Focus on Form in Classroom Second Language Acquisition

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4 *Focus on form through conscious reflection*

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Introduction

This chapter describes several classroom-based studies carried out with the pedagogical intention of exploring ways to help adolescent learners in French immersion classes to enhance the accuracy of their target language production. The underlying theoretical motivation of these studies was to investigate possible roles that output (talking and writing) might play in second language learning.

Research to date has provided descriptive evidence of the existence of learning processes stimulated by output (Cumming, 1990; Swain & Lapkin, 1995). However, there is a paucity of research that demonstrates whether these output-oriented processes are facilitative of second language learning. In this chapter, one such pilot study will be described. The study, part of a larger program of research, contributes to the broader debate of the usefulness of explicit focus on form. However, it is perhaps helpful to understand the local language-teaching context in which the debate has emerged. Thus, the chapter begins with a short characterization of French immersion education in Canada, along with a capsule description of the resulting target language proficiency. The nature of this target language proficiency, combined with systematic observation in immersion classrooms, has led to the theoretical proposal of possible roles of output in second language learning (Swain, 1985, 1995) and to a consideration of potential pedagogical solutions. A discussion of these theoretical claims and pedagogical solutions serves as background to the study described in more detail in the section called Pilot Study, later in this chapter.

I wish to thank Alister Cumming, Birgit Harley, Sharon Lapkin, and Miles Turnbull for reading an earlier draft of this chapter. In helping to make this a better paper, they have each contributed to ideas about what the next study in the OISE program of research might be.

Background

The second language teaching context

More than 300,000 children in Canada are enrolled in French immersion programs. Many of these students, few of whom had had any exposure to French before starting school, began their schooling with a teacher who spoke to them only in French. The grade 8 students who participated in the research discussed in this chapter, like many other immersion students, were taught entirely through the medium of French until grade 3. After that, they received some instruction in English. By grade 8, several academic subjects were still taught using French as the language of instruction.

Observations in immersion classes suggest that the overall context of second language learning is communicative and experiential – and thoroughly content-based. However, particularly as students progress through the grades, teachers may engage in formal grammar instruction, often as a lesson separate from content teaching (Swain, 1991b). It is highly likely that, as students enter the intermediate grades, they will have been exposed to an eclectic language teaching approach consisting of learner-centered activities fortified with doses of traditional, prescriptive grammar activities.

More than 2 decades of research in French immersion classes suggests that immersion students are able to understand much of what they hear and read even at early grade levels. And, although they are well able to get their meaning across in their second language, even at intermediate and higher grade levels they often do so with nontargetlike morphology and syntax. (For overviews of this research, see, e.g., Genesee, 1987; Swain, 1984; Swain & Lapkin, 1986. For detailed accounts, see, e.g., Harley, 1986, 1992; Harley & Swain, 1984; Vignola & Wesche, 1991.)

This research, related to the French proficiency of immersion students, makes clear that an input-rich, communicatively oriented classroom does not provide all that is needed for the development of targetlike proficiency (Swain, 1985). It also makes clear that teaching grammar lessons out of context, as paradigms to be rehearsed and memorized, is also insufficient.

What, then, is to be done to move immersion students toward more nativelike proficiency, that is, to further their interlanguage development? Few immersion teachers and researchers would disagree that more attention to grammatical accuracy is needed, but less consensus would be found as to how this might be best accomplished and at what age and proficiency level such a focus might begin.

Several classroom-based experiments have been conducted in immer-

sion classes in which specially developed curriculum materials were used over a period of weeks (Day & Shapson, 1991; Harley, 1989, this volume; Lyster, 1994a). The materials have in common a focus on form through enhanced input, increased opportunities for output, and, in some cases, explicit instruction, particularly in drawing attention to form-function links. Always, the activities in which the students engaged were embedded in a supportive, meaningful context.

These studies, although demonstrating the combined effect of these variables, could not isolate the impact of any one variable in particular. In Ontario Institute for Studies in Education (OISE) research visits to immersion classes, we observed that students were given limited opportunities for extended output where linguistic accuracy was demanded (Allen, Swain, Harley, & Cummins, 1990). We wondered whether this in itself was having an effect on the nature of immersion students' proficiency. Considerable research effort was devoted to addressing issues about input and second language learning. However, what roles output might have in second language learning were not being considered.

Potential roles of output in second language learning

Three functions of output have been proposed that relate more to accuracy than to fluency in second language learning (Swain, 1995).

Noticing

I have hypothesized that, under certain circumstances, output promotes *noticing* (Swain, 1995). This is important if there is a basis to the claim that noticing a form in input must occur in order for it to be acquired (R. Ellis, 1994a; Schmidt, 1990, 1992). The sense in which Swain and Lapkin (1995) have used *noticing* coincides with that of Schmidt and Frota (1986), who state that by *noticed*, they mean "in the normal sense of the word, that is consciously" (p. 311). What is noticed is available for verbal report, as discussed below and illustrated in Example 1.

There are several levels of noticing. Learners may simply notice a form in the target language due to the frequency or salience of the features themselves, for example (Gass, 1988). Or, as proposed by Schmidt and Frota (1986) in their "notice the gap principle," learners may notice not only the target language form itself but also that it is different from their own interlanguage. Or, learners may notice that they cannot say what they want to say precisely in the target language (Swain, 1995), what Doughty and Williams (this volume) in reference to this idea have called noticing a "hole" in one's interlanguage. It is my current conjecture that noticing the hole may be an important stimulus for noticing the gap.

The important issue here, however, is that it is *while attempting to produce* the target language (vocally or subvocally) that learners may notice that they do not know how to say (or write) precisely the meaning they wish to convey. In other words, under some circumstances, the activity of producing the target language may prompt second language learners to recognize consciously some of their linguistic problems: It may bring to their attention something they need to discover about their second language (possibly directing their attention to relevant input). This may trigger cognitive processes that might generate linguistic knowledge that is new for the learner or consolidate the learner's existing knowledge (Swain & Lapkin, 1995). Example 1, taken from a think-aloud session with a grade 8 immersion student while he is composing, is illustrative.

[1] *La dé . . . truc . . . tion. Et la détruction.* No, that's not a word. *Démolition, démolisson, démolition, démolition, détruction, détruision, détruision, la détruision des arbres au forêt de pluie* (the destruction of trees in the rain forest).

(from Swain & Lapkin, 1995)

In Example 1, the student has just written "*Il y a trop d'utilisation des chemicaux toxiques qui détruissent l'ozone.*" ("There's too much use of toxic chemicals which destroy the ozone layer.") In his think-aloud, we hear him trying to produce a noun form of the verb he has just used. He tries out various possibilities (hypotheses), seeing how each sounds. His final solution, "*la détruision,*" is nontargetlike, but he has made use of his knowledge of French by using the stem of the verb he has just produced and by adding a French-sounding suffix. This example is revealing, because the incorrect solution allows us to conclude that new knowledge has been created through a search of his own existing knowledge. His search began with his own output, which he heard as incorrect.

Hypothesis formulation and testing

A second way in which producing language may serve the language learning process is through hypothesis formulation and testing. As seen in Example 1, the learner used his output as a way of trying out new language forms (hypotheses). Tarone and Liu (1995, pp. 120–121) provide evidence that it is precisely in contexts "where the learner needs to produce output which the current interlanguage system cannot handle . . . [and so] . . . pushes the limits of that interlanguage system to *make* it handle that output" that acquisition is most likely to have occurred.

In Example 1, the learner was in a situation in which feedback from an external source was not available; thus there was nothing to test his hypotheses against except his own internalized knowledge. In more usual

circumstances, however, learners are able to obtain useful information for testing their hypotheses from other sources. When external feedback has been available, learners have also modified, or reprocessed (Swain, 1993), their output. For example, Pica, Holliday, Lewis, and Morgenthaler (1989) found that, in response to clarification and confirmation requests, more than one third of the learners' utterances were modified either semantically or morphosyntactically. The fact that learners modify their speech in one third (but not in all) of their utterances suggests that they are testing out only some things and not others. It may be that the modified, or reprocessed, output can be considered to represent the leading edge of a learner's interlanguage.

Thus, learners may use their output as a way of trying out new language forms and structures as they stretch their interlanguage to meet communicative needs; they may use output just to see what works and what does not. That immediate external feedback may not be facilitative or forthcoming does not negate the value of learners having experimented with their language resources.

Metatalk

A third function of output is its metalinguistic function. In this case, the learners' own language indicates an awareness of something about their own, or their interlocutor's, use of language. That is, learners use language to reflect on language use. In doing so, although learners may make use of metalinguistic terminology, it is by no means essential as part of the definition of *metatalk*. In fact, in the case of the data collected from grade 8 immersion students, the majority of our examples illustrate students talking about language without using metalinguistic terminology. The examples demonstrate, however, how students are thinking about their target language, that is, the hypotheses they hold about the target language. Example 2 is illustrative.

[2] S1: *Un bras . . .* wait . . . *mécanique . . . sort?*
(An arm . . . wait . . . a mechanical [arm] . . . comes out?)
S2: *Sort,* yeah.
(Comes out, yeah.)
S1: *Se sort?*
(Comes out?) [reflexive form: *se sort*]
S2: *No, sort.*
(No, comes out.) [correct form: *sort*]

(Swain & Lapkin, 1996)

In Example 2, the first student (S1) is wondering whether the reflexive form of the verb *sortir* should be used in this context. The second student (S2) is able to provide S1 with correct answers to her questions.

This metatalk, happening as it does here – *in the context of "making meaning"* – may well serve the function of deepening the students' awareness of forms and rules, and the relationship of the forms and rules to the meaning they are trying to express; it may also serve the function of helping students to understand the relationship between meaning, forms, and function in a highly context-sensitive situation.

My current working assumption is that metatalk is a surfacing of language used in problem solving; that is, it is language used for cognitive purposes. In metatalk, we are able to observe learners' working hypotheses as they struggle toward solving mathematical problems, scientific problems, or, as we are concerned with in SLA, linguistic problems. If this is the case, then much of what is observed in metatalk when learners are faced with a challenging language production task and are encouraged to talk about the problems they encounter in doing the task should help us to understand language learning processes. It should help us to understand these processes because much of what is observed will be language learning *in progress*. In other words, in metatalk, noticing, hypothesis formulation and testing (cognitive problem solving), and other learning processes (e.g., comprehending) may be made available for inspection. They are available for inspection by researchers, teachers, and, possibly most important, for students themselves as they engage in second language learning.

Thus, by encouraging metatalk among second and foreign language students, we may be helping students to make use of second language acquisition processes. That is, metatalk may be one pedagogical means by which we can ensure that other language acquisition processes operate. It is essential, however, that this metatalk is encouraged in contexts where the learners are engaged in "making meaning," that is, where the language being used and reflected upon through metatalk is serving a communicative function. Otherwise, the critical links between meaning, forms, and function may not be made.

Experimenting with task types

From the perspective of the research reported on in the rest of this chapter, the metalinguistic function of output has been the most important for us in thinking about the types of tasks in which we could engage French immersion students that might help them move beyond their current interlanguage toward more nativelike French. We have sought to utilize tasks that would encourage output (therefore, we used collaborative tasks), but that would also result in students' focusing their attention on forms while in the process of expressing their intended meaning. In other words, we have begun to try out in the classroom different tasks that are

communicatively oriented, but in which communication is, in part, at least, about language, that is, tasks in which students will talk about – consciously reflect on – their own output. One task that we feel has been particularly effective in achieving these goals is described in the next section (see Kowal & Swain, 1994, 1997 for details).

The dictogloss

The *dictogloss* is a procedure that encourages students to reflect on their own output (Wajnryb, 1990). With this procedure, a short, dense text is read to the learners at normal speed; while it is being read, students jot down familiar words and phrases; then the learners work together in small groups to reconstruct the text from their shared resources; the final versions are then analyzed and compared. The initial text, either an authentic or a constructed one, is intended to provide practice in the use of particular grammatical constructions. Wajnryb suggests that "Through active learner involvement students come to confront their own strengths and weaknesses. . . . In so doing, they find out what they need to know" (1990, p. 10).

With slightly modified procedures, one class of grade 8 immersion students was given three different dictoglosses during a school term, each of which was related in content to the *geographie* material the students were studying (Kowal & Swain, 1994, 1997). Their teacher (Kowal) had developed the dictoglosses herself and was fully confident that, in terms of content, they would be understood by her students.

The transcribed talk of each pair (occasionally a threesome) of students as they reconstructed the text provided us with the sort of data we hoped the task would elicit: talk about the language of the text they were reconstructing (metatalk). We observed students noticing things they did not know or could not say to their own satisfaction, and we observed these same students formulating hypotheses and testing them out using the tools at their disposal (themselves, each other, their dictionaries, their verb book, their teacher). In addition, students ignored some of the errors they made. They often functioned at a semantic level, wanting to use the right word as well as thinking about correct inflections and relationships between words; and they focused on many other points of grammar than the one the teacher had in mind in developing the particular dictogloss.

We examined the transcripts of each pair of students for language-related episodes (LREs). A *language-related episode* is defined as any part of a dialogue in which students talk about the language they are producing, question their language use, or other- or self-correct (Swain & Lapkin, 1996). The main focus of approximately 30% of the LREs was on lexical meaning, and the main focus of approximately 40% of the

LREs was on form. An orthographic focus accounted for the rest of the LREs (Kowal & Swain, 1994).

We therefore felt assured that the dictogloss had created opportunities for metatalk, which these immersion students took up (some with considerable enthusiasm, others with less!). The question of interest that this raises is, of course, does this metatalk support second language learning? Or, even, is the metatalk, itself, evidence of learning occurring? We speculated also that if the teacher were to have modeled metatalk for her students when introducing the dictogloss procedure, this might have promoted even more of a focus on form on the part of the students as they reconstructed the dictogloss text than had been found in Kowal and Swain (1994).

At this point in our research program then, we began to plan in detail a large-scale study to investigate the issues just raised (Swain & Lapkin, in progress). It was our good fortune that Donna LaPierre, an OISE master's student, was also interested in the issues and offered to pilot, as part of her M.A. thesis research, some of the procedures we had hoped to include in our larger-scale research. In particular, in the LaPierre study two different ways in which teachers might demonstrate (model) for their students ways of talking (metatalking), when reconstructing their dictogloss, were tried out. In addition, the feasibility of developing tailor-made posttests was explored. The idea was to tailor-make posttests based on the substance of the dialogues of pairs of students as they talked about the language they were producing. Aspects of LaPierre's (1994) study and her findings are described in the next section.

The pilot study

Research questions

Two of the research questions that LaPierre addressed in her study are relevant here.

MODELING METATALK

Does a demonstration by the teacher and researcher of the nature of the talk students are being encouraged to use in carrying out a task influence their use of it? In other words, does the modeling of metatalk by the teacher influence students' use of the metatalk? Does it help students to focus their attention on, to reflect about, their language use?

SECOND LANGUAGE LEARNING

Is there a relationship between metatalk and second language learning?

Research design

Two classes of French immersion students were involved. The instructions about how to do the task (dictogloss) were similar for both classes, with one exception. The teacher and the researcher together role-played (modeled) for the whole class how to reconstruct a text ("Vive la compagne," see Appendix A at the end of this chapter). The difference between the two classes lay in what the teacher and researcher said to each other as they reconstructed the text. The metatalk that was modeled for the metalinguistic (M) group included the provision of rules and metalinguistic terminology, whereas the metatalk that was modeled for the comparison (C) group did not make use of rules and metalinguistic terminology. (Details are provided in the following sections.)

Students completed three dictoglosses, one per week for 3 weeks. The first two sessions were given in order to familiarize students with the procedures of the dictogloss. The third session followed the same procedures; however, during this session, the students were tape-recorded as they worked in pairs on the task.

One week after completing the third dictogloss, students were given a tailor-made dyad-specific test, described in the following sections.

Participants

The study's participants consisted of 48 students from two grade 8 classes of an early French immersion program. The two classes consisted of mixed-ability students with lower-middle- to middle-class backgrounds from different schools within the same board of education located in a large urban area. The M class contained 26 students; the C class contained 22 students. The classes were assigned randomly to the two conditions.

These students entered the early French immersion program in kindergarten. In the early grades they were taught entirely in French. In grade 3, English (their native language) was introduced as a language of instruction. By grade 8, the proportion of French-medium to English-medium instruction was approximately 40:60.

The task

The type of task used was a dictogloss. Four different dictoglosses were prepared for this study: two for the modeling and practice session, one for a second practice session, and one for the session during which students were tape-recorded. The first two focused on number (formation of plural nouns and adjectives), the third one focused on gender (formation of masculine and feminine adjectives), and the fourth one focused on the

passé composé (compound past) and the *imparfait* (imperfect). The grammatical areas of focus were the areas in which immersion students continued to make errors, even at the grade 8 level.

Procedures

The procedures adopted for all students are described in the following sections. Next, the procedures followed according to session and group are given.

MINI-LESSON AND DICTOGLOSS

Prior to hearing each dictogloss, students were given a short (5–10-minute) review lesson by the researcher. During that time, the meaning of vocabulary in the dictogloss that the students' teacher had thought might be difficult for her students was explained. Also, the researcher reviewed a set of rules relevant to the grammatical point in focus. The purpose of this explicit teaching and reviewing of forms was to heighten students' awareness about an aspect of language that would be useful to them in carrying out the dictogloss. (See also Lightbown, this volume.)[1]

The dictogloss passage was read twice. The first time it was read, students were asked to listen to the passage. The second time it was read, students were encouraged to take notes to help them reconstruct the passage. Students then worked in pairs for approximately 25 minutes to reconstruct the passage. Following this, the reconstructed passage of one pair of students was compared to the original dictogloss passage in a whole-class context.

SESSION AND GROUP PROCEDURES

As mentioned before, there were three sessions in which a dictogloss was given. The sessions were a week apart.

SESSION 1 (MODELING AND PRACTICE)

The researcher read the dictogloss "Vive la campagne" twice (see Appendix A). The researcher then displayed on the overhead a set of notes that two students might have written in listening to this dictogloss. Using these, the classroom teacher (previously "trained" by the researcher) and

1 We did not expect that students would "learn" from this brief review of rules. Our expectation was that, by heightening their awareness of the grammatical point, the likelihood of their talking about it would be enhanced. Although we have not studied this issue quantitatively, we would likely find that the consequences of the mini-lesson are highly dependent on both what the lesson was about (e.g., gender versus verb formation) and the developmental stage of the learner. I have become convinced, by examining the substance of learners' metatalk, that learners talk about what they *need* to talk about, that is, those aspects of language about which they are not sure. And that, in turn, will depend on their own current, internalized state of knowledge about language and its use.

the researcher modeled the reconstruction process. The way in which this was done is described for each of the metalinguistic (M) and comparison (C) groups in the next sections.

Following this, students heard another dictogloss ("*Les erables en automne*") twice, taking notes during the second reading. Pairs of students then tried to reconstruct the passage. Finally, as a whole-class activity, the researcher reviewed the work of one pair of students, comparing the students' work against the original, modeling the M or C format whenever possible, and, as appropriate, to the group.

Metalinguistic (M) group. When the teacher and the researcher modeled the reconstruction process for the metalinguistic group, their goal was to give the students a way of seeing how to deploy explicit linguistic knowledge to solve a problem caused by a "hole" in their interlanguage. In other words, they were trying to provide students with a demonstration of rules in action, in a very specific linguistic context. To do this, the teacher (T) and researcher (R) drew attention to grammatical form *and* provided an explanation for it. Examples 3 and 4 show their reconstruction of "Vive la campagne."

[3] R: *OK, alors la première phrase commence avec "Les rues étroites."*
(OK, so the first sentence begins with "The narrow streets."
T: *Oui "les rues étroites." N'oublie pas le "s" sur "rue" parce que c'est pluriel.*
(Yes, "the narrow streets." Don't forget the "s" on "street" because it's plural.)
R: *Oh, c'est vrai, alors, il doit avoir un "s" sur* "étroite" aussi.
(Oh, that's right, so there must be an "s" on "narrow" too.)

[4] T: *Est-ce que c'est les "rues" qui avaient, ou la "ville" qui avait?*
(Is it the "streets" that had [plural form] or the "town" that had [singular form]?)
R: *C'est les "rues" qui avaient. C'est les "rues" qui est le sujet, alors on doit faire l'accord avec les "rues." Donc, ça doit être avec e-n-t à la fin.*
(It's the "streets" that had [plural form]. It's the "streets" that is the subject [of the sentence], so we have to make the verb agree with "streets." So, it must be written with e-n-t [plural form] at the end.)

Comparison (C) group. When the teacher and the researcher modeled the reconstruction process for the students in the comparison group, they drew attention to grammatical form. However, no explicit rules were invoked. In this sense, the students were not specifically provided with a demonstration of at least one possible way to solve an encountered linguistic problem. Examples 5 and 6, parallel to Examples 3 and 4, respectively, follow.

[5] R: *OK, alors la première phrase commence avec les rues étroites.*
(OK, so the first sentence begins with "The narrow streets.")
T: *Oui, "les rues étroites." N'oublie pas le "s" sur "rue."*
(Yes, "the narrow streets." Don't forget the "s" on "street."
R: *Oh, c'est vrai. Sur "étroite" aussi.*
(Oh, that's right. On "narrow" as well.)

[6] T: *Est-ce que c'est les "rues" qui avaient, ou la "ville" qui avait?*
(Is it the "streets" that had [plural form], or the "town" that had [singular form]?)
R: *C'est les "rues" qui avaient.*
(It's the "streets" that had [plural form].)

SESSION 2 (PRACTICE)

During this session, 1 week after the first session, the full dictogloss procedure was implemented in order to make sure that the students understood the nature of the task and to provide them with another opportunity to practice reconstructing a text. First, difficult or possibly unknown vocabulary that appeared in the dictogloss ("La vieille femme") was reviewed (e.g., *cire, serre, drue, moutonnante*). This was followed by a short (3–5-minute) lesson on how to form feminine adjectives from masculine ones. "La vieille femme" was read twice to the students. During the second reading, students jotted down notes. Then, in pairs, students worked to reconstruct the dictogloss. Students in each group were reminded that they should try to write their text so that it would be as close to the original as possible in grammar and content. After the students had finished their text, the researcher selected the work of one pair and corrected it, modeling the format appropriate to each group.

SESSION 3 (DATA COLLECTION)

The procedure used in the second session was repeated 1 week later: Difficult vocabulary from the dictogloss "Cauchemar" (see Appendix B at the end of the chapter) was reviewed; a short (3–5-minute) lesson on the *passé composé* and *imparfait* was given; the text was read twice, with students taking notes the second time; then, working collaboratively in pairs, students reconstructed the passage. Each pair was recorded as they worked to reconstruct the dictogloss.

THE TAILOR-MADE DYAD-SPECIFIC POSTTEST

This test represented our first attempt to measure linguistic knowledge that appeared to be co-constructed through the metatalk of individual pairs. The process of test development involved transcribing the talk of each pair of students as they reconstructed the dictogloss passage. The transcripts were then examined for LREs. The definition of LREs was the same as that used by Swain and Lapkin (1996) and provided earlier in this chapter, except that self-correction was not included. From these

LREs, tailor-made dyad-specific questions, designed to assess the target language point discussed, were created.

The questions on this posttest were of several formats: dual- or multiple-choice, fill-in-the-blank, translation, and open-ended. With the exception of the open-ended format, the test item types were of a discrete nature. The reason for using discrete item types was straightforward: We hoped to measure the learning of the *exact aspect of language* about which students had metatalked. We felt that the use of more integrative item types might have led to problematic interpretations. Of course, in further research of this sort, it will be important to develop tests that measure the transfer of linguistic knowledge to new forms, the ability to use them in a variety of formats, and so on. But at this early stage in our research program, we are most interested in seeing whether we can document, at all, the learning that our theoretical account suggests would be occurring in the LREs.

An example of an LRE that appeared in the dialogue of two students and the question that was given to that pair of students 1 week after having engaged in the discussion follows.

[7] S1: *J'ai fait un rêve effrayant la nuit dernière.*
(I had a frightening dream last night.)
S2: *La nuit dernière.*
(Last night.)
S1: *Puis je sais le début de la seconde phrase.*
(And I know the beginning of the second sentence.)
S2: *Attends. Attends. Attends. Il y a quelque chose de mal avec cette phrase. Est-ce que c'est "une rêve" ou "un rêve"?*
(Wait. Wait. Wait. There is something wrong with this sentence. Is it "dream" [feminine] or "dream" [masculine?])
S1: *Je pense que c'est "un rêve."*
(I think it's "dream" [masculine]).
S2: *Le rêve, la rêve, le rêve?*
[Testing whether *dream* is masculine or feminine; seeing which sounds better.]
S1: *On va le laisser comme ça.*
(We're going to leave it like that.)
S2: *J'ai fait un rêve. . . . OK.*
(I had a dream [masculine]. . . . OK.)

Test Question:

Indicate whether "*rêve*" is masculine or feminine: F M

The number of dyad-specific questions varied from pair to pair depending on the number of LREs that occurred in each transcript. Thus a "percentage correct" score was calculated for each student.

Results

The first research question is concerned with whether a demonstration of metatalk for the students might influence their use of it. Because the theoretical argument being developed here is that metatalk may engage language learning processes, increased use of metatalk would be seen as positive. The second research question asks whether there is evidence of a relationship between metatalk and second language learning.

To examine the first research question, we counted the LREs produced by pairs of students. The average number of LREs produced by the M group was 14.8, and by the C group was 5.8. In other words, group M produced approximately 2½ times more LREs than group C. Although the LREs of group M did not contain frequent use of metalinguistic terminology or of the statement of rules, this use was nevertheless evident to a greater degree than in the LREs of group C. The difference in the average number of LREs between the two groups suggests, furthermore, that the demonstration of metatalk that included the explicit statement of rules and the use of metalinguistic terminology succeeded to a greater extent in capturing students' attention and focusing it on their own language use.

In examining the second research question, we combined the data from both M and C groups. We did this because the question relates equally to both groups rather than entailing a comparison between groups. To examine the question of the relationships between metatalk and second language learning, we might have conducted a number of analyses. For example, we might have examined the learning outcomes of the intended focus versus the feature actually focused upon. The intended focus in "Cauchemar" was the *passé composé* and *imparfait;* however, students rarely focused on that aspect of grammar. The students were much more likely to talk about gender and number issues that had been reviewed in the dictoglosses they had done in the previous 2 weeks. We suspect, however, that what they focused their attention on had less to do with the minilessons than it had to do with the needs of the students; that is, students talked about what they needed to talk about according to the state of their own internalized knowledge.

As it was, we took several steps to examine the second research question. The first step was to analyze the responses on the dyad-specific tests in relationship to the LREs that led to their generation. In order to do this, the LREs were first categorized into four types: Type I: problem solved correctly (see Example 7); Type II: problem not solved or disagreement about problem solution (see Example 8); Type III: problem solved incorrectly or disagreement about problem solution (see Example 9); and Type IV: other.

[8] (problem not solved or disagreement about problem solution)
S1: *Un passage étroit, à la métro?*
(A narrow passage, at the subway?)
S2: *C'est "dans" la chose.*
(It's "in" the thing.)
S1: *Dans la métro ou à la métro?*
(In the subway or at the subway?)
S2: *Non, c'était quelque chose comme à l'endroit, ou à la métro.*
(No, it was something like at the place, or at the subway.)
S1: *Je pensais que c'était, je marchais dans un passage étroit a la métro.*
(I thought it was, I was walking in a narrow passage at the subway.)
S2: *Un passage étroit dans le métro . . .* in the . . . in the subway.
(A narrow passage in the subway . . . in the . . . in the subway.)
S1: *À la métro.* I just don't know.
(At the subway. I just don't know.)
S2: *Mais, c'est comme "dans."*
(But, it's like "in.")
S1: OK, anyway, *on va continuer.*
(OK, anyway, let's continue.)

[9] (problem solved incorrectly or disagreement about problem solution)
S1: *La nuit dernière je marchais dans un long passage étroit.*
(Last night I was walking in a long narrow passage.)
S2: *Non, étroite.*
(No, narrow [feminine form].)
S1: *Avec un "e"?*
(With an "e"?)
S2: *Oui.*
(Yes.)

There was a total of 256 LREs in the two groups: 140 (54.7%) were of Type I; 50 (19.5%) were of Type II; 21 (8.2%) were of Type III; and 45 (17.6%) were of Type IV.

The second step was to calculate, for each type of LRE, the percentage of correct responses on the dyad-specific questions. The results were as follows: On average, 79% of students' responses were correct for Type I; 40% for Type II; and 29% for Type III.[2] (This figure was not calculated for Type IV.)

This means that when students, through dialogue, reached a correct solution (Type I), there was a strong tendency for them to perform accurately on the relevant posttest item 1 week later. Furthermore, and equally as telling, when students co-constructed an incorrect solution

2 Comparisons of observed frequencies with expected frequencies using a chi-square model were conducted to determine whether significant differences existed. Expected frequencies were derived from the whole sample. For Type I, observed correct responses were 110, and expected were 90; for Type II, observed correct responses were 20, and expected were 28; and for Type III, observed correct responses were 6, and expected were 14. All differences between observed and expected frequencies were statistically significant.

(Type III), they tended to be inaccurate in their responses on the relevant posttest items 1 week later. In other words, the students tended to "stick with" the knowledge they had constructed collaboratively the previous week. Finally, the correct response rate of 40% attained when no solution was agreed upon (Type II) might be thought of as a baseline against which Types I and III can be compared, with Type I being considerably higher and Type III being somewhat lower. These results suggest rather forcefully that these LREs, during which students reflect consciously on the language they are producing, may be a source of language learning. Thus, increasing the frequency of LREs in pedagogical contexts through appropriate modeling, and through opportunities for use, may be useful in promoting second language learning.

Discussion

The collection of studies discussed in this chapter (Kowal & Swain, 1994, 1997; LaPierre, 1994; Swain & Lapkin, 1995, 1996, in progress) shows evidence of learners noticing the "gap" in their interlanguage, that is, noticing the difference between what they want to say and what they are able to say. As proposed by the output hypothesis, this happens as the students try to produce the target language. Equally as important, sometimes noticing the hole triggers a search for a solution: Students engaged in a language production task alone or together work to solve their linguistic difficulties, making forms and meaning the focus of their attention. The students formed hypotheses and tested them against available resources. Vocabulary, morphology, and complex syntactic structures each became the focus of their attention, and in turn, their attention became focused by talking about the problem. Verbalization of the problem allowed them the opportunity to reflect on it and, apparently, served as one source of their linguistic knowledge.

The collection of studies has implications for both pedagogy and further research. Pedagogically, the results point to the potential usefulness of collaborative work in promoting output and second language learning. They make clear that the value of collaborative work for second language learning can be enhanced in at least three ways. First, careful consideration must be given to task characteristics; that is, not just any task will elicit metatalk. Furthermore, a task that elicits metatalk from one group of learners may not do so from another group of learners. This may be due to the level of learners' proficiency, the age of the learners, and any of a host of other factors. Although this was not discussed in the present chapter, we observed considerable variation in how the French immersion students carried out the dictogloss task, particularly concerning the amount of metatalk they produced.

Second, the results seem to suggest that the value of collaborative work can be enhanced through the thorough preparation of students for task performance. For example, familiarity with task procedures is important. Accompanying instructions by, for example, teacher modeling and role-playing of the activity can be useful.

Third, the results point to the potential value of feedback to students. Although the overall percentage of LREs during which the students believed that they had solved their linguistic problem, but did so incorrectly, was small, the outcomes were consequential. Students tended to remember their incorrect solutions. They learned, but they learned the wrong thing. Teachers' availability during collaborative activities and their attention to the accuracy of the "final" product subsequent to the completion of collaborative activities are potentially critical aspects of student learning.

From a research perspective, one point I wish to emphasize here is that we must continue to explore ways to document the ongoing learning of students as they work collaboratively. We believe that we have demonstrated, at this point using rather simple and crude measures, that some learning was taking place in the metatalk we observed. We are fully aware, however, that we have not identified all that was learned, having scraped only the surface of linguistic forms and meaning.

The second point is that it seems essential in research to test what learners *actually do*, not what the researcher assumes instructions and task demands will lead learners to focus on. Not testing what learners do means that we are missing opportunities to identify some of the sources of second language learning. Although the tasks we used did encourage students to pay attention to accuracy and form-function links, the students established their own goals and agenda as to what they focused on. As Coughlan and Duff (1994) point out, "any event that generates communicative language is unique – [it is] an activity born from a particular constellation of actors, settings, tasks, motivations, and histories" (p. 190). Given this, why would we expect consistent learning outcomes from the activities our research tasks generate? Thus, it would seem crucial, if we are to measure the learning that occurs as a result of task involvement, that we tailor our tests to the contents of actual task performance. This content can be seen in the dialogue of the interactions themselves. The preparation of learner-specific tests may seem like a daunting task for the researcher, but it may be essential if we are to capture the language learning that occurs as learners co-construct linguistic knowledge through their metatalk.

Appendix A: Dictogloss used for modeling

Vive la campagne

Les rues étroites de la ville sont remplies de tricycles, d'autobus impitoyables et de motocyclistes imprudents. Heureusement, à cinq minutes du centre-ville, nous reprenons la grande route et nous retrouvons avec joie la campagne.

Appendix B: Dictogloss used for recorded session

Cauchemar

J'ai fait un rêve effrayant la nuit dernière. Je marchais dans un long passage étroit du métro. Soudain, j'ai entendu des pas derrière moi. Je me suis retourné(e) et j'ai vu un homme aux cheveux couleur de carotte striés de mèches violettes, et en costume d'Adam. Il tenait un énorme oreiller noir. L'expression de ses yeux était diabolique.