnson. 1997. Immersion education: A category within bilingual education. In R. K. Johnson and M. Swain (eds.) *Immersion education: International perspectives*. Cambridge: Cambridge University Press. 1–16.

_________ and S. Lapkin. 1982. *Evaluating bilingual education: A Canadian case study*. Clevedon, UK: Multilingual Matters.

_____________________ 1995. Problems in output and the cognitive processes they generate: A step towards second language learning. *Applied Linguistics*. 16.370–391.

_____________________ 1998. Interaction and second language learning: Two adolescent French immersion students working together. *Modern Language Journal*. 82.320–337.

Tardif, C. and F. Gauvin. 1995. *Répertoire de la recherche universitaire en immersion française au Canada: 1988 à 1994.* [*An annotated bibliography of the research on French immersion in Canada conducted by university researchers: 1988 to 1994.*] Ottawa: L'Association canadienne des professeurs d'immersion, Canada.

Tarone, E. and M. Swain. 1995. A sociolinguistic perspective on second language use in immersion classrooms. *Modern Language Journal*. 79.166–178.

Turnbull, M., S. Lapkin, D. Hart and M. Swain. 1998. Time on task and immersion graduates' French proficiency. In S. Lapkin (ed.) *French second language education in Canada: Empirical studies*. Toronto: University of Toronto Press. 31–55.

https://doi.org/10.1017/S0267190500200123 Published online by Cambridge University Press

Warden, M. 1997. The effect of form-focused instruction on control over grammatical gender by French immersion students in grade 11. Toronto: University of Toronto. Ed.D. diss.

Weber, S. and C. Tardif. 1991. Culture and meaning in French immersion kindergarten. In L. Malave and G. Duquette (eds.) *Language, culture and cognition: A collection of studies in first and second-language acquisition.* Clevedon, UK: Multilingual Matters. 93–109.

Wright, R. 1996. A study of the acquisition of verbs of motion by grade 4/5 early French immersion students. *Canadian Modern Language Review.* 53.257–280.

https://doi.org/10.1017/S0267190500200123 Published online by Cambridge University Press