Teacher–Learner Negotiation in Content-Based Instruction: Communication at Cross-Purposes?

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This research looks at teacher-student exchanges in three content-based language classrooms. The data reveal persistent archetypal patterns of classroom interaction, teachers speak most of the time and they initiate the majority of the exchanges by asking display questions, whereas student-initiated requests are referential. In addition, teachers modify their own speech in response to students' signals of non-understanding regardless of activity type (whole class, small group, one-to-one), but students prefer to verbally request help only in small group or one-to-one interactions with the teacher. Moreover, although teachers repeatedly modify their speech in response to students' requests (verbal or non-verbal), they rarely request modifications of the students' speech. Sustained negotiation—in which teachers and students verbally resolve incomplete or inaccurate messages—occurs rarely or not at all in these classrooms.

The research differs from earlier work on L2 teacher talk and negotiation in that it attempts to shed light on why these patterns of interaction persist. The discussion of the data includes the participating teachers' explanations of their own behaviors. Students' reactions to negotiation in content-based instruction are gleaned from end-of-semester evaluations of both the teacher and the course. Overall lack of linguistic negotiation is attributed to teachers' and learners' expectations for appropriate classroom behaviors, teachers' sensitivity to affective variables in second language learning, power relationships, and time management considerations. While the present research supports previous experimental studies in which learners' clarification requests result in teacher-modified input, they also challenge the feasibility of promoting more negotiation in content-based instruction.

BACKGROUND

Research in content-based instruction has firmly established that even early-stage second language (L2) learners can acquire significant amounts of subject matter knowledge through instruction conducted solely in the L2 (Lapkin and Swain 1984, Brinton, Snow, and Wesche 1990, Musumeci 1993). In addition, particularly in the areas of listening and reading, classroom learners' L2 competence can become native-like in content-based instructional settings. The success of this type of instructional approach has been attributed to the fact that learners are exposed to copious amounts of comprehensible input, in contrast...
to pedagogical approaches that attempt to teach language by focusing on grammatical forms and structures (Krashen 1984, Lightbown 1992)

It is important to note that it is not the quantity of exposure to L2 input alone that accounts for acquisition, as research in bilingual submersion education (in which students are exposed to subject matter in the L2 without regard for their linguistic limitations) has demonstrated (Cummins 1988). Rather, learners must receive input that is meaningful, rich, and comprehensible. One important way in which input is made comprehensible is through negotiation, that is, through 'exchanges between learners and their interlocutors as they attempt to resolve communication breakdowns and to work toward mutual comprehension' (Pica, Holliday, Lewis, and Morgenthaler 1989: 65). Learners can interact with native speakers by letting them know that information has not been understood and thereby instigate adjustments to the message (Long and Sato 1983, Long and Porter 1985). Several experimental studies confirm that when non-native speakers signal non-understanding, native speakers modify their messages to render them more comprehensible (Gass and Varonis 1985, Doughty and Pica 1986, Duff 1986, Pica, Young, and Doughty 1987, Pica 1993). In this 'modified input' framework, negotiation is important because it results in making the message understandable and the input more accessible to the learner.

Taken together, the input modification studies and the results of immersion education provide compelling evidence that comprehension is essential to second language acquisition. However, the immersion research also reveals persistent differences between the immersion students' oral and written language and the language produced by native speakers, despite years of exposure to comprehensible input (Harley, Allen, Cummins, and Swain 1990). These differences cause researchers to debate the relative contribution of factors other than comprehension in the language learning process: motivation, first language literacy skills, attention to linguistic form, to mention but a few. Not surprisingly, the role that negotiation may play in L2 acquisition resurfaces in the debate, albeit from a slightly different angle.

Whereas the research on negotiation previously mentioned focuses largely on the effect that negotiation has on the native speaker's restructuring of a message and its resultant comprehension by the learner, Swain's (1985) work suggests that progress in the development of language competence towards more native-like models demands the kind of continuing refinement of expression that is spurred by learners' modification of their own output and its resultant comprehension by the native speaker. Without denying the importance of comprehensible input in language development, the modified output model expands the role of negotiation in the acquisition process within the formal learning context of the classroom by switches the archetypal roles of teacher and learner. The learner thus becomes the source of the message, and it is the teacher who signals non-understanding. In the modified output model, learners' attention is directed to structural features of the language when they must reformulate utterances that are imprecise, ambiguous, or otherwise unclear.
Unlike the modified input model in which the teacher makes all the linguistic adjustments necessary for mutual understanding, in the modified output model linguistic adjustments are made by the student. Such adjustments are precipitated by the teacher's intervention, either a signal of non-understanding or a request for clarification. Results of an experimental study that looked at negotiation between native speakers and non-native speakers working in pairs confirm that non-native speakers do indeed adjust their output in response to native speakers' requests for clarification (Pica et al. 1989). It remains to be shown how often such adjustments are made in the classroom context as opposed to the experimental setting.

Despite the overlap between negotiation that is instigated by the native speaker and that which is instigated instead by the non-native speaker, what is important to note is that, from either a modified input stance or a modified output model, language acquisition theory posits some element of negotiation as pivotal, at least in pushing learners' competence to more native-like attainment.

With the exception of immersion education studies, L2 acquisition research in the area of negotiation has analyzed the verbal exchanges in experimental settings with either non-native and native speakers or among non-native speakers, or between learners and teachers in language classrooms where the primary goal of instruction was the acquisition of some general second language competence, not subject matter knowledge. In this research, I examine teacher-learner exchanges in a post-secondary content-based instructional setting, where 12–18 students and one native-speaking teacher attempt to achieve the dual instructional objectives of acquisition of subject matter and language competence, through the medium of the second language, oral and written.

While this setting is unlike either the experimental setting or the 'core' language class, it captures two features of the academic setting in which post-secondary L2 learners find themselves once they have progressed beyond basic language instruction: (1) the native speaker to student ratio more closely approximates that found in subject matter classrooms (unlike the experimental setting), and (2) the structure of the course is content-driven (unlike the 'core' language class). The practical issues that this kind of research can address are to what extent do teachers and students negotiate meaning in a post-secondary content-based instructional setting, what does that negotiation look like, and why?

THE CONTENT-BASED INSTRUCTIONAL SETTING

The content-based course in which the data were collected represents the first semester of a two-semester sequence of courses designed to bridge learners' transition from earlier language courses that focus on the development of general communicative ability to advanced courses in the literature and linguistics of the L2, Italian. (For a complete rationale and description of the content-based instructional sequence, see Musumeci 1993.) Specifically, the learning objectives for the course are to acquire knowledge of the social geography of Italy and to facilitate the continued acquisition of interpretive and expressive skills in both oral and written Italian, while promoting the develop-
ment of general academic skills in the undergraduate curriculum (note-taking, summary and definition writing, awareness of text organization through the use of outlines and flowcharts). Using Brinton et al.'s (1990) framework, the course is probably best described as sheltered immersion, since enrollment is limited to non-native-speaking students. Academic bureaucracy dictates that students receive credit in Italian upon completion of the course and not credit in geography, since it is offered through the department of Spanish, Italian, and Portuguese and it is taught in Italian, just as students receive 'Spanish' credit for a course on Latin American literature offered through the same department. If one were to ask whether it is a language course or a content area course, the answer would have to be both; the dual objectives define content-based instruction.

As in any content area classroom, the focus of instruction is the subject matter. All quiz and exam items cover the content. The textbook, *Geografia Loescher Italia*, published in Italy, is used in the national curriculum for social studies. While students' language skills are not evaluated separately from their content knowledge, the ability to use the L2 is an integral part of the course. All aspects of the course are conducted in the L2: lectures, discussions, assignments, and tests. The course requirements specify that students complete at least four formal writing tasks during the course, and the exams include both short-answer and essay questions. Students are also required to give two in-class oral presentations, and their everyday in-class participation accounts for 20 percent of their final grade.

Although in many ways the course resembles other subject-matter courses on campus, it differs from them in that the students in the content-based Italian sequence are neither native-speakers of the language of instruction (Italian) nor are they advanced L2 learners. Because of this, the teachers in the content-based instructional sequence have all received training in communicative language teaching, and they are particularly attuned to the fact that their students continue to require linguistic support and need opportunities to practice language expression, a fact that is sometimes overlooked at subsequent levels of L2 coursework where language skills are often assumed. Given the teachers' awareness of learners' linguistic needs and abilities, the content-based instructional setting should provide examples of optimal environments for acquiring subject matter and language (Swain 1991).

Swain's work also confirms that many teachers in the Canadian immersion programs fail to provide the kind of consistent linguistic feedback that might propel students to higher levels of attainment in the L2. The present research investigates whether those findings might also generalize to the post-secondary content-based instructional sequence in the Italian program. It also seeks an explanation as to why teachers who understand the theoretical stance on negotiation in L2 learning might still fail to incorporate more negotiation into their L2 classrooms.

On the one hand, the general reaction to the content-based courses in the Italian program has been very positive over the years. Teachers are amazed by
the apparent ease with which students acquire knowledge of Italian social geography in Italian. They continue to be impressed by the amount of competence from other subject areas the students bring to the Italian course. In terms of Italian language skills, the instructors find the students' interpretive skills particularly strong. They also report that students' writing skills steadily improve throughout the semester. Students also report enjoying the subject matter, the 'academic' nature of the course, and—above all—the fact that it is taught entirely in Italian. On the other hand, the teachers also express some frustration with one aspect of daily instruction: they wish the students would contribute more to class discussions, that is, volunteer to speak more frequently and at greater length. In discussions of teaching, they often ask for ideas on how to encourage students to speak more, and they wonder whether they are perhaps already doing something inadvertently to discourage it. The teachers' awareness of the theoretical value of negotiated interaction and their belief that students might benefit from speaking more, in conjunction with their desire to increase students' participation in class discussions, precipitated the elicitation of their interpretations of the data. Within the particular context of the Italian program, it was hypothesized that a relationship between negotiation and student participation might exist.

RESEARCH QUESTIONS
Before examination of the extent to which negotiation happened in these particular content-based classrooms, the research first identifies the global characteristics of the linguistic exchanges that occur during the lessons. The preliminary questions that I address are of a general nature: Who speaks? How much and when? About what? Once those questions have been answered, I look specifically at the kind of negotiation that occurs in order to answer the following questions: How is failure to comprehend signaled and how are messages modified? In particular, who signals and who modifies? Along with my analysis of the data, I present the instructors' interpretations of their own exchanges with the learners. Additionally, I consider one source of learners' reactions to negotiation in the classroom. The research findings reveal subtle, but endemic, challenges to the call for more negotiation in the content-based language classroom.

METHOD
Three 50-minute lessons, conducted by three different teachers, A, B, and C in the 13th week of a 15-week course using a content-based instructional approach, were videotaped and transcribed using standard orthography, except where pronunciation was deviant. The transcription conventions appear in Appendix A. The researcher and one other scorer went through the transcripts independently and labelled all instances of requests for information as questions. The rare rhetorical questions ('How shall I explain?') and remarks which appeared to function mainly as fillers ('OK? 'hm?') were not counted as questions. The inter-rater reliability for identifying questions was 97 (Four
problematic questions occurred in sequence and were eventually counted as one question due to the lack of pauses between them.)

The teachers who participated in the study were native or near-native speakers of the L2, Italian. At the time of data collection, they were the entire instructional staff for the third semester course. All three instructors were fully competent in the subject matter, Italian regional geography, the native speakers having studied it as part of the mandated curriculum in the Italian educational system, the non-native speaking instructor through a combination of extensive academic and travel experience in Italy, personal study, and a master's degree in urban and regional planning. Two of the instructors were doctoral candidates in the department of Spanish, Italian, and Portuguese, the third is a permanent instructor. All possessed a minimum of four years of university-level teaching experience and had taught for at least two semesters in the content-based instructional sequence prior to the time of the videotaping. In addition to their teaching experience, all had completed at least one graduate-level seminar in communicative language teaching, and they had participated in a number of language teaching workshops, with particular emphasis on how to make the L2 comprehensible.

The students who enroll in the content-based instructional sequence must have completed either one year of Italian language instruction in the departmental program (a topic-driven program with an early emphasis on L2 reading in which all instruction takes place in the L2), or a personal interview with the director of the Italian language program during which their interpretive and expressive skills in Italian are assessed. Based on surveys conducted in 1986 and 1994, we know that the students enrolled in the content-based sequence are typical of the general population of students in the Italian program; mostly undergraduates, the vast majority are not Italian majors, nor are they taking the course to meet the university's foreign language requirement. Instead, they have chosen to study Italian, in addition to their major field of study, for personal or professional reasons, they intend to travel to Italy within the next two years, they are interested in learning about Italy, Italians, and Italian culture (but not literature), and they are continuing in the program primarily to further advance their language skills.

The classes investigated were comparable in size to many second- through fourth-year classes in the humanities departments at the university, containing 14, 20, and 14 students, respectively. Moreover, the relatively small class size was believed potentially conducive to learner-teacher interaction, and presumably negotiation in the L2.

Recording classroom interaction poses problems for research due to its invasive nature. Although there is always the possibility that the presence of the videotaping equipment and the person who did the videotaping (in this case not the researcher) might have affected classroom behavior, it should also be noted that videotaping of instruction is a common occurrence in the Italian program. All new instructors are videotaped twice a semester during their first year of teaching, and at least once per semester in subsequent years. However, only the
first-year videotapes are formally discussed between the individual instructor and the program director. Later videotapes are discussed only if the instructor requests help with a particular aspect of teaching. The videotapes of veteran instructors are often used to display a variety of successful teaching strategies in the orientation and development of new teachers in the Italian program.

Because the Italian program is part of a large research university, classes are frequently involved in research projects which require videotaping, audio-recording, experimentation, and observation. Even though I have yet to encounter a teacher or student who likes to be videotaped or observed, I think that it is fair to say that students and teachers alike in the Italian program are accustomed to the presence of such elements in their classrooms. In light of the present research, it should be re-emphasized that, in addition to several years of university-level teaching experience in other language courses, the three instructors involved in this study had already taught this particular content-based course at least twice before the present data were collected. Thus, they were neither novice teachers in the content-based sequence nor unaccustomed to having their classes videotaped and observed. Although they were not informed of the specific goal of the research—to look at instances of negotiation—before the videotaping occurred (they were asked to conduct a ‘typical’ class on a day of their choosing), neither were they expecting a formal evaluation of their teaching. Moreover, comparison of videorecordings of their respective classes from previous semesters with the videotapes of the lessons reported upon here reflect consistent classroom behaviors. Most importantly, the teachers themselves stated that the videotaped lessons were in fact typical for the course, with the exception of one teacher–student exchange which will be reported and discussed.

After viewing their own videotapes and transcripts, the teachers responded to a written questionnaire which elicited their understanding of content-based instruction and the specific course objectives, their perception of their role as teachers, and their interpretations of their exchanges with students. The list of questions appears in Appendix B. At the end of the course, and according to the usual policy of the campus, students completed a 25-item Likert scale instructor and course evaluation report prepared and tabulated by the Office of Instructional Management.

PRELIMINARY REMARKS

Before I begin to report on the general characteristics of the lessons and the specific exchanges between teachers and learners, I would like to make clear that this study is not in any way a criticism of the individual teachers. In fact, all three should be commended in that the lessons were conducted entirely in the L2, and a variety of whole-class and small-group activities were employed throughout the lessons. In addition, the instructors were exceptionally adept at using the pedagogical techniques that they had learned in their professional preparation. Like teachers in other content-based classrooms, they attempted to make the L2 input comprehensible through the use of core instructional
strategies for content-based L2 instruction body language and gesture, predictability in instructional routines, use of learners’ background knowledge, visuals, graphic organizers, review of previously covered material, and teacher input was redolent with repetition, rephrasing, redundancy, indirect error correction, and comprehension checks (Wong Fillmore 1985, Snow 1990) If the only concern were the availability of teacher modified L2 input one could rest assured that the lessons were exemplary

Importantly students’ scores on departmental exams and their final grades for the course confirm that all students successfully accessed the subject matter and increased their interpretive and writing skills in the L2 In their evaluations of the course, students rated the instructors from average to excellent, and the course from average to above average, in comparison with all other courses on campus The individual evaluations of the instructors at the end of the semester were commensurate with their previous evaluations by students for the same course

The analysis of the classroom data was done to examine the extent to which negotiation between the native-speaking teacher and the non-native-speaking learners actually occurred in the classroom It remains to be demonstrated what role such negotiation might play in the acquisition of language

RESULTS

Question 1 Who talks? It is probably not surprising that teachers dominated classroom talk, speaking 33, 35, and 36 minutes out of 50 (Instructors A, B, and C, respectively) or 66 to 72 per cent of the available class time, with the remaining time devoted to student speech (directed either to the teacher or to other students, in whole-class and small-group activities) and silence (devoted to listening and reading) What might be surprising is that—given the fact that teachers are permitted to speak whenever they like during a lesson, without asking permission and without penalty—they did not speak anywhere near all the time The third semester content-based course is clearly not a lecture’ On the other hand, very similar quantities of speech among instructors contradict the findings of previous work on ‘teacher talk which demonstrated significant variation among individual instructors (Pica and Long 1986)

In addition to the amount of time the teachers ‘held the floor’, they managed the classroom talk in another way they initiated the majority of their verbal exchanges with students by means of a question—most often in the form of an explicit request for information—followed by the selection of a particular student to respond Most often, the teachers recognized a student’s willingness to volunteer a response by establishing eye contact with the student otherwise students were called upon without such prior agreement either in sequence or according to some other undetermined criteria

Although there was little variation among instructors in the total amount of time they spoke, the percentage of teacher-initiated exchanges in relation to the
total number of exchanges varied considerably among the three teachers. On the one hand, all spoke about the same amount of time. However, that time was not distributed in exactly the same ways. That is, of all the times in which the learners and teachers spoke with each other, Teacher B instigated almost all (92 per cent) of the exchanges, whereas Teacher C initiated less than two-thirds (66 per cent) of them. Teacher A (85 per cent) fell between the two. Moreover, Teachers A and B initiated roughly the same number of exchanges (51 and 59, respectively), while Teacher C initiated less than half that amount (19). Conversely, then, in Teacher B’s class students initiated a verbal exchange with B only five times (8 per cent), in A’s class, nine times (15 per cent), and in C’s class, ten times (34 per cent).

Since student-initiated exchanges, characterized as topic control, are purported to be indices of the kind of involvement that may be necessary for learning to occur (Slimani 1989), one might wonder how a preponderance of teacher-initiated exchanges is viewed from the students’ perspective. It is paradoxical to note that in the class in which the largest percentage of learner-initiated exchanges occurred—C’s class—students evaluated their teacher somewhat lower on two items in the course evaluations, ‘ability to explain and preparedness for classes,’ and gave her the lowest rating on ‘overall teaching effectiveness’ and ‘how well a balance between student participation and instructor contribution was achieved.’ Furthermore, these are the only items on the course evaluations which differentiated Teacher C from Teachers A and B. The results are tabulated in Table 1. The significance of these findings will be addressed in the discussion.

### Table 1  Teacher talk and students’ evaluations

<table>
<thead>
<tr>
<th>Teacher</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher talk in minutes (%)</td>
<td>33/50 (66)</td>
<td>35/50 (70)</td>
<td>36/50 (72)</td>
</tr>
<tr>
<td>Teacher-initiated exchanges (%)</td>
<td>51/60 (85)</td>
<td>59/64 (92)</td>
<td>19/29 (66)</td>
</tr>
<tr>
<td>Students’ ratings of their teachers (out of 5)</td>
<td>12/14 students responding</td>
<td>18/20 students responding</td>
<td>12/14 students responding</td>
</tr>
<tr>
<td>(a) Overall teaching effectiveness (5 = exceptionally high, 1 = exceptionally low)</td>
<td>4.8 (sd = 0.6)</td>
<td>4.5 (sd = 0.5)</td>
<td>4.0 (sd = 0.9)</td>
</tr>
<tr>
<td>(b) Ability to explain (5 = excellent, 1 = very poor)</td>
<td>4.7 (sd = 0.5)</td>
<td>4.6 (sd = 0.5)</td>
<td>4.0 (sd = 1.2)</td>
</tr>
<tr>
<td>(c) Daily preparedness (5 = yes, always, 1 = no, seldom)</td>
<td>4.9 (sd = 0.3)</td>
<td>4.8 (sd = 0.5)</td>
<td>4.5 (sd = 0.8)</td>
</tr>
<tr>
<td>(d) How well a balance of student participation and instructor contribution was achieved (5 = always, 1 = never)</td>
<td>3.4 (sd = 0.6)</td>
<td>4.2 (sd = 0.8)</td>
<td>2.8 (sd = 0.8)</td>
</tr>
</tbody>
</table>
Question 2 What do they talk about? And how do they talk about it?

The subject matter was the sole focus of all three lessons, and, by far, display questions constituted the teachers' preferred manner of initiating an exchange accounting for 84 per cent, 69 per cent, and 90 per cent of all teacher-initiated exchanges. Display questions are questions for which the answer is known beforehand to the questioner. This type of question, while uncommon in natural conversation, can serve several functions in the classroom to test learners' knowledge of subject matter to maintain attention or arouse curiosity, to discipline, to manage the lesson, and, in the 'traditional language classroom, to elicit production of particular grammatical forms. Banbrook and Skehan (1990) distinguish between 'form-based' and 'content-based' display questions, revealing that in some cases it may be difficult to interpret the language instructor's intent in the use of a display question whether to request information or to elicit a linguistic form. Notable in these data was that all three teachers appeared to react only to the content of the students' responses, even when the form of the reply impeded comprehension. This issue will be taken up again in the discussion.

In the content-based classrooms investigated here, display questions served primarily as comprehension checks, that is, they were used by the teachers to determine if the content of a message was successfully conveyed. In Excerpt 1, Teacher B uses display questions during a whole-class activity to check comprehension of the term 'regional capital,' a term the students had just been asked to define as part of a small group task.

Excerpt 1 Content-based display question What is a "regional capital"?

Teacher B E capoluogo di regione? Uh Che tipo di definizione hai dato? Puoi spiegare tu.

Student La città più importante della regione.

Teacher B cos'è?


Joe Genova.

Teacher B OK. Genova e il capoluogo di quale regione?

Joe Liguria.


Janet L'Aquila.

Teacher B L'Aquila. Uh huh. E il capoluogo di [voice trails and he looks around expectantly] Uh huh?

Janet Abruzzi.

Teacher B Si. Dell Abruzzo.

Teacher B And regional capital? Uh What kind of definition did you give? Can you explain.
Student: The most important city in the region is what it is?

Teacher B: Yes. Exactly. It's the administrative seat of the region. OK? Uh, for example, Springfield is the capital of the state of uh of uh of Illinois. However, we always use the word capital. In Italy, one uses capital uh for uh for the national capital. Which is Rome. OK. Uh, What are some examples of these? Say first the region and then the regional capital. Uh, Volunteer? [scan the class] Joe.

Joe: Genoa.

Teacher B: OK. Genoa is the capital of which region?

Joe: Liguria.

Teacher B: Uh huh. And another? [looks around] Yes, Janet.

Janet: L'Aquila.

Teacher B: L'Aquila. Uh huh. It is the capital of [voice trails and he looks around expectantly] Uh huh?

Janet: Abruzzi.

Teacher B: Yes. Of the Abruzzo.

During these two exchanges, first between B and Joe and then between B and Janet, the teacher poses content-based display questions. The questions served as comprehension checks because the students had just formulated a definition of a regional capital, and B uses the questions to check on the students' comprehension of the term. The questions are labelled display because the teacher already knows all the regions and their capitals. Moreover, he reacts to the students' responses with an evaluation of their content. "OK and yes." Despite his direction to state first the region and then the capital, B accepts responses in the reverse order, in which the students state the regional capital, followed by the region. There is no indication that he is looking for either a particular linguistic form or even a linguistically accurate response, as he does not supply to the first student the combined form of the preposition and definite article (della Liguria) that one might expect to be included in Italian, even in such a minimal reply. When he does provide this information in his response to Janet (dell'Abruzzo), it is not marked, either phonologically or syntactically, but appears to be his own unconscious use of the form. (Note that the teacher's use of Abruzzi vs. the student's use of 'Abruzzi' is not a correction. Either the forms are acceptable variants of one another.) These examples of the teacher's reactions to students' replies are typical of the entire corpus of data they are content-focused. Although all three teachers tend to supply corrected forms in their follow-ups to student speech—and even when those corrected forms are intonationally or syntactically marked—there is not one instance in the data in which a teacher requires a student to supply a particular grammatical form or to correct an ungrammatical one. The use of content-based display questions as comprehension checks in the way Teacher B used them in the preceding example best represent the data for all three teachers.

The data also reveal the use of a particular type of display question, one that Pearson and Johnson (1978) refer to as 'Guess what's in my head', also typical of the L1 instructional setting. The formulation of this type of content-based
display question is sufficiently broad or vague as to elicit a wide range of responses from students despite the fact that a teacher’s predetermined response is quite specific. Excerpt 2 illustrates Teacher C’s attempt to elicit a very particular answer to the question ‘What type of government does the United States have?’ in preparation for a later discussion of Italy as a parliamentary republic.

Excerpt 2  ‘Guess what’s in my head’ content-based display question  ‘What type of government does the United States have?’

[Teacher C has just previewed the day’s lesson for the students explaining that they will learn some features of Italian government. She has written several new terms on the board representing different levels of government.]

Teacher C Come si dividono gli Stati Uniti? che tipo di governo hanno gli Stati Uniti? come si dividono gli Stati Uniti? che cosa sono gli Stati Uniti? Hm? Voi siete tutti americani Quando [voice trails C smiles]

Student 1 In gli Stati Uniti noi abbiamo cinquanta stati
Teacher C [nods] Uh huh
Student 2 Ogni stato ha un capoluogo? Ha Dentro lo stato Stato?
Teacher C [nods] Uh huh
Student 3 Si ha Come si dice Uh Non provincia Ma Teacher C Regioni
Student 3 Nuah Uh Come si dice district?
Teacher C Distrette Si Distrette?
Student 3 Distrette Uh Per la come si dice
Teacher C Amministrazione? [C nods]
Student 3 Si Ma Uh Representative Come si Teacher C Rappresentanti [C nods repeatedly]
Student 3 In in congresso?
Teacher C Uh huh Uh huh [nods more vigorously]
Student 3 Rappresentanti
Teacher C Uh huh E che tipo di governo hanno gli Stati Uniti? [smiles]
SS [eagerly, as if they have finally hit upon the correct answer] Democratico? Democratico?
Teacher C [laughs] Chi comanda? Chi comanda?
Student [hesitantly] Presidente?
Teacher C [nods decisively] E una repubblica presidenziale Hm? Repubblica presidenziale [writes on board ‘Repubblica presidenziale’]

Teacher C How are the United States divided? what type of government does the United States have? how are the United States divided? what are the United States? Hm? You all are Americans So [voice trails C smiles]

Student 1 In the United States we have fifty states
Teacher C [nods] Uh huh
Student 2 Every state Has A capital? Has Inside the state State?
Teacher C [nods] Uh huh
Student 3 Yes It has How do you say [incorrect verb morphology]? Uh Not provinces But
Teacher C Regions?
Student 3 Nuah Uh How do you say district?
Teacher C: Districts Yes Districts?
Student 3: Districts Uh For the How do you says
Teacher C: Administration? [C nods]
Student 3: Yes But Uh Representative How do
Teacher C: Representatives [C nods repeatedly]
Student 3: In in congress?
Teacher C: Uh huh Uh huh [nods more vigorously]
Student 3: Representatives
Teacher C: Uh hum And what type of government does the United States have?
[smiles]
SS: eagerly, as if they have finally hit upon the correct answer] Democratic
Democratic
Teacher C: [laughs] who commands? Who commands?
Student: [hesitatingly] President?
Teacher C: [nods decisively] It's a presidential republic Hm? Presidential republic
[writes on board 'Presidential republic']

In this instance, C asks a content-based display question that produces several viable responses. However, despite the teacher's response to those replies (an encouraging 'uh huh'), none until the very last is acceptable because they do not match the teacher's predetermined answer 'presidential republic' (C later explained that she thought that getting students to say that the US is a presidential republic would prime them to describe Italy—in parallel fashion—as a parliamentary republic further along in the lesson).

Unlike the content-based display questions which predominate in the data, the teachers' use of referential questions—defined globally as questions whose answers are not known beforehand to the questioner—was rare. Throughout the lesson, Teacher B asked 5 referential questions, Teacher A, 3, and Teacher C, 1, representing 9 per cent, 6 per cent, and 5 per cent, respectively, of the total number of questions they asked. The referential questions were 'Would you like to try [to answer]' (to a student who had missed the previous lesson), 'Are you ill' (to a student who looked somewhat feverish), 'Are you going home for Thanksgiving' (to a student during a small group activity), 'Has anyone been to the Vatican' (to the whole class when discussing independent states within Italy), 'May I look' (to a student who requested help with a word in a reading), and 'What [topic] do you have?' (to students working in small groups). Even the 9 per cent figure for Teacher B may be inflated because, although it is true that B may not have remembered the information he was requesting, it could be argued that four of his referential questions (repeated use of 'What [topic] do you have?') were, in fact, more likely procedural. Teacher B asked the question as he moved among the small groups, and he may have been trying to keep the students on task, rather than elicit information.

Banbrook and Skehan (1990) rightly advocate a close examination of referential and display questions because it is sometimes difficult to determine whether a referential question is asked because the language teacher is truly seeking information or whether it is a form-based display question 'in disguise', asked to elict a particular linguistic form. Because all the display questions in
the present study were content-based, not form-based, the concern is not relevant in these data. For the purposes of the present research, what distinguished a referential from a display question was simply whether or not the answer was known beforehand to the questioner. However, the data do reveal that referential questions, like display questions, may serve a variety of functions in classroom discourse: they may act as links from the subject matter to the students' personal experience ('Has anyone been to the Vatican?'), they may be solicits or courtesy requests ('Would you like to try?', 'May I look?'), or they may serve to direct students' attention to the task at hand ('What topic do you have?'). Notwithstanding the multiple functions that referential questions have, it is fair to say that instructors' use of them, for any purpose, is practically non-existent in the data.

The percentage of explicit comprehension checks of the type 'Are there questions?' or 'Do you understand?' comprised 5 to 17 per cent of all teachers' questions. Table 2 contains a breakdown of all question types used in the three classes.

<table>
<thead>
<tr>
<th>Table 2 Question types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
</tr>
<tr>
<td>Total number of questions asked by teacher</td>
</tr>
<tr>
<td>Display questions (%) answer known prior to question, all content-based (e.g., 'What is a regional capital?')</td>
</tr>
<tr>
<td>Referential questions (%) answer unknown prior to question (e.g., 'Has anyone ever been to the Vatican?')</td>
</tr>
<tr>
<td>[or 1 (2)]</td>
</tr>
<tr>
<td>Explicit comprehension checks (e.g., 'Do you understand?')</td>
</tr>
<tr>
<td>Procedural questions (e.g., 'Are you ready to begin?')</td>
</tr>
<tr>
<td>[or 7 (12)]</td>
</tr>
<tr>
<td>Total number of questions asked by students (all referential)</td>
</tr>
</tbody>
</table>

While the teachers' preferred mode of initiating exchanges entailed the use of content-based display questions, none of the students asked questions for which they already knew the answers. Excerpt 3 provides an example of a student-initiated referential question that occurred in Teacher C's class while the students were working in small groups. The student sought confirmation of his notion that the Italian government is unstable.

Excerpt 3 Student-initiated referential question

[Students are working in small groups, while teacher walks slowly, and without speaking, from group to group. As she approaches one group, a student looks up at her and begins to speak.]
Student: E' vero che il governo l'Italia non è molto forte?
Teacher C: Non in questo momento. Ha molte crisi.
Student: Io sono stato in Italia in maggio e mi dicono non era governo in un momento e che Era moltissimo governo. Credo molti anni fa e non /dure/ molto /tempo/ molto /tempo/. [While the student is talking, the person seated next to him looks up from his book and appears to listen.]
Student: Ci sono governi oggi?

Student: Is it true that the government Italy isn't very strong?
Teacher C: Uh. Not at the moment. It has many crises.
Student: I was in Italy in May and they tell me was no government in a moment and that Was a lot of government. Uh I think many years ago and it didn't last long time. [While the student is talking, the person seated next to him looks up from his book and appears to listen.]
Teacher C: Yes. [The 'eavesdropping student returns to his book.] Governments have can have crises. Hm? Some crises and fall. Hm? [writes on board: 'governmental crises']. Governmental crises.
Student: Are there governments today?
Teacher C: Uh. Yes. They have formed it. Uh. There are many governmental crises. Ever since Italy has been a republic. Uh. There are many governments that then couldn't govern Italy and so they fell. [makes a falling motion with her hands] and they had to form another government. Hm? Italian politics are very very complicated. [nods several times] Hm? Right now we're in a crisis.
shared across classes and learners. But it is interesting that the strategies for making explicit requests for lexical information varied by class: the students in Teacher A’s class and in Teacher B’s class consistently adopted the frame cosa significa? ("what does mean"). a strategy that invariably elicited a definition or circumlocution in the L2 from the instructor but never a translation into the learners’ shared L1, English. Inversely, when students in these two classes attempted to formulate utterances for which they lacked lexical items, they, in turn, appeared to adopt their teachers’ strategies and also used circumlocutions. In Excerpt 4, in which the student attempts to describe the Christian Democrat party, notice how Teacher A supplies the lexical items (underlined in the transcription) that match the student’s circumlocutions. However, despite the feedback, the student does not incorporate the items in subsequent utterances, nor does the teacher require her to do so.

Excerpt 4 Student’s circumlocution and teacher’s supply of lexical item

[Teacher A has distributed written descriptions of various political parties in Italy. The students have formed groups of 2-3 students each with each group assigned one section of the text to read silently and then discuss among themselves. Teacher A has told them that they should look for important information and make note of it because they will be asked to present their party to the rest of the class. The students have been working for about 10 minutes in their small groups occasionally calling A over and asking questions. The groups are now presenting their parties to the class.]

Martha: La uh Democrazia Cristiana ha dominato la politica per uh quasi cinquant’ anni?
Teacher A: Uh huh
Martha: Uh E’ la voce politica all interessi cattolici e uh alla Chiesa
Teacher A: Uh huh Allora, la sua ideologia è l’ideologia cattolica Hm?
Martha: Ma Uh Più recente?
Teacher A: Recentemente?
Martha: Uh Supporta l’aborto e divorzio divorzio [self-correction] Uh E più diversa della Chiesa
Teacher A: Ha una posizione differente della Chiesa sul divorzio e sull’aborto
Martha: Uh Le idee Idea [attempted use of ‘ideologia’?] Uh Del partito sono più moderata Uh [voice trails]
Teacher A: Uh huh
Martha: A destrata e a sinistra
Teacher A: Allora non è un partito di destra Non è un partito di sinistra E’ un partito moderato di centro eh?
Martha: Uh E’ popolare con la donna e la class media borghese nel nord-est Nella campagna nel nord-ovest Uh E attorno a Roma E al sud
Teacher A: [nods] Uh huh Allora in quelle zone hanno molti voti eh? Ricevano molti voti Soprattutto in quelle zone geografiche Allora è un partito moderato un partito di maggioranza e si ispira alla religione della maggioranza degli italiani che è la religione cattolica Uh Qualcos’altro o abbiamo finito con la DC DC Democrazia Cristiana? [students nod]
Martha: The uh Christian Democrats have dominated politics for almost uh fifty years?
Teacher A Uh huh
Martha Uh It's the political voice in the Catholic interests and uh in the Church
Teacher A Uh huh So its ideology is the Catholic ideology Hm?
Martha But Uh More recent?
Teacher A Recently?
Martha Uh It supports abortion and /divorsia/ divorce Uh It's more diverse [i.e., different] from the Church
Teacher A It has a different position than the Church on divorce and abortion
Martha Uh The ideas Idea [attempted use of ideology?] Uh Of the party are more moderate Uh [voice trails]
Teacher A Uh huh
Martha To the right and to the left
Teacher A So it's not a right-wing party It's not a left-wing party It's a moderate party Of the center eh?
Martha Uh It's popular with women and the middle class bourgeoisie in the Northeast In the countryside in the Northwest Uh And around Rome And in the South
Teacher A [nods] Uh huh So in those areas they have lots of votes eh? They receive many votes Above all in those geographic areas So it's a moderate party a majority party and it aspires to the majority religion of Italians which is the Catholic religion Uh Anything else or have we finished with the DC Christian Democrats? [students nod]

Whereas students in A's class and in B's class tried to convey their ideas using whatever means they had at their disposal ('to the right and to the left'), the 'presidential republic' example presented in Excerpt 2 illustrates the strategy overwhelmingly favored by several learners in Teacher C's class when they needed a lexical item the phrase 'Come si dice' (= 'How do you say...?') The use of this question never failed to engage C in the co-construction of the students' responses In truth, the question as posed by students would be more accurately transcribed as Come si dice—pause—'insert L1 word', an indication of a fixed routine This strategy relied heavily on the student's use of the L1 in the formulation of their utterances and on the teacher's shared knowledge of the L1, a strategy that would assuredly fail outside the classroom setting if the interlocutor did not share the learner's L1 (a likely scenario), and one that failed several times during C's lesson because her unfamiliarity with US governmental structures did not permit ready comparison with levels of government in Italy Moreover, again in the 'presidential republic' example, one can see that Learner 3 did not even need to complete the lexical requests, as C supplied the missing terms as soon as she recognized the nascent phrase Come si dice

In addition to a tendency to help the discourse along by supplying lexical items, the teachers were sometimes so enthusiastic in their response to a rare student-initiated request that their responses became quite long and involved, a routine that I refer to as 'Where did I come from?' Excerpt 5 from C's lesson illustrates the point
Excerpt 5  Teacher's response to a learner's referential question 'Where did I come from?'

[Teacher C has just finished explaining what a province is. The students are reading silently in their texts. C is sitting looking down at the book open in front of her on the desk. A student seated in a far corner of the room speaks]

Student  Io Domanda

Teacher C  [Looks up, smiles, and from her seated position at the front of the room answers immediately] Si?

Student  Province Uh Uh Significato non chiaro. La /tʃiˈta/ (= città, misplaced accent) o la area intorno la città?

Teacher C  Tutte e due. Le cosa La città più l'area intorno la città. Most of the students who can be seen on the videotape are looking down at their texts. Uh C looks at a map on the wall, then down at the text. She stands, holding open the textbook in front of her, and points to a picture in it. She looks at the student who asked the question, and she begins to speak more quickly. Questa è una fotografia no? OK Benissimo. La fotografia due è un esempio di provincia. Abbiamo la città che è Ferrara. Hm? E tutte queste zone intorno che hanno un nome. Ogni zona ha un nome. The rest of the students can be seen looking in their books or writing. They are not looking at C. Uh Sono comuni che fanno parte della provincia. Queste zone più piccole C continues to describe the relationship between various cities and provinces, providing multiple examples. Finally, she concludes.] Questa è la differenza fra capoluogo di regione e capoluogo di provincia.

Student  Esempio?

Teacher C  Chiaro?

Student  Esempio. Palermo è?

Teacher  Palermo è capoluogo di regione.

Student  Si

Student  I Question

Teacher C  [Looks up, smiles, and begins to speak from her seated position at the front of the room] Yes.

Student  Provinces Uh Uh Meaning not clear. The /tʃiˈta/ (= city, misplaced accent) or the area around the city?

Teacher C  Both. The city plus the area around the city. [Most of the students who can be seen on the videotape are looking down at their texts.] Uh C looks at a map on the wall, then down at the text. She stands, holding open the textbook in front of her, and points to a picture in it. She looks at the student who asked the question, and she begins to speak more quickly. This is a photograph right? OK Great. Photograph two is an example of a province. We have the city that is Ferrara. Hm? And all the zones around it that have each have a name. Each has a name. The rest of the students can be seen looking in their books or writing. They are not looking at C. Uh They are municipalities that make up the province. These zones are smaller. C continues to describe the relationship between various cities and provinces, providing multiple examples. Finally, she concludes] This is the difference between regional capital and provincial capital.

Student  Example?

Teacher C  Clear?
Swain (1988) has suggested that the teaching of content and language is sometimes obstructed by the incompatibility of instructional objectives. In the ‘Where did I come from?’ exchange, C was obviously pleased that a student had asked a question. Her face brightened considerably, she smiled and stood. Her almost 3-minute reply potentially provided a significant amount of input. However, it is not clear how comprehensible the input was, since C did not make a comprehension check until the very end (‘Clear?’). In addition, the relevance of the content of that input to the student’s actual query is also uncertain, since C ended up with an explanation of the difference between a regional and a provincial capital, whereas the student had requested a definition of the word ‘province’. It is also not clear from the videotape whether anyone other than the student who asked the question listened to the response beyond the first 40 seconds. This point will be raised again in the discussion surrounding the conditions that appear to be necessary for students to participate in an exchange with the teacher.

**Question 3: How much and when?**

Unlike learners’ turns that tended to be one clause or less in length per turn, teachers’ responses to learner-initiated exchanges ranged from ‘uh huh’ to lengthy explanations, as illustrated in the ‘Where did I come from?’ example. A turn was counted from the point one begins to speak until one stops. If the speaker stops for a reply and someone else begins to speak, the first speaker’s turn ends and the second speaker’s turn begins. Likewise, if a speaker is interrupted while talking and stops, ceding the floor to the interrupter, the turn ends. But if a speaker stops for a reply and a reply is not forthcoming and the same speaker resumes talking, or if a speaker continues to talk through an attempted interruption, it is considered a continuation of the same turn. The length of any single teacher turn varied from 1 second to almost 7 minutes (Teacher A lectured on the organization of the Italian government), but no single student turn lasted longer than 35 seconds. In addition, the length of the students’ turns varied according to whether they were in response to a closed or an open-ended content-based display question. In Excerpt 6a, the students’ responses were limited to one word or one clause, a response length that is completely appropriate to the type of question asked and the nature of the activity: content-based display questions requesting classification of places as regions, capitals, and/or counties.

**Excerpt 6a: Appropriately minimal response to display questions**

(The teacher has referred students to an exercise in the textbook that had been assigned as homework the night before. The exercise consists of a list of place names. The students were supposed to check whether each place is a ‘region with special statute’ a
region with ordinary statute a regional capital, a provincial capital, or a municipality. They are now going over the exercise in class.

Teacher A: Firenze? Uh Cathy?
Cathy: Capoluogo di regione?
Teacher A: Firenze è un capoluogo di regione? Benissimo Le Marche? Uh Karl?
Karl: Uh Stato ordinario?
Teacher A: Uh huh Region a statuto ordinario? Cagliari Martha?
Martha: Capoluogo di regione?
Teacher A: Capoluogo di regione Si trova nella Sar nella regione Sardegna E un capoluogo Friuli-Venezia Giulia Jeannie?
Jeannie: Regione a statuto speciale?
Teacher A: Regione a statuto speciale? Abbiamo visto che confina è una regione di frontiera Confina con la Jugoslavia e con l'Austria.

Teacher A: Florence? Uh Cathy?
Cathy: Regional capital.
Teacher A: Florence is a regional capital? Very good The Marche? Uh Karl?
Karl: Uh Ordinary state?
Teacher A: Uh huh Region with ordinary statute? Cagliari Martha?
Martha: Regional capital?
Teacher A: Regional capital? You find it in Sar in the region Sardinia. It's a capital Friuli-Venezia Giulia Jeannie?
Jeannie: Region with special statute?
Teacher A: Region with special statute? We have seen that in borders it's a border region. It borders on Yugoslavia and Austria.

Notable about these particular exchanges, and others like them in the data (for example, Excerpt 1) in which a teacher calls on students to give short answers to content-based display questions, is the rapid pace at which teacher's questions and the students' replies follow one another. During this type of exchange between teacher and students, there is little hesitation and almost a total lack of filled pauses ('uh'). The students appear eager to answer, and everyone seems to be participating. On the videotape, the students can be seen looking and smiling at each other and at the teacher throughout the activity.

Whereas short responses were appropriate in the previous exercise, in Excerpt 6b, Teacher A uses a more open-ended request for information about a political party from a student. When A is unsuccessful in the attempt to elicit a sustained response of more than one clause from the student, she concludes the interaction by asking a yes–no content-based display question.

Excerpt 6b: Learner's minimal response to open-ended display question

[Continuation of the activity described in Excerpt 4]

Teacher A: Passiamo a Jane e Jake? Sentiamo qualcuno dei loro partiti?
Jake: Uh PRI Uh E fatto? La Uh Monarchia.
Teacher A: Uh huh?
Jake: Nasce durante Uh Il Ri Sorgimento?
Teacher A: Uh huh?
Jake: Uh Sono Uh Di una politica riforma fiscale.
Teacher A Uh huh
Jake E' molto popolare Uh Nel Nord
Teacher A Uh huh
Jake E' un parte de gruppo Uh Di /led3isti/ [= legislators] Uh E' parte del (inaudible) partito
Teacher A Un pentapartito che era un'alleanza di governo con cinque partiti Uno dei cinque partiti era questo Partito Repubblicano Ha molti voti il Partito Repubblicano Jake? Ha molti voti?
Jake No
Teacher A Let's go on to Jane and Jake Let's hear one of their parties
Jake Uh PRI Uh Was made? The Uh Monarchy
Teacher A Uh huh
Jake It is born during Uh The Re Surgeance?
Teacher A Uh huh
Jake Uh They are Uh Of a politics fiscal reform
Teacher A Uh huh
Jake It's very popular Uh In the North
Teacher A Uh huh
Jake It's part of group Uh Of /led3isti/ [= legislators] Uh It's part of the (inaudible word)
Teacher A A pentaparty that was a government alliance of five parties One of the five parties was this Republican Party Does the Republican Party have many votes Jake? Does it have many votes?
Jake No

In contrast, the student who spoke immediately after Jake produced, without prodding from A, the lengthy description of the Radical Party found in Excerpt 6c

*Excerpt 6c* Learner’s extended response to display question  
[A continuation of the activity reported in Excerpt 6b]
Teacher A Jane vuoi dire qualcosa sul Partito Radicale che è un partito nuovo abbastanza nuovo nella politica italiana?
Jane È' è fondato da (inaudible) E' allontanato dalla PLI [= English pronunciation of the Italian letter 'i'] il Partito Liberale Italiano? Uh Uh E' contro la politica del Big Business uh a favore atteggiamenti /drammatid3i/ [= dramatic] Esempio alla tv Uh E' idealiste a favore riforme delle prigioni uh e anche uh la separazione tra Chiesa e Stato
Teacher A Jane do you want to tell us something about the Radical party which is a new party pretty new in Italian politics?
Jane It's it was founded by (inaudible word) It's moved away from the PL /a1/ [= English pronunciation of the Italian letter 'i'] the Italian Liberal Party? Uh Uh It's against the politics of big business uh in favor /drammatid3i/ [= dramatic] expressions Example on TV Uh It's idealists in favor of political reform of the prisons uh and also uh the separation between church and state
The two examples just related demonstrate that, unlike closed display questions, open-ended display questions that are content-based may produce longer and more extensive student responses, much like the referential questions investigated by Brock (1986). Clearly, the length and complexity of learners' responses to display questions depends on both the type of display question asked—whether it is closed or open-ended—as well as on the individual learner. A similar distinction should probably also be made between closed and open-ended referential questions. Teacher-initiated referential questions were rare in the data, but those that did occur were closed and produced much shorter responses than the open-ended display questions. It was not whether the question was 'display' or 'referential' which affected the length of the students' responses, rather whether it was open-ended or closed.

It is also important to note that the use of open-ended display questions did not evoke the same kind of eager response and interest on the part of the learners as was observed during the activities that consisted of closed display questions. During Jake's reply, several students looked away. This also happened, albeit to a lesser extent, during Jeannie's response. And, in the case of the 'Guess what's in my head' questions, students' initial eager responses gradually dissipated when they discovered that the exchange did not conform to the structure of a closed display question activity.

In addition to contrasts in length between teacher turns and student turns, student-initiated exchanges differed from teacher-initiated exchanges in two other ways: the number of turns involved and the setting in which they occurred. Exchanges that were student-initiated usually involved at least two turns for the learner, one to open the exchange and one to close it, as opposed to only one student turn—the response—in most teacher-initiated exchanges. Many student-initiated exchanges allowed the learner 4–6 turns, and one exchange provided the learner with an uncharacteristic 30 turns! In addition to favoring more student turns, learner-initiated exchanges were distinctly constrained by setting. Teachers initiated interactions across settings, whole class and small group. Student-initiated exchanges on the other hand occurred almost exclusively during small-group activities, not during whole-class activities. This last finding suggests that certain conditions must be met before students will initiate a verbal interaction with the teacher.

Question 4. How is failure to communicate signaled?

Even though learners had been told explicitly on the course syllabus and repeatedly throughout the semester to request clarification by using phrases such as ‘Pardon?’ (Come?) and ‘I don’t understand’ (Non ho capito), these linguistic gambits were almost non-existent in the data. Only two students, in C's class, signaled non-understanding with ‘Not clear’ (Non chiaro). Teacher B used ‘Pardon?’ once, the other two teachers, never. No one, neither teacher nor student, ever said ‘I don’t understand’.

Rather than ask for clarification from the students, teachers confirmed learners' responses by exact repetition, where the form of the reply was correct.
(Excerpt 6 ‘Regional capital’ ‘Regional capital’), or by rewording the reply, incorporating correct forms (Excerpt 6 ‘Ordinary state’ ‘Region with ordinary statute’). Moreover, in lieu of asking learners for an expansion or reformulation of their response, the teachers often provided rich interpretations of students’ speech. In Excerpt 7, in which a student tries to explain what it means for a region to have special statute. Teacher B asks for a repetition (‘The?’) when he does not hear the student’s overlapping response. He then makes a rare request for an expansion (‘OK ‘The limits of what?’), but as soon as he catches the word ‘industry’, he provides the explanation, ‘trade and economic development’, for her

**Excerpt 7 Teacher’s interpretation of limited learner response**

Teacher B Cos altro possiamo dire su uh le regioni a statuto speciale? [scans the students] Uh huh? Prima Debra e poi dopo

Debra La limite non esiste

Teacher B La? [draws out final vowel]
Debra La limite non esiste?

Teacher B OK I limiti di che cosa?
Debra Uh In

Teacher B OK

Debra Di indus industria e

Teacher B OK Uh esatto Quando si parla di industrie quando si parla di non so commercio Cos’altro? Uh lo sviluppo economico

Teacher B What else can we say about uh the regions with special statutes? [scans the students] Uh huh? First Debra and then after

Debra The limit doesn’t exist

Teacher B The? [draws out final vowel]
Debra The limit doesn’t exist

Teacher B OK The limits of what?
Debra Uh In

Teacher B OK

Debra Of indus industry and

Teacher B OK Uh exactly When one speaks of industry when you talk about I don’t know trade What else? Un economic development We are talking about limits

What appeared to be a rare instance of a teacher’s request for student-modified speech (‘The limits of what?’) was aborted as soon as B had enough information to create meaning from her reply. When asked about this particular exchange, B admitted that although he interrupted the student he knew that she was talking about free trade and the self-regulatory status these regions possess.

Students asked far fewer questions than their teachers. Overall, the number of learner questions varied among the three classes, but the setting in which they occurred did not. When learners verbally request clarification, they prefer to do so in one-to-one or small-group settings, not in front of the whole class. During these student-initiated requests—when a student raises a hand or otherwise beckons the teacher’s attention—Teacher A moves quickly to the small group.
leans over toward whoever asked the question, and answers in a hushed voice. Teacher B also moves to the small group, and even though B sometimes gives his answer in his public 'teacher voice', the students in other groups do not look up from their work or otherwise acknowledge that he might be addressing them. The one-to-one or small-group condition is so pronounced in these classes that, even on the one occasion in which a student in B's class asks a question during a whole-class activity, Teacher B begins his response, stops, and feels it necessary to call the attention of the whole class to the answer. The exchange appears in Excerpt 8.

Excerpt 8. Student–Teacher exchange in whole class setting

[Continuation of the activity reported in Excerpt 7]

Teacher B: OK. Perché la provincia prende il nome della città capoluogo di provincia OK? E questo è stato spiegato nel testo OK. [Notices a student with his hand raised] Una domanda?

Student: Una. Una. Il capoluogo del regno è sempre la capoluogo de provincia?

Teacher B: [Remains in his position in the front of the room, but turns towards the student who is seated to his near left] [more quietly] Uh. Infatti si. Infatti. Perché? Per esempio uh L'Aquila [Turns to face the entire class and speaks in a louder voice] Classe. L'Aquila è il capoluogo dell'Abruzzo e L'Aquila e anche la provincia e il capoluogo della provincia OK? E una sede amministrativa molto importante a livelli diversi [in a quieter voice] Uh huh. Questo si. Infatti. [C looks at the student and nods] Un buon commento. Uh huh. [C returns to his original position of 'front and center' and begins to speak more loudly] Possiamo vedere di nuovo queste carte geografiche al muro. [Lesson continues]

Teacher B: OK. Because the province takes its name from the provincial capital OK? And this was explained in the text. OK. [Notices a student with his hand raised] Question?

Student: An. An. Is the regional capital always the provincial capital?

Teacher B: [Remains in his position in the front of the room, but turns towards the student who is seated to his near left] [more quietly] Uh. In fact yes. Right? Why? For example uh L'Aquila [Turns to face the entire class and speaks in a louder voice] Classe. L'Aquila is the capital of Abruzzo and L'Aquila is also the province and the provincial capital OK? It is a very important administrative seat at various levels [in a quieter voice] Uh huh. This is true. [C looks at the student and nods] Good comment. Uh huh. [C returns to his original position of 'front and center' and begins to speak more loudly] We can see again on the wall maps. [Lesson continues]

In all three classrooms investigated, it was much more likely that a learner would initiate a verbal exchange with the teacher in the private (one-to-one) or intimate (small-group) setting instead of the whole class. And even when a student violated that condition, the other students seemed to treat the exchange as private, by refusing to make eye contact with the speaker and by turning away, as they did in Excerpts 5, 6b, and 6c.

The most dramatic example of a learner's request for clarification occurred
during Teacher C’s lesson. Again, it is the student who initiated (twice, in fact) an exchange that occurred near the end of the lesson while the other students were silently reading a passage in their textbooks. C had reminded them to ask, if they had questions. This exchange, like the vast majority of student-initiated exchanges, occurred during an individual activity, and it is one-to-one between the student and teacher. However, it is atypical in the number of turns it afforded the learner, and it is particularly interesting because of the reactions it provoked. The exchange is found in Excerpt 9.

Excerpt 9 Learner-initiated exchange Two attempts at negotiation

[Students are reading silently in their texts. Teacher C walks from student to student around the room and returns to her place at the front. She is shuffling papers together when something in the back of the room catches her eye.]

Teacher C Si? Several students look up from their reading.

Student Non chiaro rappresentante. [The students who looked up quickly identify the student who has asked the question and immediately look back at their texts. One student rolls her eyes in apparent disdain.]

Teacher C [moves to the back of the room where student is seated] Si rappresentante?

Student Si in uh il Parlamento si?

Teacher C Si

Student Quanti uh rappresentanti per regione?

Teacher C Uh per regione?

Student Si perché in America in Senato? Senato? In Senato

Teacher C Dipende

Student Si In Senato due senatori per stato si? Senatori?

Teacher C Uh huh

Student Nel uh uh come si dice

Teacher C Parlamento?

Student No Uh altra camera dei uh deputati

Teacher C Uh huh


Teacher C In Italia dipende al numero dei voti. Chi ha il numero il partito che ha più numero dei voti. I rappresentanti All interno del partito che hanno più numeri più numero dei voti uh

Student Si Io

-Teacher C uh vengono eletti /po/ [=poi]? Uh E’ è e secondo il numero non è secondo la regione Sono elezioni secondo il numero

Student Numero

Teacher C Uh huh E’ diverso. Non è come qui. Non dipende dalla grandezza della regione. Se la regione è più grande ha più rappresentanti no?

Student Si perché seicentotrenta rappresentanti in questa camera dei deputati si?

Teacher C Di quale regione?

Student Si
Teacher C: No, non dipende dalle regioni. E' una rappresentazione diversa. Dipende dal numero dei voti dei partiti. Uh, in Italia ci sono molti partiti. No? E quindi, [voice trails and C begins to move away]

Student: I partiti.
Teacher C: [stops] Della maggioranza.
Student: Si, 1 partito e differente dei regioni.
Teacher C: Si, il partito è qualche partito democratico socialisti il partito liberale.
Student: No.

Teacher C: Quelli sono i partiti.
Student: Non giusto. Uh

[At this point, Teacher C turns completely and walks away from the student. She appears to be returning to her desk. The student calls her back, re-initiating the exchange.]

Student: C.
Teacher C: [stops walking and turns around immediately] Si?
Student: Non chiaro.
Teacher C: Eh! [laughs and a few students look up from their reading.] Neanche per noi italiani è chiaro.
Student: Perché?
Teacher C: La politica italiana è un caos. [The students who looked up smile at C and look down again.] Uh.
Student: Si.
Teacher C: E' molto difficile.
Student: Capisci mi domanda?
Teacher C: [abruptly] Si, ho capito.
Student: [quickly] Uh OK. Uh, [more slowly] Strano. E' strano perché sei seicentotrenta in la camera.
Teacher C: Uh, huh.
Student: Uh, qual uh rappresentare?
Teacher C: Uh, huh. Ecco perché noi abbiamo le divisioni secondo le regioni, le province, i comuni e poi al livello statale e Roma no? Uh. Perché i rappresentanti poi di ogni regione sono al livello regionale anche.
Student: Oh! OK. OK. Uh, Adesso uh, per percentuale uh, da tutte uh, voti.
Teacher C: Uh, huh.
Teacher C: Si.
Student: Uh, OK. OK.
Teacher C: Si. Per esempio, il partito di maggioranza. E' quello che ha cinquantuno, un certo per cento dei voti. E tutto percentuale. Uh. Un certo per cento dei voti. E tutto percentuale. Uh? [The videocamera scans the entire class.] The other students are seen reading, writing, or just staring into space.

Student: Quando uh tu uh vota.
Teacher C: Uh, huh.
Student: Non vota per la uh, nome sulla biglietto.
Teacher C: Anche.
Student: Solo per la partito?
Teacher C: No, per il partito, per i nomi. Possiamo esprimere. Dipende dal tipo di
elezione Tre preferenze o anche cinque dipende dal tipo di elezione Se è un’elezione parlamentare Se e un’elezione regionale Se è un’elezione provinciale

Student OK
Teacher C Votiamo il partito Piu le preferenze
Student C OK
Teacher C OK Preferenze Uh huh [bell rings, signaling the end of class] Continuamo mercoledì

Teacher C Yes? [Several students look up from their reading]
Student Not clear representative [The students who looked up quickly identify the student who has asked the question and immediately look back at their texts One student rolls her eyes in apparent disdain]
Teacher C [moves to the back of the room where student is seated] Representatives?
Student Yes In uh the Parliament yes?
Teacher C Yes
Student How many uh representatives per regions?
Teacher C Uh per region?
Student Yes because in America in Senate? Senate? In Senate?
Teacher C It depends
Student Yes In Senate two senators per state yes? Senators?
Teacher C Uh hum
Student In the uh uh how do you say
Teacher C Parliament?
Student No Uh other chamber of uh deputies
Teacher C Uh huh
Student It depends uh on the uh /popola/ /popo/ /popolo/ /po po la tsi o ne/ [po la ti on] in the State yes? Because uh for /eksemppi/ [ex-ple] /kwant kwanta un/ [StUDENT wanted to say quarantunoُ (41), but actually said much much one] from California yes? But in Indiana I think near eleven represented
Teacher C In Italy it depends on the number of votes Whoever has the number the party that has more number of votes The representatives Inside the party that have more numbers more number of votes uh-
Student Yes I-
-Teacher C uh They are elected /po/ [it] Uh It s it s it s by the number not by the region They are elections by number
Student Number
Teacher C Uh hum It s different It s not like here It doesn t depend on the size of the region If the region is bigger it has more representatives no?
Student Yes because sixhundredthirty representatives in this Chamber of Deputies yes? But I not clear sixhundredthirty representative
Teacher C From which region?
Student Yes
Teacher C No It doesn t depend on the regions It s a different kind of representation It depends on the number of votes of the parties Uh in Italy there are many parties no? And so [voice trails and C begins to move away]
Student The parties
Teacher C [stops] Of the majority
Student Yes the parties is different from the regions
Teacher C Yes yes The party yes some democratic parties socialist the liberal party
Student No not
Teacher C Those are the parties
Student Not right Uh

[At this point Teacher C turns completely and walks away from the student The student calls her back initiating negotiation a second time]
Teacher C [stops walking and turns around immediately] Yes?
Student Not clear
Teacher C Eh’ [C laughs and a few students look up from their reading] It’s not clear for us Italians either
Student Why
Teacher C Italian politics are in chaos [The students who looked up smile at C and look down again] Uh
Student Yes
Teacher C It’s very difficult
Student Do you understand me [incorrect form of the possessive] question?
Teacher C [abruptly] Yes I understood
Student [quickly] Uh OK uh [more slowly] Strange It’s strange because six six hundred thirty in in the Chamber
Teacher C Uh huh
Student Uh what uh to represent?
Teacher C Uh huh That’s why we have divisions by region province town and then at the state level in Rome no? Uh Because the representatives then of each region are also at the regional level
Student Oh! OK OK Uh Now uh For percentage uh from all the uh votes
Teacher C Uh huh
Student Uh huh Parties How do you say Number of seats depends all number of vote
Teacher C Yes
Student Uh OK OK
Teacher C Yes For example The majority party It’s the one that has fifty point uh something Uh A certain percent of the votes It’s all percentage Hm?
[The videocamera scans the entire class The other students are seen reading writing or just staring into space]
Student When uh you uh votes
Teacher C Uh huh
Student You don’t votes for the uh name on the ticket
Teacher C That too
Student Only for the party?
Teacher C No For the party for the names We can express It depends on the type of election Three preferences or even five it depends on the type of election If it’s a parliamentary election If it’s a regional election If it’s a provincial election
Student OK
Teacher C We vote for the party And our preferences
Student OK
Teacher C OK Preferences Uh hum [Bell rings, signaling the end of class] We'll continue on Wednesday then

The exchanges in Excerpt 9 are unusual not only for their length, but also because they provide the only instance of an explicit comprehension check emanating from a student the student asked 'Do you understand me question?’ and Teacher C very abruptly replied ‘Yes I understood’ The tone of the student’s follow-up suggests that he understood C’s response to be a reprimand Otherwise, the exchange is in every way congruent with other findings regarding student-initiated exchanges it afforded the student more than one turn, it is referential, it allowed the student the opportunity to produce longer responses, and it occurred during a one-to-one interaction between student and teacher However, taken in its entirety, the event was exaggeratedly different from all other student–teacher exchanges in the data It was this exchange that was considered atypical of the course I will treat this issue further in the discussion

DISCUSSION

*Comprehensible input and comprehensible output in the content-based classroom* Tell me if you don’t understand

The data reveal that the teachers in the third semester content-based Italian course speak more, more often, control the topic of discussion, rarely ask questions for which they do not have answers, and appear to understand absolutely everything the students say, sometimes even before they say it! One might conclude from these findings that teachers are a loquacious, manipulative, power-hungry bunch of know-it-alls Not at all! Like many teachers, the teachers who participated in this study said that they consider a lesson ‘successful’ if it had a high level of student participation, that is, when students speak much of the time, control the discussion, and ask lots of questions Congruent with the feelings of former instructors in the course, Teachers A, B, and C stated in their own comments on the lessons that they would like learners to feel comfortable, to participate more, and to take more responsibility for the management of the lesson In addition, A, B, and C all attest to welcoming students’ questions These teachers repeatedly encourage their students to use expressions such as ‘I don’t understand (x)’, ‘What does (x) mean’, and so on But although students did let teachers know when they had not understood, they more often conveyed their lack of understanding through non-linguistic signals than by explicit requests for clarification Furthermore, when students asked questions, they preferred to ask them ‘in private’ either in a small-group setting or one-to-one

But the data also disclose that the same did not happen in the reverse direction either the teachers never told the students that their messages were not understood, even though they admitted that they sometimes have trouble understanding exactly what students are saying It appears that the teachers in this sample made every effort to derive meaning from students’ speech In doing so, they supplied key lexical items and provided rich interpretations of students’ responses, rather than engage in the kind of negotiation which would have
required learners to modify their own output. In fact, these teachers did everything within their power to avoid ‘failure to communicate’, even if that meant aborting an exchange or transforming it midstream. At least two explanations for these findings are possible. First, the teachers may have been attempting to help their students save face linguistically—either for the videotape or as a routine occurrence. It is also very likely that the teachers were simply accommodating the learners’ present stage of linguistic development, as suggested by Poole (1992). In either case, however, while this kind of ‘filling in the spaces’ by the teacher may have helped to create coherent conversational texts, it also made the teachers responsible for carrying the linguistic burden of the exchange, and it reduced the students’ role to one of supplying linguistic hints to the teacher, rather than functioning as full partners in the exchange. By not asking students to reformulate their messages, the kind of negotiation which might push the learners’ L2 grammars—according to Swain—did not occur.

If the teachers created meanings from learners’ utterances and spoke more in order to avoid telling students that their messages were minimally (or not at all) comprehensible, what did students do when they did not understand what the teacher said? The data reveal that students also avoided saying ‘I don’t understand’ This is not to suggest that the teachers could not tell if learners failed to comprehend messages. Despite the fact that students seldom made verbal requests for clarification of a teacher’s message, these lessons were replete with teacher-modified input. It is clear from the transcripts that Teachers A, B, and C were very attuned to learners’ non-linguistic signals and tried to adjust their language accordingly. Certainly, students were not restricted to verbal signals; puzzled expressions and blank stares can be very effective requests for clarification. The fact that all three teachers continually modified their input, using gestures and other visual aids, along with expansions and repetitions, without any explicit verbal requests from the learners leads me to believe that non-linguistic signals play a significant role in precipitating modifications from the native speaker. But, again, non-linguistic signals do not initiate the kind of two-way verbal exchange that allows a learner to signal precisely what in the input needs modification, nor do they require the student to produce the L2.

When asked how they figure out what students are trying to say and what they do when they cannot, Teacher B responded ‘I politely ask him/her to repeat. Then, I listen again and if I still don’t understand, I try to guess’. Teacher A wrote ‘If absolutely incomprehensible, I ask again giving some clues about which words to use’ and sometimes ‘it [students’ speech] would be hardly comprehensible, if I didn’t already have the information that the student is trying to communicate’. Teacher C stated ‘It requires a lot of imagination sometimes’. Despite the teachers’ reports that they ‘ask again’, the transcript reveals only one instance of this strategy when B did not hear a student’s response and repeated the first syllable. In general, it appears that the teachers made extraordinary efforts to create meaning from students’ output.

Notwithstanding these teachers’ exhortations to students, telling them to
‘speak up’ when they do not understand, their own behavior in the classroom
reveals that they do not practice what they preach. Why not? When the teachers
were asked why they did not simply tell the students they could not understand,
all three instructors insisted that it is their responsibility as teachers to make
sense of what the students say to ensure that communication is successful. When
it was suggested by the researcher that asking the students to reformulate their
message to make them more comprehensible might create more opportunities
for students to speak—something that all the teachers claimed would be
desirable—each was quick to point out that they would like their students to
speak more, but without having to put them on the spot, a situation that the
instructors said would embarrass the learners and impede production (and
participation) even more. In the context of the Italian course, then, the teachers
believed that negotiation and student participation were in a delicate balance,
and too much of the former might preclude the latter. Negotiation of meaning
helping each other to understand one another’s thoughts according to A, was
viewed by the instructors as less a linguistic, ‘grammar juggling act than a social
one in which the teacher’s role is to help the student get through the exchange
as painlessly as possible.

The teachers’ worries about students’ reactions to ‘failure to communicate
may be traced to their overt awareness of affective variables in second language
acquisition, something they had learned about in their professional training. But
it is also possible that they are reacting to the unequal balance of power in the
classroom, perhaps more acutely felt in content-based instruction where the
teacher has both the linguistic as well as the content area knowledge advantage.
Tannen (1990 136) states that ‘what appear as attempts to dominate a
conversation (an expression of power) may actually be intended to establish
rapport (an exercise of solidarity).’ This might explain the teachers’ surprise at
seeing what they considered ‘too much’ teacher talk in their transcripts. All
three consider themselves facilitators of L2 use in the classroom. Thus, the
teacher speech that seems to ‘dominate’ the transcripts and the teachers’
aversion to signaling incomprehension of students’ speech may deserve a
different interpretation within the context of the Italian geography lesson. It
could be that the teachers were attempting to make the content-based
classroom more user-friendly by lightening the linguistic load placed upon the
students and by downplaying their power status as both teachers and native
speakers.

It has been suggested that it is the transmission model of content area teaching
that restricts the kind of negotiation that can occur in the content-based
classroom (Swain 1991). However, the teachers in this sample do not only
lecture class time in these lessons was pretty evenly divided among whole-class,
small-group, and individual activities. Moreover, there was little variation in the
total amount of teacher talk. These findings reflect the teachers’ perceptions of
their dual instructional responsibilities to convey content information and to
encourage students’ use of language in the classroom.

Throughout the history of western education, asking and answering questions
has constituted typical classroom discourse. The data provide no surprises to the contrary especially during whole-class activities, teachers ask display questions. It was found that referential questions were almost non-existent in the data. Despite research by Brock (1986) which suggests that teachers can be trained to use more referential questions when they teach, it should be noted that the content-based classroom presents a particular hindrance to their use. If the students discuss the subject matter the teacher will always be the expert. Unless students are encouraged to bring in outside information or relate personal experiences, referential questions will always be less frequent in content classroom discourse. Furthermore, if the purpose in using more referential questions in the L2 classroom is to produce longer student utterances, then the present findings suggest that the use of open-ended display questions might have the same effect.

Banbrook and Skehan (1990, 146) have suggested that 'a finer subcategorization of display questions' might lead to more interesting findings regarding their use in classrooms. This research has shown that content-based display questions, far from being the 'unpromising question type' that Banbrook and Skehan propose, serve at least three functions in the content-based classroom. First, they act as reliable comprehension checks of subject matter delivered in the L2. The relatively small number of explicit comprehension checks reflect the teachers' perceptions that such questions are rarely effective. Because content-based display questions elicit varying amounts of L2 output from the students, one distinction that should be made is between open-ended and closed questions. Depending on the individual student, open-ended content-based display questions may be just as effective as referential questions for the production of longer and more extensive responses, and they may be more successful than closed referential questions. Finally, Teacher A's comment regarding how she makes sense of students' speech ('it would hardly be comprehensible if I didn't already have the information that the student is trying to communicate') is particularly interesting because it suggests that content-based display questions serve a third important function in the content-based classroom. They allow students the opportunity to express themselves in the L2 and thereby participate in the classroom discourse. In an apparently successful way, because by knowing the answer beforehand, teachers can more easily construct meaning from students' speech. However, this last point also discloses an incipient danger of content-based display questions, they permit the teacher to circumvent negotiation that might otherwise require students to modify their output.

The data reveal a particular type of teacher response to a learner's clarification request, labelled 'Where did I come from?' At best, this kind of response provides an extensive amount of discourse-level L2 input. However, its uninterrupted nature resembles input that Pica (1993) has characterized as premodified, rather than interactionally modified. A lack of intervention during this type of input prevents the learner from indicating the kind of modification that might be helpful. Moreover, if it is true that students need opportunities to...
produce language in order to acquire certain linguistic features, then, even if 'Where did I come from?' exchanges occur only a few times in the course of a lesson, the amount of class time that they ultimately consume might be cause for concern.

Teachers' sensitivity to affective variables in the L2 acquisition process, in combination with the dynamics of the post-secondary classroom, appears to affect negotiation in yet another way. Linguists are well aware that certain kinds of interaction, like negotiation, may occur only under specific conditions determined by the relationship between the interlocutors, the topic, and the setting (Tannen 1990). Years of classroom experience as both a student and a teacher lead me to believe that interactions between teachers and students in content classrooms are similarly constrained. Students do not usually announce to the entire class that they have not caught on to something. The patterns of interaction found in the three lessons sampled here, in which students tended to ask questions almost exclusively in the small-group or one-to-one setting, confirm this belief. The small sample size of this research precludes anything beyond a hypothesis at this point. However, if this finding holds true beyond the present sample, then small-group activities may be especially important in the content-based foreign language classroom—where the teacher is the only available native-speaker contact—since it is only this setting in which learners will engage the native speaker in communication. The possible existence of an intimacy condition also presents an important distinction between research conducted in the experimental versus the instructional setting; what learners will do in a small-group or one-to-one exchange with native speakers in the experimental setting may not generalize at all to the whole-class, multiple-learners-one-teacher, situation of the classroom.

A graduate student in applied linguistics who audited both semesters of the content-based courses in Italian subsequent to the collection of these data suggested to me that students might wait to explicitly ask for help in understanding until they are in small groups or working individually because it is only at that point that they can be certain that no more 'whole-class' teacher-modified input would be available (Licht, personal communication). That seemed a reasonable explanation, and so I reviewed the transcripts once again to see if it was borne out in the data. The data for all three teachers show that immediately before conceding the floor to small group or individual tasks, the teachers follow a set routine: they ask students if they have any questions, they pause and scan the room, and when no questions are forthcoming, they again remind the students to ask if they have any questions. Since no questions are asked until the students have settled into their groups or have begun their individual assignments, I propose that it is in fact the intimacy requirement of the small-group or one-to-one setting, rather than the realization that no more information is forthcoming, that best explains the data.

The classroom setting itself also affects the extent to which students will engage in negotiation with a teacher. Reactions to the behavior of the student who persisted through 30 turns in an effort to understand representation in the
Chamber of Deputies suggest that clear limits to appropriate learner behavior exist even within one-to-one and small-group settings themselves. This particular student's behavior was so anomalous that it elicited two overt negative reactions recorded on the videotape: the teacher's reprimand and a student's disdainful expression. Upon review of the transcript, Teacher C identified the exchange as atypical. The assistant who videotaped the lesson mentioned this particular incident, without prompting, when she handed me the videotape. These reactions, along with those of numerous teachers with whom I have shared the data, lead me to believe that this kind of exchange must be interpreted as pushing the absolute limits of what is considered appropriate behavior for learners in the classroom. Such tenacity may afford students ample practice speaking, but not without consequence if the teacher interprets the exchange negatively. This particular student's linguistic proficiency was probably on par with many in the class and better than some, but he violated norms that, according to Saville-Troike (1990: 152) 'clearly constitute far more serious but less visible errors' in communication than would deviations from normative rules of pronunciation or grammatical structure. The unstated rules of classroom discourse, when asked to comment on the structure of this exchange, Teacher C instead described this student as deviant and elaborated on how he differed from others: older, 'lived in Italy for a while', 'married to an Italian', 'formerly in the military'. She added, 'he is unable to understand the Italian system'. She confided, 'the other students don't like him'. The value of this particular exchange in the data set is not the exchange itself—it certainly is not typical—rather it is what the interaction can tell us about the limits of negotiation in the classroom setting. If theory purports that negotiation enhances language acquisition, practice suggests that any negotiation that occurs must observe strict boundaries, implicitly understood by teachers and learners.

In addition to an understanding of their role in the classroom, students may also have definite expectations of appropriate teacher behavior. Only one measure of learner satisfaction was used: the end of course evaluations. The implications that can be drawn from such a limited source of data are tentative at best. Nevertheless, the students' responses pose some interesting dilemmas for the L2 teacher who would like to encourage more student-initiated negotiation. It was clear in their evaluations that the students in the Italian course expected their teachers to explain well sufficiently well so that it would not be necessary to ask questions. Perhaps it is true that C was not as clear as Teachers A and B, or did not 'explain well' as students stated on the course evaluations. The lack of understanding that would arise from such a situation should have spurred more student-initiated negotiation. In the one lesson that was videotaped, it appeared to do just that. In a positive sense, less transparent messages might challenge students' developing language systems. Aside from the possible benefit of generating more student-initiated exchanges, how might this affect students' perceptions of the teacher? In C's case, it may have reflected negatively on her course evaluations.
Students also expected teachers to manage lessons efficiently. Teacher C asked significantly fewer questions than either A or B. What was missing from her lesson were the closed display questions those questions that seemed to produce smooth, rapid-pace exchanges accompanied by positive student reactions. Instead, almost all of C's questions were open-ended display, not closed ones, a practice that resulted in slow, halting learner speech. In light of these findings, it becomes important to recall that Teacher C was evaluated more negatively than either A or B on the 'balance between teacher and student participation'. If students based their evaluation on the fact that they needed to ask for clarification and that C asked the kind of questions that placed a heavier linguistic burden on them, then teachers in content-based instruction must consider seriously how students' expectations of what constitutes a 'well-run' class might affect the way they are evaluated.

CONCLUSION
Second language acquisition theory purports that negotiation is important because it results in modification of the input, making it more comprehensible to the learners, and perhaps also because it requires learners to adjust their output to render it more comprehensible to native speakers. Non-understanding, then, is beneficial to the acquisition process because it promotes negotiation. In the classroom, students and teachers may not understand each other for many reasons: one may speak too softly to be heard, extraneous noise may interfere, questions and answers may be framed in confused or ambiguous ways. These are all valid impediments to communication, the first two are also relatively impersonal. The more dangerous interpretations of non-understanding are those that question the capabilities of either the teacher or the students. For example, if a student does not understand, it is possible to infer that the teacher did not explain well or the student is not trying hard enough. On the other hand, if a teacher does not understand, then it might be because the student is confused or the teacher is not trying hard enough. Factors like noise and inaudible speech result in requests for repetition of utterances. Signaling non-understanding for other reasons appears to be a risky business. Risky enough that students prefer to do it in private and teachers not at all.

Data from immersion studies in Canada suggest that teachers rarely require students to modify their output (Swain 1993). The results of the present study suggest that the teachers in the Italian classrooms supplied modified input without any linguistic intervention from the students, but they, too, did not ask students to modify their output. These findings should not suggest that content-based instruction is fundamentally flawed. Swain's work in the Canadian immersion setting provides compelling evidence in its favor. Learners' linguistic performance consistently exceeds that of students enrolled in 'core' language classes. What is suggested is that negotiated interaction might push students' L2 grammars along.

If the experimental studies tell us that non-native speakers will adjust their messages (that is, modify their output, in Swain's terms), given a signal of non-
understanding from the native speaker, then it is important to find out why teachers do not signal non-understanding. Because even if experimental studies were to show that modified output is important for L2 acquisition, the application of those findings would be nil unless we determine why negotiation that leads to modified output does not occur in the content-based instructional setting. This research represents a first step in understanding how negotiation happens in content-based classrooms, and why often, it does not. But it is only a first step; the size of the sample limits the strength of the present findings, and further investigation of learners' reactions to negotiation will reveal whether teachers' fears about signaling non-understanding are founded.

Negotiation may be essential for L2 development, but teachers and students may also view it as inefficient, embarrassing, or even inappropriate. For incomplete communication to be signaled, accepted, and resolved, without loss of face or reparation, requires the assurance that such behaviors are appropriate in the classroom and valuable for L2 acquisition. Just as teachers may need to model behaviors that apparently diminish their omniscient roles in the classroom, learners must acquiesce to multiple attempts to iterate, edit, reformulate, and reiterate their utterances, in spite of any embarrassment or frustration that such efforts provoke. In order for teachers to indicate that they have not understood and students to modify, negotiation cannot be interpreted as repair of imperfect or failed communication, rather it must be regarded as an important component of the learning experience.

If the kind of negotiation characterized by two-way clarification requests, learner-initiated exchanges, and learner-modified output is to occur in the content-based classroom, it will necessitate a change in what constitutes seemingly classroom behaviors for teachers and learners. The attitudes, roles, and responsibilities of all participants in the instructional setting will require adjustment; it will become appropriate for teachers and learners to not understand each other, they will be justified in letting each other know, and the investment of time necessary to reach understanding will be deemed well-spent.

Students in content-based instructional settings acquire subject matter knowledge and language simultaneously. Could they be learning more language, more quickly, if they engaged in more negotiation, specifically negotiation that resulted in learner-modified output? With what benefits? And at what risk? We still do not know the effects that such output might have on second language acquisition. The present research suggests that its potentiality in content-based instruction may remain opaque unless we better understand the effects—perceived and actual—of such negotiation on the dynamics of classroom interaction.

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**APPENDIX A**

*Transcription conventions* (Based on Allwright and Bailey 1990)

An attempt has been made to render the transcripts as readable as possible and still convey the 'feel' they have in the original Italian. The following labels and symbols have been used:

To identify who is speaking:

Teacher

Student (unidentified)

Student 1 (identified student using numbers)

SS (unidentified subgroup of students speaking in chorus)
APPENDIX B

Questions soliciting teachers' interpretations of lessons

As part of my research in learning a second language through content area instruction, I would appreciate your input as instructors in the experiment in content language learning, Ital 103 and 104. Please be candid in your answers. This is not an evaluation of your teaching!

Please

1. Watch your class on the videotape to refresh your memory of the lesson. Please do this first, before you look at the transcript. Then answer the following questions:
   1. Is this lesson typical?
   2. If not, how does it deviate from a usual lesson?
   3. How would you characterize the students' participation in the lesson?

2. Now look at the transcript to answer the following questions. Don't worry about the spacing, slashes, or the way the students' responses are written. Look at the passages that I've highlighted. (You can write your responses on the transcript itself next to each encounter.)
   1. What do you think is going on in each encounter?
   2. How comprehensible is the student's speech?
   3. How did you figure out what the student was saying/asking?
III Please answer the following questions about 103, in general

1. In your opinion what are your strengths as a teacher in ITAL 103?
2. What would you like to change in your 103 lessons?
3. What do you consider a good/successful lesson?
4. How does the lesson you reviewed compare to the 'ideal' lesson?
5. What are the major challenges in teaching 103?
6. What are the goals of 103? (What are the students supposed to learn?)
7. What do you think 'negotiation of meaning' means?
8. If you don't understand what a student says, what do you usually do? Why?

THANK YOU YOUR INTERPRETATION OF THE LESSON IS AN IMPORTANT PART OF MY RESEARCH I APPRECIATE YOUR HELP