Classroom Learning, Teaching, and Research: A Task-Based Perspective

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In an increasing number of second language (L2) classrooms, teachers and researchers are taking on new roles and responsibilities. From these new perspectives, they are developing similar concerns about L2 learning processes, which they typically express in ways that reflect their different backgrounds and goals. To support learning, teaching, and research in the L2 classroom, researchers and teachers have attempted to develop activities that both address their concerns and accommodate their differences on a long-term basis. This article reflects my participation as a researcher in this context and presents the ways in which the teachers and students with whom I have worked have turned to information gap tasks to serve many of our needs. The first part of the article describes the contributions of information gap tasks as seen from our learning, teaching, and research perspectives. The second part describes the issues and challenges we have faced in integrating and implementing them. Then the third part presents an approach that we have developed for designing information gap tasks both as authentic activities for teaching and learning and as reliable instruments for research. Examples of our tasks are provided, together with excerpts from the discourse of their classroom implementation. These excerpts reveal the effectiveness of the tasks in drawing students' attention to form, function, and meaning in ways that we considered vital to students' L2 learning.

THE THEORY AND PRACTICE OF SECOND language (L2) learning and teaching are dynamic enterprises, subject to continued debate, development, and change. In recent times, some fascinating changes have occurred within the L2 classroom, as participants have broadened their roles, extended their responsibilities, and collaborated in their activities. What was once, and remains in some places, a formal setting for instruction and practice, has become in other places a center for purposeful communication and meaningful exchange. This article focuses on this other classroom context, its challenges and its opportunities. It begins with the participants, the students and teachers, and then turns increasingly to researchers including me.

In many classrooms today, students, now also referred to as learners, take an active role in their learning, as they work together on projects, respond collaboratively to texts, and exchange ideas in pairs and groups. Their teacher takes on the roles of resource person, coach, and co-participant, encouraging the students to be meaningful, comprehensible, and supportive in their work together. Teachers of language have become teachers of language learners and strive to meet their students' social, academic, and work-related needs. They are often asked to teach sheltered sections of regular, subject matter classes and thematic units on cultural topics, or to provide tutorial support in academic areas. They use textbooks and materials that emphasize content, communication, and study skills more than linguistic rules and structures. Although students and teachers have embraced this orientation overall, many of them have called into question its lack of emphasis.
on language instruction and corrective feedback (e.g., Boyd-Kletzander, 2000; Pica, 2002).

Researchers have also taken on new roles and responsibilities. Over the years, classroom observers, who counted instructional moves and correlated them with learning outcomes (e.g., Levin, 1972), were joined by researchers concerned with classroom processes. Early on in their careers, my colleagues and I would ask teachers to implement different approaches to grouping students, posing questions, and adjusting input. We would then compare the impact of these classroom processes on students' interaction, comprehension, and other aspects of their L2 learning (e.g., the seminal work of Long, Adams, McLean, & Castanos, 1976; and subsequent studies by Blau, 1982; Doughty & Pica, 1986; Pica & Doughty, 1985; Pica, Young, & Doughty, 1987).

More recently, many of us have moved beyond our earlier concerns about classroom practice to theoretical questions on the role of input comprehension and interaction in L2 learning. Even though these questions did not originate in classroom practice, but rather in theoretical issues of the need for attention and intervention in the L2 acquisition process, they resonate with concerns about language and learning that many teachers and students also hold. Thus, as researchers have continued to question relationships between attention to form and meaning and L2 development and learning, teachers and students have also looked for ways to emphasize language forms and features in their content lessons and meaning-oriented activities. Along similar lines, while researchers have begun to ask about the theoretical necessity for negative evidence in L2 learning, teachers have wanted to know when to provide the correction and feedback that their students expect from them, and how to do so in the ways that serve them best.

This convergence of concerns has given me the opportunity to work with my colleagues on projects that are both theoretical and practical in their implications. Although projects of such scope can be carried out in controlled settings, we have begun to see how well they fare in the classroom context. The classroom has long been considered an excellent site for descriptive studies and action research. However, it has also been viewed as a place where intervening variables make it difficult to test theories or run experiments. New treatment studies, focused on instructional interventions, have shown that these interventions can be implemented during regular class time. These studies have provided data of important theoretical and pedagogical consequence for the field (e.g., Doughty & Varela, 1998, on the effect of science lesson feedback on past tense formation; Harley, 1998, on the role of curriculum-grounded games in grammatical gender awareness).

THE CLASSROOM AS AN ENVIRONMENT FOR L2 RESEARCH

What is emerging from studies such as those just noted is that the strength of the classroom lies not only in its contributions as a context for teaching and learning, but also in its role as a research environment. Among its benefits to researchers are the availability of cohorts of students and teachers to study and stretches of time for these studies. This availability is especially important because answers to theoretical questions about L2 learning often center on the internalization of grammatical systems, which take time for learners to develop, teachers to guide, and researchers to track. When theoretical questions are addressed on a short-term basis, however, results can be elusive. Features that appear to have been acquired over the course of a few weeks or months can be absent during follow-up observation and testing. Lightbown and Spada (1999) pointed out in their review of research that there was no way to determine whether such absences were due to insufficiency of the research treatment, its premature withdrawal, or a lack of student readiness for internalization of grammatical systems. Additional strengths of the classroom as a research environment are characterized by what DeKeyser (2003) and Doughty (2003) have called ecological validity. Many studies have sought answers to theoretical questions about learning processes that have close ties to classroom experiences. As reviewed by Doughty (2003), studies on attention to form and negative evidence, for example, have become increasingly prominent in the field of instructed L2 acquisition. However, most of these studies have been carried out through instructional treatments provided under controlled conditions. The elegance of their design and the importance of their results for Second Language Acquisition (SLA) theory are offset somewhat by concerns about the authenticity of the treatments and the relevance and applicability of their results to actual classroom participants. As long as theoretical issues on learning processes connect with classroom commodities, the results of controlled studies will need to be validated with data from intact classes. Moreover, the strengths of the classroom as a research site suggest that
original studies on these processes could very well be initiated within the classroom context.

Despite this optimistic view, however, classroom research on theoretical questions will continue to be challenging because it must deal with standards for methodological rigor while the classroom remains a place where students and teachers have their own, important work to do. Activities and materials used in research not only must resonate with teacher and student concerns about L2 form and feedback, but also must be consistent with what these classroom participants are used to doing—working together, exchanging ideas, and communicating about content.

Is it possible to develop a methodology that can satisfy the needs and expectations of learners, teachers, and researchers? Is it possible to develop a collection of activities that can be used in the classroom, not only as intensive, short term experiments, but also as engaging activities, worth sustaining over time? These are some of the questions I found myself asking over many years of carrying out classroom research. I have asked them to students and colleagues, and they in turn have often asked them to me. The answers have come from activities that have emerged steadily over these same years in L2 learning research and practice, and that, collectively, have become known as tasks. There are many types of tasks and many activities and exercises that are referred to as tasks (for a recent review, see Ellis, 2003). However, the one task type that we have found especially compatible with our learning, teaching, and research objectives is the information gap task, and it is to this type of task that I now turn.

INFORMATION GAP TASKS FOR INSTRUCTION AND RESEARCH

The information gap task is characterized by several features: Only one outcome or answer is considered possible, appropriate, or correct, and reaching it requires a verbal exchange of information among task participants (Ellis, 2003; Pica, Kanagy, & Falodun, 1993). In order to reach the precise outcomes that information gap tasks require, participants must make sure the information they exchange is both accurate and understood. When access to one participant’s information becomes difficult, another participant signals the need for clarity, and the first participant responds by recoding, rephrasing, or expanding the information, often doing so until it appears to be understood. As the participants engage in this negotiation (e.g., Long, 1983; Varonis & Gass, 1985), they draw attention to the meaning of the information and the form in which it is encoded. This process can be seen in Excerpt 1, in which a pair of English language learners try to reproduce a picture story that matches one hidden from their view. In order to recreate the complete story, the participants exchange verbal descriptions of their own incomplete portions of the story.

Excerpt 1
Story Reproduction

Yaka: So I have just one more—two picture—one of them she called someone

Suno: She is?

Yaka: She is calling someone (Pica, Lincoln-Porter, Paninos, & Linnell, 1996, p. 74)

During this exchange, Suno extracts a small segment of Yaka’s description, an act that serves as a signal for Yaka to try again to get his message across. Yaka responds by changing the word call from its past time encoding to its continuous form, which is more appropriate to the ongoing story depicted in the picture sequence. Both learners make modifications to input and output, which eventually lead to successful selection and placement of their pictures. As suggested by this excerpt, information gap tasks promote the kinds of interactions that are welcome to students, teachers, and researchers. Their goal-oriented interaction requirements set up conditions for students to receive feedback, enhance their comprehension, and attend to message form and meaning.

Drawn from seminal work on the theoretical construct of task and its role in the learner’s curriculum (e.g., Candlin & Murphy, 1987; Crookes, 1986; Long, 1985b; Nunan, 1989; Skehan, 1996), information gap tasks have become increasingly visible in SLA research. Some studies have examined and compared different types of tasks and their impact on learning processes (e.g., Doughty & Pica, 1986; Duff, 1986; Kowal & Swain, 1994; Newton & Kennedy, 1996; Swain, 1998; Swain & Lapkin, 2001). Other studies have used information gap tasks as instruments to gather data on classroom practice and learner generation of input, output, and feedback (e.g., Crookes & Rule, 1988; Mackey, 1999; Mackey, Oliver, & Lefman, 2003; Mackey & Philp, 1998; Oliver, 1995, 2000; Plough & Gass, 1993), and to address questions on input comprehension and comprehensibility (e.g., Gass & Varonis, 1985, 1994; Pica, 1991; Pica et al., 1987). More recently, information gap tasks have been used to study learners as they react to corrective feedback and attend to targeted grammatical forms, functions, and
meanings (e.g., Iwashita, 2003; Leeman, 2003; Mackey, 1999; Philp, 2003).

Information gap tasks can also serve as instructional treatments, to generate and then study L2 learning processes and outcomes. The most revealing tasks are those in which the information required to fill a gap must also be encoded with a specific form. To date, the work of Loschky and Bley-Vroman (1993) remains one of the most influential in this area. For them, the most beneficial tasks include task essential forms, in that the tasks cannot be completed unless a targeted form is used. Locative forms, for example, would be essential to a task that required object selection and placement.

Form-focusing aspects of Loschky and Bley-Vroman’s model have influenced researchers in their choice of form focus, task selection, and input, output, and feedback emphases (e.g., Doughty & Varela, 1998; Harley, 1998). More challenging is their integration into actual curricula and implementation into intact classrooms for dual purposes of instruction and research. These requirements have raised issues and challenges for my colleagues and me, but they have given us opportunities and advantages that we could not have found, had we worked on our own.

One issue of great concern is the yet untested dimension of time. Although it is widely accepted that information gap tasks can hold their own as high-interest classroom activities, it is still not known whether they can maintain their reliability as research instruments over time. Information gap tasks have been used effectively as instructional treatments in short-term studies (e.g., Leeman, 2003; Newton & Kennedy, 1996). Their role in effecting long-term outcomes has been largely unexplored.

A second issue involves authenticity. Despite the pedagogical origins of information gap tasks and the important data that their research implementation has brought to the field, a large part of the data contributed by researchers, including me, has come from conditions that were classroom-oriented, but were more typical of a controlled environment than a classroom setting. These settings have included monitored sessions outside the classroom (e.g., Long, 1985a; Pica, Holliiday, Lewis, Berducci, & Newman, 1991; Pica, Holliiday, Lewis, & Morgenthaler, 1989; Pica et al., 1996; Pica et al., 1987) and researcher visits to classrooms in session and during break time (e.g., Doughty & Pica, 1986; Pica, 1991, respectively). In several studies, tasks have been carried out with intact classes of students, but as extracurricular activities, added on to the regular classroom agenda (e.g., Newton & Kennedy, 1996; Williams & Evans, 1998). Such practices guarantee uniform delivery of task treatments, across multiple participants, with consistent timing in task implementation. The research design can be maintained with reliability and consistency, so that task directions are followed carefully, and tasks are implemented uniformly across different learners and within a comparable time frame.

Although the data collected under controlled conditions are highly reliable, there are concerns as to whether they reflect authentic experiences for the students and teachers who provided them. As noted above, both DeKeyser (2003) and Doughty (2003) have questioned the ecological validity of such studies. In addition, as Byrnes (2000) has argued, the limited extent of their implementation time calls into question the authenticity and applicability of even the most theoretically grounded and empirically successful tasks. Her points resonate with the views of many educators, namely that what is recognized as instructed SLA research must be situated in, and responsive to, the needs of classroom participants if it is to have utility for instruction.

Now that so much is known about SLA processes and the contributions of task participation to them, situated studies that would bring them together in the classroom seem both feasible and timely. One especially inviting situation can be found in classrooms where students are used to working with activities that address content meaning, but where their L2 development suggests they need greater awareness of, and feedback on, language form. Such classrooms, growing in abundance in schools and language centers across a variety of settings, have been the site and impetus for the work on tasks that my colleagues and I have recently developed, and which I describe below.

CONTENT CLASSROOMS AS CONTEXTS FOR TASK-BASED LEARNING, TEACHING, AND RESEARCH

Although it has been shown that many language skills can be learned through a focus on meaning, there is increasing evidence that the learning is incomplete and that grammatical imprecisions remain. Several researchers have raised the possibility that meaning-focused, content classrooms may not offer students sufficient opportunities to modify their output syntactically (e.g., Swain, 1985, 1991) or to receive feedback on their grammatical accuracy (e.g., for English as a second language [ESL] classrooms, see Pica &
Washburn, in press; Pica, Washburn, Evans, & Jo, 1998; for the same findings in French immersion classrooms see Swain, 1985, 1991; and for a L2 Italian content-based classroom, see Musumeci, 1996). Excerpts 2 and 3 suggest such insufficient opportunity for language development. They are taken from a database of tape-recorded classes in content areas, including university-level English language courses on literature and culture (Boyd-Kletzander, 2000) and film and culture (Pica, 2002; Pica & Washburn, in press; Pica et al., 1998), which my colleagues and I have gathered over many years. Some of the data collection was inspired solely by curiosity. Another motivator was the need for information to apply to practice or to use for assessment.

In my own case, I simply wanted to observe content classroom interaction. In reviewing curricula for the content courses taught in a L2, I had found very little explicit attention to L2 forms and features in the materials and activities, and I assumed that the students' interaction and negotiation over curriculum content would draw them to attend to L2 form as they shared content-laden messages. What I found, however, fell short of my expectations.

During discussion, which was the most typical activity in most of the classes, teachers responded to students with topic-related, meaningful L2 input and spent little time with language, even when a request for clarification or a corrective move focused on grammatical imprecisions might have been helpful. As shown in Excerpt 2, from a course on literature and culture, the teacher responded to the meaning of a student's grammatically misformed utterance with a reformulation, but in so doing, retained the target-like portion of the utterance, he mustn't show his humiliation, and did not call attention to the grammatically incorrect non-target phrase, by don't give money.

Excerpt 2
Course on Literature and Culture

Student: yeah if he's still proud he mustn't show his humiliation by don't give money

Teacher: right it's his humiliation that would show (Pica, 2001, p. 160)

In Excerpt 3, from a course on film and culture, Language and Film, the teacher's back channels and positive feedback led the student to believe that his production regarding The Joy Luck Club (Stone, 1993) was accurate, despite its many errors (I have highlighted errors in italics for Excerpt 3).

Excerpt 3
Course on Film and Culture

Teacher: give me a thumbnail sketch
Student: one-one-one thing is, his grandmother about his grandmother? because he feel, if he is he work hard he can go to college and he need now to pay for the aah

Teacher: uh-huh, uh-huh

Student: for the nursing of the- xxx the second one is, eh, the teacher give him, gives him enough time and encouraged him—like Patricia said, the teacher give him enough uh

Teacher: ah

Student: space to let him to feel he can do good... (from Pica, 2001, p. 166)

These data reflect the discourse characteristics of a wide range of content-based classrooms that I have studied, together with teachers, administrators, and preservice graduate students. They reveal fluent, but linguistically inaccurate, student production and show greater attention given to the meaning of their contributions than to their linguistic encodings. This pattern was consistent with the teachers' instructional objectives for content reporting and information exchange and with the discourse norms of their classroom lessons and discussions. Grammatical imprecisions were overlooked because they did not keep the teachers and their students from displaying knowledge and conveying ideas. Although there was a good deal of negotiation for meaning, its focus was on defining unfamiliar lexical items and clarifying factual information rather than on calling attention to grammatical errors. As the data revealed, grammatical features—articles and pronouns, modal verbs, and bound inflectional endings for tense and aspect—were seldom the focus of classroom negotiation. Numerous contexts for supplying these grammatical features were generated given that discussion topics required the students to refer to multiple individuals, concepts, and conditions; to structure information into arguments; and to connect issues and concepts. However, the absence or imprecision of these grammatical features was seldom acknowledged or addressed.

That a language teacher's response to students might focus solely on content is not unique to content thematic settings such as those in Excerpts 2 and 3. As Lyster (1998) pointed out, when
immersion teachers' follow-up responses to students are encoded as recasts of their errors, these moves are often perceived as content-focused acknowledgements, even if they are not intended to function in this way. It is unlikely that the implicit corrective dimensions of recasts make an impact in classrooms where content rather than its form matters for success. Although recasts are legitimate corrective moves to language form in experimental contexts, where their linguistic emphases can be isolated and noticed, they serve mainly as follow-up responses to content accuracy in immersion classrooms, where subject matter learning is the key to school advancement.

My concerns about content classrooms as contexts for L2 learning have been echoed many times by my colleagues at community language programs, adult literacy centers, foreign language departments, and elementary and secondary school classrooms. We foresee that our concerns are likely to increase as schools continue to move language learners into sheltered and regular classrooms, as university language courses adopt content-based curricula, and as theme-based and specific purpose classes increase in scope and popularity. Optimal tasks will have to pinpoint students' needs for accurate encoding of form, function, and meaning, and be integrated within the classroom curriculum, implemented during actual class time, and sustained over a course term. A step-by-step approach is required to address these criteria, so simple in their articulation. Even further steps may be needed so that teachers can implement the tasks with credibility and researchers can trust their findings for reliability. Observation, discussion, and revision must accompany each step. As will be discussed, I have found that however time-consuming these steps may appear to be, it is possible and worthwhile to take them.

TASK DESIGN AND IMPLEMENTATION FOR L2 LEARNING, INSTRUCTION, AND RESEARCH

How is it possible to design form-focusing information gap tasks that assist L2 learning and teaching, retain classroom authenticity, and yet adhere to standards of research rigor? During the past several years, my colleagues and I have been both challenged and guided by this question as we have worked together as students, teachers, and researchers to develop such multipurpose tasks. The following sections highlight the many initiatives and interim products of these efforts, as they focused on the course, Language through Film, noted earlier in Excerpt 3. Housed in a university-level English language program, this course emphasizes academic English language, literacy and communication skills, and contemporary American culture. Students view films, read reviews, summaries, and scripts, and discuss them with teachers and classmates. Though our collaboration has focused on a specific course and its curriculum and students, the challenges we have had to confront in task design are consistent with broader issues we have faced across a range of meaning-focused classroom contexts.

Selection of Forms, Function, and Meaning

As has been the case with other form-focused interventions (e.g., Harley, 1993, 1998; Swain, 1998), our impetus for task intervention arose from concerns that the classroom experiences of our students in the film course did not meet all their needs for successful L2 acquisition. We therefore worked within the existing curriculum and considered ways in which the form-focusing experiences of information gap tasks could enhance those provided by their meaning-focused texts and activities. In keeping with guidelines on task-essential forms (e.g., Loschky & Bley-Vroman, 1993), we designed tasks in which the content necessary to fill the information gap required a specific form for its encoding. It was necessary to choose forms that the students were developmentally ready to learn, but were struggling to master. In making these choices, we relied on the principles of Harley (1993) and Long (1996). Thus, forms were chosen whose encodings were difficult for the students to perceive, seldom available in their classroom input, or lacking in transparency with their function or meaning.

Based on these criteria and concerns, one category of forms selected was articles and determiners. Although these forms were widely available in classroom input, they were difficult to perceive and their relationship was seldom transparent with the numerous functions they served. We also selected conjunctions and connectors, because they were used to identify newly named and previously identified referents, organize information, mark transitions, and make connections. Finally, we also selected modal verbs (for building arguments, making predictions, suggestions, and speculations) and verb tense and aspect (to organize and sequence information, distinguish generalizations and details, and highlight reported speech).

It should be underscored that we chose forms not only because they lacked saliency, but also
because they encoded multiple or complex relationships of function and meaning with which the students were struggling. The functions for all the L2 features the students needed were thus crucially important to our selection decisions. In the case of articles, for example, the students were familiar with rules regarding article use in expressing uniqueness, but less familiar with their application to repeated or multiple references. So it was this latter function that we targeted. The next step was to figure out ways to make these form, function, and meaning relationships essential to task implementation and completion.

Compliance with Curriculum, Classroom, and Research Expectations

When tasks are used as research instruments, they can appear to be tests to students and their teachers, and indeed, several students shared this concern with us as they sampled our initial tasks. In addition, the attractiveness of the activity-orientation and problem-solving aspects of a task can be offset by its inconsistency with curriculum content. In both cases, rapid abandonment can ensue. Therefore, to enhance their authenticity and insure their long-term use, we made sure our tasks would be integral to curriculum texts, topics, and assignments, and that they had enough variety among them so that teachers and students would want to sustain their participation over time.

Locating sources for our tasks was quite easy, given that the topics, texts, and assignments of the film curriculum were replete with contexts for the forms and functions noted above. Thus there was little need to enrich curriculum materials with these features. Because so much of actual class time was focused on the discussion of the film reviews and summaries the students had read, we based the tasks on these texts. The texts were modified mainly to streamline sentence complexity, reduce paragraph length, and eliminate outdated, distracting expressions, colloquialisms, and allusions to other films that the students and many of their teachers had never seen. In further keeping with the curriculum's emphasis on the learning of academic English, task directions began with a statement to the students that the task would help them become more accurate and precise in their speaking and writing in areas such as organizing, reporting, reviewing, or editing information.

The following passage is based on an excerpt from a review (Ebert, 1990) of the film Stand and Deliver, which the students had already viewed and discussed and that we incorporated into a Spot the Difference information gap task.

East Los Angeles High School had many problems. The principal was worried that the school might lose its accreditation. So he held a faculty meeting to ask for suggestions. The vice principal said that the students entered the school with barely a seventh grade education. He argued that there wasn't a teacher at the meeting who wasn't doing everything he possibly could do. (pp. 699–700)

Even in this tiny excerpt, there were numerous contexts for the various form, function, and meaning relationships of reference, argument, and organization that the students needed to notice. Because there were also contexts for the connector, pronoun, and verb forms needed by the students, we were able to create two additional versions of the task.

The Spot the Difference task has been widely used as a tool for data collection (e.g., Crookes & Rulon, 1988; Long, 1981). Students are asked to work in pairs and together locate subtle differences between pictures, and to do so by oral communication only, that is, without showing their pictures to each other. In the tasks we developed for the film curriculum, the students followed directions that asked them to identify differences between review passages and to choose which of the differently encoded words or phrases made their passages more accurate and precise. They were also asked to justify their choices to each other.

The passage cited previously is presented in Tables la–c (see Appendix), which were the versions given to different student pairs, A and B, C and D, and E and F. Table 1a displays the versions for articles and determiners as they were used in sentences that referred to film elements. Tables 1b and 1c display versions for pronoun and connective forms in sentences that marked relationships between individuals, events, and ideas, and verb and modal forms, in sentences that sequenced and reported information and made speculations and predictions. The differences are italicized here, for purposes of display only; the italics were not used in the student versions.

Later in the activity, the students followed directions that asked them to recall their word and phrase choices as they reconstructed, or completed, a cloze version of the original passage without looking back at it. This exercise was in keeping with current theory that views attention and noticing as central to L2 learning and holds that the ability to recall a linguistic item is evidence
that noticing of the item has occurred (Schmidt, 1993). The cloze exercise for Table 1a is shown in Table 1d (see Appendix).

Finally, the students were shown the original passage again, with lines under the phrases that had been used in the original sentences. Their directions told them to compare the passage with the one they had just completed, and if they found any differences with the original, to explain them to each other and record them on task worksheets.

The five task directions, which asked the student pairs to choose between words, phrases, and sentences, to justify their choices, and later recall, compare, and explain those choices, provided them with numerous opportunities to focus their attention on the form, function, and meaning relationships they needed to learn. These tasks, in turn, provided data for the researchers. Task length and consistency also allowed the teachers to spend time with each pair of students and monitor their progress. These benefits were built into two additional information gap tasks, Jigsaw and Grammar Communication, which are discussed briefly in the following section, and described elsewhere (Pica, Kang, & Sauro, 2004). Also discussed in the next section are ways in which task design was kept consistent in order to assist classroom implementation and provide reliable data.

Consistency with Goals and Methods of Teachers and Researchers

All three information gap tasks were based on widely available, published activities whose contributions to L2 learning processes and outcomes have been discussed in review articles (e.g., Nassaji, 1999; Pica et al., 1993) and documented through empirical research. Versions of the tasks can also be found in professional reference books (e.g., Ur, 1988). Spot the Difference, as noted above, has been shown to engage students in negotiation in order to reach a successful outcome. As they negotiate, they modify their input, provide corrective feedback, and produce modified output. Grammar Communication tasks (e.g., Ellis, 1998; Fotos, 1994; Fotos & Ellis, 1991; Loschky & Bley-Vroman, 1993) and jigsaw tasks (e.g., Doughty & Pica, 1986; Pica, 1991; Pica et al., 1989; Pica et al., 1996; Swain & Lapkin, 2001) have revealed similar results.

Successful outcomes for the tasks depended on the students’ noticing form, function, and meaning relationships in order to reproduce the original text passage they had read. Spot the Difference required the students to notice differences in form, function, and meaning in sentence pairs based on the passage; Jigsaw required similar noticing using scrambled sentence pairs; and Grammar Communication used four words and phrases. Samples of these latter two tasks are shown in Tables 2 and 3 (see Appendix).

Consistency was achieved across the three task types by maintaining the same directions, except for a few variations. The initial purpose statement to students was the same on all three task types, that is, that the task would help them become more accurate and precise in speaking and writing; however, the sentence that followed this statement varied according to the specific skill area used in each task. Thus, the second sentence of the Jigsaw told the students that the task would also help them organize information. The second sentence of the Grammar Communication task informed them that they would be helped to report information accurately. In Spot the Difference, students were told that they would be assisted with their editing skills.

When managing and understanding the task data, there was yet another issue to be confronted in making sure that tasks were consistent and useful for the teachers, their students, and the researchers. Each of the five task directions to choose, justify, recall, compare, and explain, therefore, became a category for tracking the incidence of SLA processes, including the students’ participation in negotiation, modification of input, provision of feedback, production of modified output, and noticing of the forms, their functions, and meanings that they had yet to master. Other processes to track included the students’ form-focused instruction through their sharing and transmitting of rules, guidelines, and other metalinguistic insights.

Task Implementation as a Context for Learning Processes

Excerpts 4 through 8 represent the student exchanges during our development and piloting of the tasks. The discourse reveals how the tasks provided the students with more opportunities to attend to relationships of form, function, and meaning among our targeted grammatical features than had been noted during the classroom discussion for Excerpts 2 and 3. We found that, as students followed the task directions to choose among different sentences and phrases in their film review passages, they negotiated impasses in their mutual understanding or decision making. In so doing, they offered each other modified input and feedback and responded with modified
output. These negotiations are illustrated in Excerpts 4 through 6, as the students focused on choosing verb phrases used to speculate on the career choices of the central character in *Stand and Deliver*. In Excerpt 4, the students discussed and negotiated their selection of *could do*, *does*, *did*, and *could have done* in the sentence *There wasn't a teacher at the meeting who believed he wasn't doing everything he possibly _________.* The form that had appeared in the original passage they had read was *could do*.

Excerpt 4
Grammar Communication Task

Student B: *Wasn't doing*. Yes, *wasn't doing*.

Student A: And did.

Student B: And *wasn't doing* everything he possibly (Modified Input)

Student A: Yeah, all of them we need past tense in this sentence.

Student B: *Did. Could do*. I think it's *could do*.

Student A: *Could do?* (Negotiation Signal)

Student B: Yes.

Student A: *Why?*

Student B: *Could do* is... is possibly *could do*. (Modified Output)

Student A: Oh... possibly—uh, huh. (Negotiation Signal)

Student B: It's not *did*. He didn't do it so. (Corrective Feedback)

Student A: You mean it's not certain it's so it is kind of possibility? In the near future or...?

Student B: I think it's... 

Student A: Oh, he possibly *could do*.

Student B: Not definitely do... yeah so... (based on Ebert, 1990, pp. 699–700)

While the students followed the direction to justify their choices, they often provided form-focused instruction and corrective feedback that drew connections between targeted forms, their functions, and meanings as revealed in Excerpts 5 and 6. In Excerpt 5, the students justified their choices of *would be able* and *were able* for the sentence *Escalante believed that they ________ to succeed in math if they paid attention and worked hard after having already eliminated *are able* and *would have been able* from consideration. As shown in Excerpt 6, after many exchanges of justification through negotiation, they eventually chose *would be able*, which was the form they had read in the original passage.

Excerpt 5
Grammar Communication Task

Student A: Escalante believed that they would be able to succeed in math if they paid attention and worked hard. If they.

Student B: Okay, but he was talking in past. He believed they were able. (Corrective Feedback and Reference to form/function, meaning relationship)

Student A: No, no, no if, right? If is hypothetical. (Corrective Feedback and Reference to form/function, meaning relationship)

Student B: Yes.

Student A: So maybe we need a *will* modal. (Reference to form/function, meaning relationship)

Student B: He believed.

Student A: He believe?

Student B: Believed. Past.

Student A: Yeah, he believed.

Student B: He believed that they were able. He believed—in past tense. He thought they were able. (Corrective Feedback and Reference to form/meaning, function relationship) (based on Ebert, 1990, pp. 699–700)

Excerpt 6
Grammar Communication Task

Student A: No, they will... He believed they will be able to succeed in math if they...

Student B: Yes, but it is not here. It is not in the options. (Corrective Feedback)

Student A: So do the past tense. *Will* past tense is *would*, right? (Form Focused Instruction)
Student B: \textit{would be able, would be able}. Okay. Some said that they would be able. (based on Ebert, 1990, pp. 699–700)

As the students followed the directions to reconstruct a passage and identify and explain similarities and differences between their choices and the words used in the original, they recalled forms they had chosen, often through utterances of negotiation. These negotiations served to highlight the forms in relation to their functions and meanings; they suggest that the students were able to recall these forms for task completion as seen in Excerpt 7.

Excerpt 7
Jigsaw Task

Student B: Before we used \textit{would risk}. (Recall of previous choice) It's a supposing sentence. Usually we use \textit{would}. (Reference to form/function, meaning relationship)

Student A: Now I got it. This sentence is any lawyer will not risk. Right. So it means, I don't want to... take that risk... This is the future... (Reference to form/function, meaning relationship)

Student B: Yeah. We know the difference use. Any lawyer would not listen. Would not. It's supposing, supposing sentence, right. If you would... (Reference to form/function, meaning relationship) (based on Ebert, 1997, pp. 593–594)

In Excerpt 8, as the students followed directions to compare their choices with those in the original passage and explain them, they drew connections between their choice of form and the content of the film they had viewed.

Excerpt 8
Spot the Difference Task

Student A: Yes... we have. We have same here... (Identified similarities with original passage) and did you lose something about little Amish boy?

Student B: It's actually in bus station, isn't it? So the activity of little Amish boy means what did he do on the station. (Reference to event in film)


Student A: OK... Thank you. (based on Ebert, 1990, p. 841)

CONCLUDING REMARKS

Over the past two decades, the fields of SLA and foreign language teaching have come together in fruitful and informative ways. Long-standing reservations about the relevance and applicability of SLA theory and research to issues and decisions in classroom practice have notably subsided, as teachers and researchers now draw upon each other’s knowledge and skills to pose questions about classroom interventions and to study their impact on L2 acquisition processes and outcomes. Earlier discussions (e.g., Hatch, 1978; Lightbown, 1985; Tarone, Swain, & Fathman, 1976), when compared with more recent ones (e.g., Lightbown, 2000; Pica, 1994, 2004), reflect this growth and change. The interventions have come to address not only issues in instructional practice but also broader questions about the theoretical dimensions and requirements of the acquisition process.

Throughout our work together, my colleagues and I have found that one intervention of great promise has been the information gap task, which we have adjusted and adapted to work effectively as a teaching and learning activity as well as a research instrument. Because information gap tasks have classroom authenticity, their expansion from pedagogical activities to data collection tools and treatments has been relatively straightforward. Task design alone, however, is only one component of a large endeavor that must include long-term classroom implementation of the tasks and a commitment to collaboration among teachers, researchers, and the students whose needs they serve. Pilot data have illustrated that this collaboration is possible and have provided a basis for studies addressing questions about the acquisition and internalization of L2 form and meaning that need to be implemented over time. As our recent studies continue to inform the classroom curriculum and shed light on the acquisition process (e.g., Pica et al., 2004), we remain active and forward-looking in our pursuits. Time will reveal answers on how best to teach and learn languages in the classroom, but time also holds the greatest challenges for all of us who make a commitment to work together in this effort.

NOTE

1 In carrying out the design and implementation of the tasks in this article, I have worked most closely with
REFERENCES


APPENDIX

Tables Showing Activities

All activities are based on a passage, also cited in the text of this article, from a film review by Ebert (1990, pp. 699–700).

TABLE 1a
Passage Versions for Articles and Determiners

<table>
<thead>
<tr>
<th>Version to Student A</th>
<th>Version to Student B</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Los Angeles High School had many problems. The principal was worried that the school might lose its accreditation. So he held a faculty meeting to ask for suggestions. The vice principal said that the students entered school with barely a seventh grade education. He argued that there wasn’t a teacher at a meeting who wasn’t doing everything he possibly could do.</td>
<td>East Los Angeles High School had many problems. The principal was worried that their school might lose its accreditation. So he held a faculty meeting to ask for the suggestions. The vice principal said that the students entered the school with barely a seventh grade education. He argued that there wasn’t a teacher at the meeting who wasn’t doing everything he possibly could do.</td>
</tr>
</tbody>
</table>

TABLE 1b
Passage Versions for Pronouns and Connectors

<table>
<thead>
<tr>
<th>Version to Student C</th>
<th>Version to Student D</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Los Angeles High School had many problems. The principal was worried that the school might lose its accreditation. So he held a faculty meeting to ask for suggestions. The vice principal said when the students entered the school with barely a seventh grade education. He argued but there wasn’t a teacher at the meeting who wasn’t doing everything he possibly could do.</td>
<td>East Los Angeles High School had many problems. The principal was worried that the school might lose his accreditation. So that he held a faculty meeting to ask for suggestions. The vice principal said that the students entered the school with barely a seventh grade education. He argued that there wasn’t a teacher at the meeting who wasn’t doing everything he possibly could do.</td>
</tr>
</tbody>
</table>
### TABLE 1c
**Passage Versions for Verb and Modal Morphology**

<table>
<thead>
<tr>
<th>Version E</th>
<th>Version F</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Los Angeles High School had many problems. The principal was worried that the school <em>might</em> lose its accreditation. So he held a faculty meeting to ask for suggestions. The vice principal said that the students <em>entered</em> the school with barely a seventh grade education. He argued that there wasn’t a teacher at the meeting who wasn’t doing everything he possibly <em>should</em> do.</td>
<td>East Los Angeles High School had many problems. The principal was worried that the school <em>must</em> lose its accreditation. So he <em>holds</em> a faculty meeting to ask for suggestions. The vice principal said that the students <em>entered</em> the school with barely a seventh grade education. He argued that there wasn’t a teacher at the meeting who wasn’t doing everything he possibly <em>could</em> do.</td>
</tr>
</tbody>
</table>

### TABLE 1d
**Cloze Passage for Articles and Determiners**

East Los Angeles High School had many problems. The principal was worried that _______ might lose its accreditation. So he held a faculty meeting to ask _______. The vice principal said that the students entered _______ with barely a seventh grade education. He argued that there wasn’t a teacher _______ who wasn’t doing everything he possibly could do.

### TABLE 2
**Jigsaw Passage Versions for Articles and Determiners**

<table>
<thead>
<tr>
<th>Version to Student C</th>
<th>Version to Student D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sentence # 1</strong> Stand and Deliver tells the story of a high school mathematics teacher named Jaime Escalante.</td>
<td><strong>Sentence # 1</strong> Stand and Deliver tells the story of a high school mathematics teacher named Jaime Escalante.</td>
</tr>
<tr>
<td><strong>Sentence #___</strong> Escalante motivates them by getting attention.</td>
<td><strong>Sentence #___</strong> Escalante motivates them by getting their attention.</td>
</tr>
<tr>
<td><strong>Sentence #___</strong> Students are undisciplined, unmotivated and rebellious.</td>
<td><strong>Sentence #___</strong> The students are undisciplined, unmotivated and rebellious.</td>
</tr>
<tr>
<td><strong>Sentence #___</strong> He is asked to teach a class of losers and potential dropouts.</td>
<td><strong>Sentence #___</strong> He is asked to teach a class of some losers and potential dropouts.</td>
</tr>
<tr>
<td><strong>Sentence #___</strong> Escalante faces an enormous challenge on the first day of school.</td>
<td><strong>Sentence #___</strong> Escalante faces his enormous challenge on the first day of school.</td>
</tr>
</tbody>
</table>

### TABLE 3
**Grammar Communication Passage Versions for Articles and Determiners**

<table>
<thead>
<tr>
<th>Version to Student A</th>
<th>Version to Student B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Escalante returned to education to prove something.</td>
<td>1. Escalante returned to education to prove something.</td>
</tr>
<tr>
<td>2. What he proved was that students/some students can succeed through motivation and hard work.</td>
<td>2. What he proved was that his students/the students can succeed through motivation and hard work.</td>
</tr>
<tr>
<td>3. His students were able to pass the difficult math test/this difficult math test.</td>
<td>3. His students were able to pass a difficult math test/this difficult math test.</td>
</tr>
<tr>
<td>4. However they were accused of cheating on his test/their test.</td>
<td>4. However they were accused of cheating on his test/their test.</td>
</tr>
<tr>
<td>5. Even though the students/these students had not cheated, their scores were questioned by the Educational Testing Service.</td>
<td>5. Even though students/their students had not cheated, their scores were questioned by the Educational Testing Service.</td>
</tr>
</tbody>
</table>