

DOCUMENT RESUME

ED 135 232

FL 008 392

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 TITLE Teachers' Priorities in Correcting Learners' Errors in French Immersion Classes. Working Papers on Bilingualism, No. 12.
 INSTITUTION Ontario Inst. for Studies in Education, Toronto. Bilingual Education Project.
 PUB DATE Jan 77
 NOTE 25p.; For related documents, see FL 008 391-396
 AVAILABLE FROM Bilingual Education Project, The Ontario Institute for Studies in Education, 252 Bloor St. West, Toronto, Ontario, Canada M5S 1V6 (as long as supply lasts)

EDRS PRICE MF-\$0.83 HC-\$1.67 Plus Postage.
 DESCRIPTORS *Bilingual Education; Bilingualism; Bilingual Students; Classroom Environment; Classroom Research; Curriculum; English; *French; Interaction Process Analysis; Language Instruction; Language Skills; Language Teachers; Secondary Education; *Secondary School Students; *Second Language Learning; Student Teacher Relationship; Teacher Attitudes; *Teacher Behavior
 IDENTIFIERS *Error Correction; *Immersion Programs

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TEACHERS' PRIORITIES IN CORRECTING LEARNERS' ERRORS
IN FRENCH IMMERSION CLASSES¹

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ABSTRACT

Observation and analysis of classroom interaction is used in a pilot study of Grade 8 and 9 French immersion programs to evaluate the relative importance placed by teachers on different student oral behaviours. The frequencies of teachers' corrections for different kinds of students' errors (in L2 skills, subject matter knowledge, and classroom interaction) are seen to correspond in definite ways to the teachers' stated priorities. The learning of lesson content (in Mathematics, Science, History, Geography and French) is not subordinated to L2 acquisition.

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1. Introduction

Research on the effectiveness of second-language (French) immersion programs has been directed towards determining whether the students achieve greater proficiency in the L2 than comparison students in regular L2 instruction; whether the immersion students' achievement in other subject matter taught using the L2 as the medium of instruction is comparable to that of students taught using the L1 as the medium of instruction; and whether immersion students show any detrimental effects on their L1 (here, English) proficiency as a result of the immersion context.

Results to date indicate that various types of immersion programs are successful in developing L2 without sacrificing achievement in either L1 or other subjects (Stern, *et al.*, 1976; Edwards and Smyth, 1976; Swain and Bruck, 1976; Barik and Swain, 1976a, 1976b). These results are largely based on summative evaluations comparing immersion program students with regular English program students.

However, research on issues concerning in-class instruction in immersion programs has been virtually non-existent. The "communicative" use of the L2 might in some ways be a hindrance to complete L2 development if students' utterances are too often accepted for their content when the grammatical form is slightly aberrant. This complex field of inquiry is not readily clarified by results of end-of-the-year standardized tests.

In order to provide a focus from which to develop further research into this issue, a pilot study of classroom interaction in an immersion program at the grades 8 and 9 levels was undertaken by the author, in conjunction with the Bilingual Education Project of the Ontario Institute for Studies in Education.² The intent of the study was to determine whether, and in what ways, immersion teachers established priorities between classroom performance of linguistic skills and of subject matter knowledge. More precisely, the questions asked were: a) How much are learners' L2 linguistic errors corrected in either French or other subject classes, relative to errors of other sorts? b) In what ways are errors corrected -- that is, how insistent are teachers in their reaction to errors, and what sorts of information do they provide to inform the students of the nature of the errors?

It was believed that answers to these questions would help to: 1) indicate the teachers' instructional priorities, 2) ascertain whether a predominance of language instruction was taking place during instruction about other topics, 3) suggest some possibilities for a comprehensive model of teachers' corrective reactions, and 4) reveal some of the strategies students use in rectifying their errors.³

The results of the pilot study suggest some answers to question a), and thus to points 1) and 2) above, but only partially, since other indicators of priorities need investigation (e.g., amount of time spent on different grammatical topics, procedural necessities, pronunciation drills, and so on). Question b), and point 3), have also been answered in some detail, the results of which are reported elsewhere (Chaudron, 1976a, 1976b). Point 4) remains for the most part unanswered; some provocative possible answers are suggested by, for example, Mehan (1974) and Naiman, et al., (1975). The use of a model for corrective reactions (Chaudron, 1976b) may aid the investigation of this point.

2. Methodology

2.1 Procedure

Tape recordings of actual half-hour lessons were made at each of two separate times in the school year. Time 1 was early in the year (October) and Time 2 was late in the year (April), in order to detect changes which might have occurred in the course of the year. The same three teachers' lessons were recorded at each time, according to the schedule shown in Table 1 below. Transcripts of each lesson were typed, and citations or references to them will be made according to the codes in brackets.

Table 1

<u>Grade</u>	<u>Teacher</u>	<u>Time 1 Lessons</u>	<u>N Students</u>
8	1	Science (Sci 8.1) Mathematics (Math 8.1) French (Fr 8.1)	(about 30) (" ") (half of class, about 15)
8	2	Geography (Geo 8.1)	(about 30)
9	3	Geography (Geo 9.1) French (Fr 9.1)	(about 30) (" ")
<u>Grade</u>	<u>Teacher</u>	<u>Time 2 Lessons</u>	<u>N Students</u>
8	1	Science (Sci 8.2) Mathematics (Math 8.2)	(about 30) (" ")
8	2	History (Hist 8.2) French (Fr 8.2)	(about 30) (half of class, about 15)

Table 1 (cont.)

<u>Grade</u>	<u>Teacher</u>	<u>Time 2 Lessons</u>	<u>N Students</u>
9	3	History (Hist 9.2) French (Fr 9.2)	(about 30) (" ")

Following the recordings at Time 2, all three teachers were asked to listen to the tapes of their own lessons at that time, and to indicate on special forms the errors made by their students, and the purpose and structure of the corrections they provided, if any. It was believed that this would afford the investigator greater insight into the purposes and priorities held by each teacher.

Prior to the above request, the teachers had not been informed as to the exact focus of the recording and observation of their lessons. They had been led to believe that the investigator was merely interested in the general organization of lessons and materials presentation. It is believed that the presence of the investigator and the small tape recorder did not make any major difference in the frequency or kind of corrective strategies which occurred.

The analysis is therefore based on the oral correction both of oral errors and of some other behaviors judged inappropriate by the teachers (to be described below). Non-verbal types of corrections (i.e. the teacher points to an underlined word on the blackboard) have only been considered when the observer's memory or the recordings allow a reconstruction of the event. Very few of the correcting interactions in the present study are excluded by this limitation.

2.2 Definition of Corrections

There are several conceptions or definitions of a "correction" (see Politzer, 1965; Brooks, 1964; Allwright, 1975; and summary in Chaudron, 1976b). The conception employed here is that a corrective reaction is any reaction by the teacher which transforms, disapprovingly refers to, or demands improvement of, a student's behavior or utterance. No judgement has been made in the first analysis concerning the psychological reality (the "explicitness" or "implicitness") of the correction, nor have corrections been limited to occurrences in which the student responds with a correct utterance. This conception allows the broadest range of possibilities for any subsequent analysis of the effect of teachers' reactions on the students' learning.

2.3 Definitions of errors

Errors were identified according to two basic criteria, and they then were classified according to type of error (no attempt has been made to determine the source of errors by error analysis). The two criteria are: 1) an objective evaluation of linguistic or content errors according to linguistic norms or evident misconstrual of facts, and 2) any additional linguistic or other behavior that the teachers reacted to negatively, or with an indication that improvement of the response was expected. (See Fanselow, n.d., for a similar approach.) The attempt was made to locate all errors, whether or not they were reacted to, so that both absolute (how much the teacher corrects) and relative (which types of errors are corrected) priorities in correction could be determined.

Instances of errors were then classified according to types, namely the following:⁵

2.3.1 Phonological Errors

Pronunciation errors are very common and to be expected in the performance of beginning students of a L2. Clearly, virtually everything uttered in the teacher's reaction could be considered a correction of the student's pronunciation. Therefore, only an approximate count of phonological errors was made, based on clear "interference" from English, for example, the use of /u/ for the French /y/.⁶ The discussion of linguistic errors below will disregard phonological errors.

2.3.2 Morphological Errors

Some gradual shading of phonological errors into morphological errors is inevitable. In the present analysis morphological errors include the failure to "elide" articles (le and la with nouns beginning with vowel sounds); omission or incorrect use of articles (le for les, etc.) and the partitive (de for du, etc.); incorrect or omitted prepositions; and the incorrect omission or addition of bound morphemes (e.g., conjugation for tense (est, sont), inflection for number or gender (cheval, chevaux), and nominal suffixation (marche, marcheur)).

2.3.3 Syntactic Errors

There are few syntactic errors evident in the students' production, owing, for the most part, to their simple sentence constructions. The classification here includes errors of word order (adjective preceding noun, object pronoun following verb, misplaced negation). Another

type, which is not strictly 'syntactic', rather one of 'coherence' in discourse, pertains to the proper identification of pronominal referents (to events in the classroom context). For example, students will occasionally use a subject pronoun without any clear referential antecedent or they will inappropriately use, or omit, the presentatives c'est and il y a. This has been included as a type of syntactic error.

Syntactic errors and morphological errors together are henceforth termed linguistic errors.

2.3.4 Content errors

These errors consist of those for which student responses show incomplete (e.g. a student's failure to state the units of measurement in Science or Math) or incorrect expression of the concepts relevant to the subject. This applies equally to grammatical knowledge in French (e.g. the classification of words in grammatical categories), to measurement in Science, calculation in Mathematics and facts in History. Some content errors may be manifested in a single word, but they show evidence of misunderstanding of concepts:

Hist 9.2 S: Les prisonniers étaient venus parce que le roi a dit qu'ils, uh, qu'ils pouvaient venir.

T: Qu'ils pouvaient venir? (Teacher's emphasis; i.e., 'qu'il fallait qu'ils viennent' would be correct)

Content errors may also simply be inappropriate answers which do not supply the information expected in the teacher's question. However, since most student responses could be expanded upon or qualified more than is actually demanded, the teachers' implicit or explicit expectations for precision have set the limits for the classification of content errors.

2.3.5 Discourse Errors

It has been useful to regard certain corrective interactions in these immersion classrooms as appeals to the rules of interaction or classroom procedure, rather than as linguistic or subject matter corrections. Nonetheless, there is a strong possibility that the teachers' reactions to discourse errors contain a good deal of linguistic information for the students. For example, since late immersion classrooms demand the exclusive use of French as soon as the students can manage, numerous exchanges occur in which the teachers must discourage the use of English (with typical phrases such as 'Ça, c'est anglais') or provide French translations. The occurrence of this type of discourse error was noticeably more frequent at Time 1

than Time 2. Other discourse errors include: the failure of the student to answer, or to speak loudly enough; speaking without recognition or taking up a question or response out of its order in the lesson; unrequested repetition of answers previously supplied by other students; and the use of incomplete, but semantically clear, phrases.

This last type of discourse error is a particularly difficult one to identify, for these teachers will only occasionally insist on the use of full sentences. After such a correction, change in lesson focus will usually again allow a more elliptical language. Such errors have only been counted when they were reacted to, and in contexts immediately following such reactions. Since numerous discourse errors have not been isolated as such, the frequency of discourse correction will be seen to be relatively high; but a high frequency might also be expected, considering the importance of consistent classroom procedures.

2.3.6 Lexical Errors

This classification was initiated only for the second set of recordings at Time 2. Previously, such errors were classified either as morphological, content, or discourse. However, with the increased number of communicative ventures attempted by the students later in the year, their need for specific vocabulary had begun to play a greater role in their classroom participation. For example, whereas in the beginning of the year the students' use of English would often involve entire sentences which the teacher would admonish and/or translate (a discourse error), at the later time there are numerous instances of the students asking (in French) how to say a particular English word in French (not an error), or using an English word in the midst of a French sentence (and the teacher would merely provide the correct French word as a lexical correction).

Again, a gradual shading exists between lexical errors and "content" errors. The context determined the classification, i.e. if the student erred in his expression of subject matter knowledge, or if he merely failed to remember the appropriate French word. For example, see the Hist 9.2 exchange above as a content error, contrasted with the following exchange from Hist 8.2:

- T: Qu'est-ce que (Lord Carleton) fait en 1786...
 ...
 S: Il uh, aide de trouver une solution de problème en...des population...

Here, the student meant to say essaie de trouver. The meanings (as well as the sounds) of the two words are rather close in this context, so there is little question of this being a content error -- rather, it appears more to be a 'slip of the tongue', confusing two lexical items.

2.4 Summary

The determination of errors is clearly a difficult process, which depends on the immediate context of the utterance in question, as well as on an understanding of the content of the lesson, the intent of the teacher or student, and at times, the prior learning of the students.

Any further work in this area may require a more detailed categorization of different types of errors. Discourse errors, for example, are largely procedural, but the one type discussed above, that of incompleteness of a sentence, might be included in a category of "referential" errors, in which one could also include some of the kinds of errors included here under syntactic errors (lack of coherence, or incorrect presentatives). This possibility, and the separation of lexical from content errors, or phonological from morphological errors, and so on, may all require a much larger corpus of observations.

Nonetheless, the type of decision such as whether *il* is used in referring to a woman or a feminine noun is a referential or simply a morphological (even in some cases a phonological) error, will have to be made in some arbitrary but consistent manner.

3. Results

3.1 Frequencies of Correction of Different Error Types

The following two tables show Teachers 1-3's frequencies for correcting different errors at Time 1 (Table 2) and at Time 2 (Table 3). The error counts shown are of the total number of instances of error (i.e. if the student repeats the same error after an attempted correction; if it occurs twice in the same utterance, it also counts as two errors, a counting which decreases slightly the proportion corrected, for the teacher rarely will correct the duplicated error twice). Errors which students self-correct are not included.

If the teacher responded in the sense described above in section 2.2, then it was counted as a correction. Corrections have sometimes occurred where the nature of error is uncertain from the author's point of view, but where the teacher clearly reacts negatively to, or reformulates, the student's reply. This has resulted in some cases in the Tables of more than 100% frequency of correction, which have been rounded off to 100%. The types of errors are those described in sections 2.3.1-2.3.6.

Table 2

Time 1: Frequency of Correction (% corrected) Versus
Frequency of Different Error Types (# Errors)
By Lesson

	<u>Teacher 1</u>			<u>Teacher 2</u>	<u>Teacher 3</u>		<u>Totals</u>
	<u>Sci 8.1</u>	<u>Math 8.1</u>	<u>Fr 8.1</u>	<u>Geo 8.1</u>	<u>Fr 9.1</u>	<u>Geo 9.1</u>	
<u>Phonological</u>							
<u># errors</u>	23	1	21	46	23	4	118
<u># corrections</u>	18	0	14	27	16	1	76
<u>% corrected</u>	78%	0%	67%	59%	70%	25%	64%
<u>Morphological</u>							
<u># errors</u>	20	8	7	39	35	35	144
<u># corrections</u>	8	4	6	13	33	9	73
<u>% corrected</u>	40%	50%	86%	33%	94%	26%	51%
<u>Syntactic</u>							
<u># errors</u>	1	2	0	6	2	4	15
<u># corrections</u>	1	1	0	4	3	2	11
<u>% corrected</u>	100%	50%	0%	67%	100%	50%	73%
<u>Content</u>							
<u># errors</u>	17	18	17	3	3	12	70
<u># corrections</u>	15	15	18	4	3	10	65
<u>% corrected</u>	88%	83%	100%	100%	100%	85%	93%
<u>Discourse</u>							
<u># errors</u>	9	12	13	14	9	0	57
<u># corrections</u>	9	5	6	4	8	0	32
<u>% corrected</u>	100%	43%	46%	28%	89%	0%	56%
<u>Linguistic</u>							
<u>(Morph +Syn)</u>							
<u># errors</u>	21	10	7	45	37	39	159
<u># corrections</u>	9	5	6	17	36	11	84
<u>% corrected</u>	43%	50%	86%	38%	97%	28%	53%

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Table 3

Time 2: Frequency of Correction (% corrected) Versus
 Frequency of Different Error Types (# errors)
 By Lesson

	<u>Teacher 1</u>		<u>Teacher 2</u>		<u>Teacher 3</u>		<u>Totals</u>
	<u>Sci 8.2</u>	<u>Math 8.2</u>	<u>Fr 8.2</u>	<u>Hist 8.2</u>	<u>Fr 9.2</u>	<u>Hist 9.2</u>	
<u>Phonological</u>							
<u># errors</u>	41	11	37	22	18	7	136
<u># corrections</u>	14	3	27	11	5	0	60
<u>% corrected</u>	34%	27%	73%	50%	30%	0%	44%
<u>Morphological</u>							
<u># errors</u>	55	19	29	21	33	36	193
<u># corrections</u>	22	6	21	11	17	11	88
<u>% corrected</u>	40%	32%	72%	52%	52%	31%	46%
<u>Syntactic</u>							
<u># errors</u>	2	1	7	1	5	4	20
<u># corrections</u>	0	0	6	1	5	1	13
<u>% corrected</u>	0%	0%	86%	100%	100%	25%	65%
<u>Lexical</u>							
<u># errors</u>	8	2	3	2	2	7	24
<u># corrections</u>	5	2	3	2	2	4	18
<u>% corrected</u>	63%	100%	100%	100%	100%	57%	75%
<u>Content</u>							
<u># errors</u>	14	24	32	10	8	7	95
<u># corrections</u>	13	24	23	10	7	6	83
<u>% corrected</u>	93%	100%	72%	100%	88%	86%	87%
<u>Discourse</u>							
<u># errors</u>	2	4	3	5	3	1	18
<u># corrections</u>	1	4	3	4	2	0	14
<u>% corrected</u>	50%	100%	100%	80%	67%	0%	78%
<u>Linguistic (Morph + Syn)</u>							
<u># errors</u>	57	20	36	22	38	40	213
<u># corrections</u>	22	6	27	12	22	12	101
<u>% corrected</u>	39%	30%	75%	55%	58%	30%	47%

Many factors could account for the variation between Tables 2 and 3 (i.e. between Time 1 and 2), between teachers, and between lessons. The factors which are suggested are reasoned on the basis of the particular lessons and contexts on the recording days, the teachers' own comments following the lessons, and other evidence from the transcripts.

3.1.1 Differences in number of errors from Time 1 to Time 2

(a) The increase in the number of morphological errors in some classes from Time 1 to Time 2 (Sci 8.1 and Sci 8.2, Math 8.1 and Math 8.2, and Fr 8.1 and Fr 8.2) might be explained by the increase in amount of participation in French by the students at Time 2. This did not occur in one situation, where the difference between morphological errors at the two Times decreased from Geo 8.1 to Hist 8.2, possibly owing to the fact that in Hist 8.2 a great deal of time was devoted to reading from worksheets in the particular class observed.

(b) The increase in content errors from Fr 8.1 to Fr 8.2 may be attributable to the change in teacher (Teacher 1 at Time 1, and Teacher 2 at Time 2); the tasks in both classes were similar, but Teacher 2 tended to elicit more responses exemplifying grammatical knowledge (see brief discussion below in section 3.1.3).

(c) The marked decrease in discourse errors for all classes (except from Geo 9.1 to Hist 9.2) is mainly explicable by the students' more extensive use of French. Also important is the students' apparent growth in familiarity with interactional requirements.

3.1.2 Differences in the teachers' frequency of correction (# of corrections divided by # of errors) from Time 1 to Time 2.

(a) Teacher 1 (columns 1-3, Table 2, and 1 and 2, Table 3) appeared to maintain the same relative frequency of corrections (% corrected) for content versus linguistic errors (morphological plus syntactic errors), with some apparent shift in favor of content errors: Sci 8.1, 88% versus 43%; Sci 8.2, 93% versus 39%; Math 8.1, 83% versus 50%; Math 8.2, 100% versus 30%. In Teacher 1's Fr 8.1 class, where both content and language are important, approximately equivalent concern for content and linguistic errors is indicated (100% versus 86%).

(b) Teacher 2 (column 4 in Table 2, and columns 3 and 4 in Table 3) also consistently shows less concern for linguistic errors in subjects other than French: Geo 8.1 shows 100% content corrected versus 38% linguistic corrected,

and Hist 8.2 shows 100% content corrected versus 55% linguistic corrected. Teacher 2's Fr 8.2 class shows approximately equal concern (72% versus 75%).

(c) Teacher 3 (columns 5 and 6 in Tables 2 and 3) showed somewhat similar differentials between content and linguistic corrections at both Times 1 and 2. Fr 9.1 and Fr 9.2 show 100% versus 97%, and 88% versus 58% corrections, respectively. Fr 9.1 was exceptionally high, in that it was almost uniquely pattern drills, while Fr 9.2 has a relatively low frequency of correction for linguistic errors, in part due to the fact that the content of a reading passage was being discussed, and the students' linguistic errors were not important to the intent of the lesson. Geo 9.1 and Hist 9.2 show 85% versus 28%, and 86% versus 30%, respectively.

3.1.3. Summary

The maintenance of this linguistic-content differential distinction for French versus other lessons is shown clearly in the following combined tabulation of all three teachers' frequency of corrections at Times 1 and 2, for French versus other lessons. The corrections totalled in Table 4 are only for linguistic and content errors.

Table 4

Frequency of Linguistic and Content Errors Corrected By All Three Teachers in French and Other Lessons

		% Linguistic errors corrected (Morph + Syn)	% Content errors corrected
French	Time 1	95%	100%
	Time 2	66%	75%
Other subjects	Time 1	37%	88%
	Time 2	37%	96%

The French lessons show much closer balance between the two kinds of corrections at both Times 1 and 2 (95% and 100% at Time 1, and 66% and 75% at Time 2), than the balance evident in other lessons at either Time (37% versus 88% at Time 1, and 37% versus 96% at Time 2). The marked decrease in percentage of corrections of either kind for French classes from Time 1 to Time 2 (from 95% to 66% linguistic, and from 100% to 75% content) seems to be a result of the increased amount of student participation in conversation in the two French classes at Time 2.

Both Teachers 2 and 3 encouraged a greater amount of discussion of various topics at Time 2 in their French classes,

and they did not confine themselves to the material in the textbook. In particular, Teacher 2 in Fr 8.2 posed several extra questions regarding knowledge about morphology and phonology. The students offered many more responses than the teacher had time to. This also explains the relatively high number of content errors for Fr 8.2 in Table 3.

3.2 Teachers' Priorities

The obvious question that follows from this analysis concerns the teachers' general awareness of the differences that have been seen above. In particular, what are their criteria for correctness of student participation, and what are their reasons for applying these criteria at any point during the course of a lesson?

The problem of variability in correction for a given type of error was illustrated in Mehan (1974). Correcting an error at one point, and omitting correction at another, may create misunderstanding. If teachers' professed criteria do not complement their actual performance, then the chances for providing effective corrections are decreased.

The teachers were asked, following Time 2, to list their students' errors on a special form, while listening to the recordings of their respective lessons. They were to indicate the type of error, whether or not they had corrected it, the intention of the correction (or lack of correction), the form of the correction, the importance of the error, and whether another form of correction would have been more effective. They were additionally asked to submit comments regarding their priorities.

For several reasons, the teachers did not select all instances of error which are now apparent from the transcripts: (1) One teacher indicated that, owing to the quantity of errors, only a representative few were selected. (2) The teachers' selections were also limited by their insufficient awareness of what the investigator understood as errors. They were not given any examples of categories, out of the concern that the investigator's suggestions would bias their subjective criteria. (3) Finally, close listening to the tapes during transcription revealed errors that would not be evident during a one-time-through listening. Despite these reasons, the teachers selected a wide range of errors (except discourse errors, which are therefore excluded from the following discussion).

3.2.1 Teacher 1's Priorities

Teacher 1 maintained that correction of linguistic difficulties should be relegated to French lessons, that interruptions for such corrections in Mathematics or Science (Math 8.2 and Sci 8.2) would frustrate other students' attempts to express themselves. Only when faulty pronunciation or inaccurate vocabulary and syntax would lead to misunderstanding of the lesson material, has she noted the need for interventions. One instance, however, illustrated the teacher ignoring both linguistic and content inaccuracy, which she reported was for the sake of supporting the student's effort to attempt a complex response.

Teacher 1's stated priority is also evident in the tabulation of her selection of students' errors, and of her frequency of corrections for these selected instances, shown in Table 5.

Table 5Teacher 1's Selection of Errors and Frequency of Correction

(Figures in parentheses are from Table 3)

	<u>Phon</u>	<u>Morph</u>	<u>Syn</u>	<u>Lex</u>	<u>Cont</u>	<u>Totals</u>
<u>Sci 8.2</u>						
# errors	5 (41)	10 (55)	1 (2)	3 (8)	3 (14)	10
# corrections	4 (14)	2 (22)	0 (0)	2 (5)	2 (13)	
% corrected	80% (34%)	20% (40%)	0% (0%)	67% (63%)	67% (93%)	
correct responses by student						
#	3	2	0	1	1	7
%	75%	100%	0%	50%	50%	70%
<u>Math 8.2</u>						
# errors	1 (11)	2 (19)	- (1)	1 (2)	- (24)	
# corrections	0 (3)	0 (6)	- (0)	0 (2)	- (24)	
% corrected	0% (27%)	0% (32%)	- (0%)	0% (100%)	- (100%)	
correct responses by student						
#	-	-	-	-	-	
%	-	-	-	-	-	

(The Math 8.2 lesson was primarily one of review of work done on homework sheets, and Teacher 1 did not select any of the content errors which actually occurred in that lesson.) The figures in parentheses in Table 5, and later in Tables 6-7, are taken from Table 3, in order to compare the teachers' selection of instances with the total instances of error and correction as determined by the analysis of the transcripts.

The two lower rows in Table 5, and in the following Tables 6-7, for each lesson (# and % correct responses by student) are counted from the transcripts to indicate to what degree the teacher's selection of correcting instances were "successful", in the sense that the students responded again, this time with a correct response. To maintain uniformity with the other data presented here, the teachers' categorizations of types of errors have not been used; the types used are those described in 2.3 above.

3.2.2 Teacher 2's Priorities

Teacher 2 comments that few of the errors he perceived in his Grade 8 history lesson (Hist 8.2) stem from lack of understanding of history. Most were linguistic errors which he said required repetition of the correct model, or explanations. He perceives the study of history in French as a supplementary opportunity to expand the students' knowledge of French. He classified the errors he selected largely into those of pronunciation, vocabulary, grammar, "reading" (i.e. several instances of students' misreading their notes or their books -- these have been categorized by type as if they were errors in normal pronunciation), and confusion in knowledge of (grammatical) terms. The rather large number of content errors and corrections in Fr 8.2 were primarily of this last type. Most of the "reading" errors were phonological.

Table 6 shows the tabulation of Teacher 2's selection of occurrences of errors and corrections.

Table 6

Teacher 2's Selection of Errors and Frequency of Correction

(Figures in parentheses are from Table 3)

	<u>Phon</u>	<u>Morph</u>	<u>Syn</u>	<u>Lex</u>	<u>Cont</u>	<u>Totals</u>
<u>Fr 8.2</u>						
# errors	20 (37)	2 (29)	1 (7)	1 (3)	12 (32)	33
# corrections	18 (27)	2 (21)	1 (6)	1 (3)	11 (23)	
% corrected	90% (73%)	100% (72%)	100% (86%)	100% (100%)	92% (72%)	
correct responses by student	# 13 % 72%	2 100%	1 100%	1 100%	8 89%	25 76%
<u>Hist 8.2</u>						
# errors	3 (22)	3 (21)	1 (1)	2 (2)	2 (10)	11
# corrections	3 (11)	3 (11)	1 (1)	2 (2)	2 (10)	
% corrected	100% (50%)	100% (52%)	100% (100%)	100% (100%)	100% (100%)	
correct responses by student	# 3 % 100%	1 33%	0 0%	2 100%	0 0%	6 55%

3.2.3 Teacher 3's Priorities

Comments by Teacher 3 show that her concern for the progression of the lesson in Grade 9 History (Hist 9.2) overrode her concern for strictly linguistic errors. She meant by this that pronunciation and grammatical errors could be better treated in French class (Fr 9.2), while only errors of subject matter or new vocabulary were important in Hist 9.2. She compared Hist 9.2 to a history lesson in the L1, where non-grammatical language would also be "tolerated (as long as comprehension is retained)".

These reflections are borne out to a degree in the transcription (Table 7) of Teacher 3's selection of corrections of different errors in Fr 9.2 and Hist 9.2, where her percentage of correction for content and lexical errors is high. Again, the frequency and percentage of her corrections that students actually responded to with the correct response, are shown, and comparison is made with the frequencies from Table 3.

Table 7⁹Teacher 3's Selection of Errors and Frequency of Correction

(Figures in parentheses are from Table 3)

	<u>Phon</u>	<u>Lorph</u>	<u>Syn</u>	<u>Lex</u>	<u>Cont</u>	<u>Total</u>
<u>Fr 9.2</u>						
# errors	8 (18)	8 (33)	1 (5)	2 (2)	2 (8)	14
# corrections	4 (5)	6 (17)	0 (5)	2 (2)	2 (7)	
% corrected	50% (30%)	75% (52%)	0 (100%)	100% (100%)	100% (88%)	
correct responses by student	# 4 % 100%	# 5 % 83%	# 0 % 0%	# 2 % 100%	# 1 % 50%	# 12 % 86%
<u>Hist 9.2</u>						
# errors	3 (7)	10 (36)	2 (4)	8 (7)	3 (7)	17
# corrections	1 (0)	4 (11)	1 (1)	8 (4)	3 (6)	
% corrected	33% (0%)	40% (31%)	50% (25%)	100% (57%)	100% (86%)	
correct responses by student	# 1 % 100%	# 2 % 50%	# 0 % 0%	# 3 % 38%	# 3 % 100%	# 9 % 53%

3.2.4 Comparison of Tables 5-7

Despite the three teachers' actual differences in rate of correction, the results shown in Tables 5-7 indicate some similarities in their selections from the transcripts.

(1) All three teachers have primarily selected those instances of errors which they "corrected" or reacted to in some way, instead of ignoring them. Of those selected that were not corrected, especially linguistic errors in subjects other than French, Teachers 1 and 3 indicated that they consciously avoided correction in order not to distract from the progress of the lesson.

(2) In proportion to their actual occurrence, morphological errors appear to be those least selected by these teachers (35 out of 193 = 18%) -- that is, they are possibly the least noticed and the teachers indicated several times that such errors were not generally important.

(3) It is furthermore noticeable that of the instances of error selected by all three teachers, those which were followed by a correction tended to be corrections that elicited correct responses from the students. The ratio for all teachers (adding the Totals columns) of such "successes" to the number of corrections is 69%. As in (1) above, this selection of successful corrections may be due to the added salience on the recordings of those teacher-student exchanges in which the teacher reacts, and the student is led to reply again.

The actual ratio of "success" in correction for all of these classes was 39%, which is shown broken down in the following Table 8, presenting data from the analysis of the transcripts. For most of the corrections, the rate of students' correct responses is influenced either by the teachers' persistence in obtaining a correct response, or by the students' voluntary attempts to recapitulate the teacher's correction. (The relationship between the teacher's persistence and the students' voluntarism is of course a very complex one that requires investigation beyond the present study.)

The '% corrections' in Table 8, representing the total number of teacher corrections, are from Table 3; the '% correct response' are counted from the students' replies to the teachers' reactions; the '% correct response' equals '% correct response' divided by '% corrections'; and the '% teachers' select.' are the same as the '% correct responses by student' from Tables 5-7.

Table 8

	Sci 8.2	Math 8.2	Fr 8.2	Hist 8.2	Fr 9.2	Hist 9.2
<u>Phonological</u>						
# corrections	14	3	27	11	5	0
# correct response	7	0	14	5	4	0
% correct response	50%	0%	52%	45%	80%	-
% teachers select.	75%	-	72%	100%	100%	100% *
<u>Morphological</u>						
# corrections	22	6	21	11	17	11
# correct response	3	0	6	2	7	3
% correct response	14%	0%	29%	18%	41%	27%
% teachers select.	100%	-	100%	33%	83%	50%
<u>Syntactic</u>						
# corrections	0	0	6	1	5	1
# correct response	0	0	2	0	0	0
% correct response	--	-	33%	0%	0%	0%
% teachers select.	0%	-	100%	0%	0%	0%
<u>Lexical</u>						
# corrections	5	2	3	2	2	4
# correct response	3	0	0	0	2	3
% correct response	60%	0%	0%	0%	100%	75%
% teachers select.	50%	-	100%*	100%	100%	38%
<u>Content</u>						
# corrections	13	24	23	10	7	6
# correct response	6	12	11	4	5	3
% correct response	46%	50%	48%	40%	71%	50%
% teachers select.	50%	-	89%	0%	50%	100%

*(represents teacher-perceived error types that were not classified as such in analysis)

Comparison of the rows for "% correct response" and "% teachers' select." of correct responses shows that, although the teachers may have selected more corrective exchanges with successful outcomes, the actual frequencies of correct responses to correction of different types, relative to each other within a given lesson, are somewhat comparable to the teachers' selections. This is to say that when correct responses to, e.g., phonological errors were high, the teacher also tended to perceive and select them more from the recordings. Numerous factors, among them those mentioned in section 3.2 and following, interact to keep this relationship from being systematic.

3.3 Summary of Teachers' Stated Priorities

All three teachers had expressed a concern for linguistic development through subject-matter discussions, and Teacher 2's professed subordination of History study to the learning of French is not borne out in his actual performance in correction -- he, too, tends to neglect linguistic errors more in Hist 8.2 and Geo 8.1 than in Fr 8.2 (comparing Tables 2 and 3). In rating types of errors, moreover, all three teachers considered content errors to be more important than linguistic and phonological errors. Many of their

corrections of phonological errors are only brief modelling of correct pronunciation, with no insistence on a correct response from the student. Occasionally, however, certain phonological errors were considered important and insisted upon.

Regarding linguistic errors, all three teachers commented on the varying importance of some types of linguistic errors over others, depending on the level of their students' knowledge of French, the amount of time already spent in exercises on particular items, and recurrent individual problems with specific errors, such as gender or tense. The teachers suggested that they preferred to correct those items which are focal points of lessons, especially the use of new vocabulary, or, for example, synonym and antonym contrasts in French class. Difficult idioms, or grammatical points which surpass the knowledge and experience of the students, were to be ignored.

4. Conclusion

The questions raised in the Introduction (Section 1) regarded general instructional priorities, where the teachers' rate of correction and proportion of corrections of various types of errors were considered as indicators of their priorities. The present results show a reasonable degree of agreement between the teacher's stated priorities and their classroom practice. Language instruction is indeed subordinated to the subject matter -- even in French class, where factual communication about stories and narratives often is the subject of discussion, as well as grammatical content.

The beginning use of a second language at a later age is unavoidably beset with misunderstandings and uncertainties, but the evident L2 communicative growth of these students within the five months between observations attests to their involvement in learning and to their comprehension of the challenges posed by an immersion learning context. If the teachers persist with a high rate of correction of content errors, then concern for the students' general academic achievement is not justified without some evidence of poor achievement.

On the other hand, the initial question concerning immersion students' growth in L2 skills is not totally clarified. When, as often seems to be the case in these classes, the communicative use of French takes precedence over correct linguistic use, one must ask in what ways the teachers' reactions (correcting or not) guide the learner's sensitivity to linguistic correctness. (L1 acquisition appears to be successful despite parents' inattention to syntactic and other linguistic errors in their children's language (Brown and Hanlon, 1970), but the case of later L2 learners is not necessarily equivalent.)

Although immersion students at the Grade 8, 9, and other levels achieve significantly higher in French than comparison students who take French as a subject (Barik and Swain, 1976a, 1976b), there is still a need to determine which behaviors on the part of the teachers can help their

students improve linguistic performance, and which behaviors tend to confuse or to inhibit the development of performance. The present paper has attempted to describe what teachers do quantitatively with different error types. In Chaudron (1976b) the teachers' corrective strategies have been described, and an indication of some more effective ones have been outlined. A further report will investigate some of the linguistic problems resulting from the use of the L2 as a medium of instruction.

Footnotes

1. The present paper is a significantly revised portion of a Qualifying Research Paper prepared for entrance into a doctoral program at the Ontario Institute for Studies in Education (O.I.S.E.). This Q.R.P. was based on the pilot study reported on below. The author wishes to thank Merrill Swain for her constant comments and encouragement during the execution and analysis of the study, and during the subsequent writing of various versions of the Q.R.P. and of this present paper. The data and opinions presented are, however, the responsibility of the author.
2. The study, conducted in the 1975-76 school year, was funded by a Grant-in-aid from the Ministry of Education, Province of Ontario, to the Project Director, Dr. Merrill Swain. The students in the present study had had Grade 7 French for 20 minutes a day. For those Grade 7 students who will enter the immersion program in Grade 8, French lessons are increased to an hour a day for the final two months of Grade 7.
3. Various kinds of measurement of classroom interaction and of educational achievement might be attempted to clarify these issues; the present study is only one type of investigation, which itself needs replication in different settings, with perhaps more teachers for longer periods of time.
4. Teachers 1 and 2 are native European French speakers and Teacher 3 is a native English-speaking Canadian with an excellent command of French.
5. Not everyone will agree with what has been included in each type of error. Other more general or more specific classification schemes might be appropriate. This present one developed somewhat naturally out of the data, and I have attempted to be as explicit as possible about what was included in each type, so that the reader can make his/her own interpretation about the importance of error correction in each of the categories.
6. The occasional difficulty of discerning the precise sound quality of some utterances on the tapes complicated the location or description of phonological errors.
7. Other instances of lack of coherence are so deficient that they are difficult to analyze. These have mostly been ignored in the analysis; if the teachers did react with a request for a repetition of the student's response, (especially when the volume of the response was in question), the "error" could be judged as a discourse error.

8. For example, the following student statement was followed up by the teacher's syntactic reconstruction. However, given the sometimes disjointed nature of student utterances (with pauses, implicit references, etc.), it is difficult to say that this student's response was incorrect syntactically.

Hist 9.2 S: Elle dit que, les Volkswagens ici, il y a le même quantité de Mercedes là.

T: En Suisse, qu'il y a de Volkswagens ici.

9. In Hist 9.2 Teacher 3 typified a number of errors as "vocabulary", which according to the present analysis would be content errors, but the quantity of them has justified placing them under "lexical" errors in this case. Also, one error in pronunciation was perceived by Teacher 3 which was not considered so by the investigator. This accounts for the greater number of these two types of errors and their corrections in Table 7, compared to Table 3.

Bibliography

- Allwright, Richard L. (1975) "Problems in the Study of the Language Teacher's Treatment of Learner Error." In M.K. Burt and H.C. Dulay, eds. New Directions in Second Language Learning, Teaching and Bilingual Education. Washington, D.C.: TESOL.
- Barik, Henri C., and Swain, Merrill. (1976a) "A Canadian Experiment in Bilingual Education at the Grade Eight and Nine Levels: The Peel Study." Foreign Language Annals, Vol. 9, No. 5 (October), 465-479.
- (1976b) "A Canadian Experiment in Bilingual Schooling in the Senior Grades: The Peel Study through Grade Ten." International Review of Applied Psychology, Vol. 25, 99-113.
- Brooks, Nelson. (1964) Language and Language Learning: Theory and Practice, Second Edition. New York: Harcourt, Brace and World.
- Brown, Roger, and Hanlon, Camille. (1970) "Derivational Complexity and Order of Acquisition in Child Speech." Cognition and the Development of Language. Edited by J.R. Hayes. Toronto: John Wiley and Sons, Inc.
- Chaudron, Craig. (1976a) "Teacher Strategies in Handling Student Errors in French Immersion Classes." Paper delivered at the Linguistic Circle of Ontario, Toronto, March 6.
- (1976b) "A Descriptive Model of Discourse in the Corrective Treatment of Learners' Errors." Modern Language Centre, O.I.S.E., Toronto (mimeograph). (1976)
- Edwards, H.P., and Smyth, F. "Alternatives to Early Immersion Programs for the Acquisition of French as a Second Language." Canadian Modern Language Review, Vol. 32, No. 5 (May), 524-533.
- Fanselow, John. (n.d.) "The Treatment of Error in Oral Work." Teachers College, Columbia University, New York.
- Mehan, Hugh. (1974) "Accomplishing Classroom Lessons." In Cicourel, A., et al., eds. Language Use and School Performance. New York: Academic Press.
- Naiman, Neil, Fröhlich, Maria, and Stern, H.H. (1975) The Good Language Learner. Toronto: O.I.S.E., Modern Language Centre.

Politzer, Robert L. (1965) Teaching French: An Introduction to Applied Linguistics. Waltham, Massachusetts: Blaisdell Publishing Company.

Stern, H.H.; Swain, M.; McLean, L.D.; Friedman, R.J.; Harley, B.; and Lapkin, S. "Three Approaches to Teaching French." Toronto: Ontario Ministry of Education, 1976.

Swain, Merrill, and Bruck, Maggie, eds. (1976) Special Issue of the Canadian Modern Language Review on "Immersion Education for the Majority Child." Vol. 32, No. 5 (May).