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Authors

Poole, Deborah
Patthey-Chavez, G Genevieve

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Locating Assisted Performance: A Study of Instructional Activity Settings and their Effects on the Discourse of Teaching

Deborah Poole
San Diego State University
G. Genevieve Patthey-Chavez[1]
Los Angeles City College

In an effort to locate instances of Tharp and Gallimore's assisted performance in educational settings, teacher-student interactions in typical teacher-fronted classrooms are contrasted with the organization of talk across a variety of alternate educational participant structures—a teacher-student conference, small group work, the making of a class video, and a problem-solving interaction in a computer lab—that deviate from the traditional "default script" (Cazden, 1988, p. 53) of classroom interactions. We consider how each learning arrangement affects the extent to which students are able to initiate, control, and maintain interaction, and the extent to which their agendas are articulated. We further consider the influence exerted by the multiple facets of each encounter's institutional and interpersonal context. This range of influences precludes a monolithic transfer of knowledge, pointing to the obviously agentive role of the novice as well as to ways in which historical and institutional expectations are represented (or altered) in interactional encounters. Hence, locating assisted performance uncovers a web of relationships among participants, tasks, and talk that both facilitate and constrain learning in a given novice-expert episode.

INTRODUCTION

Ordinary classrooms contain most of the elements that can create rich, rewarding learning experiences for teachers and students. Routinely attaining such experiences, however, can prove both difficult and elusive, as a great variety of classroom research attests (e.g., Goodlad, 1984; Lemke, 1991; Cazden, 1988;

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Patthey-Chavez & Goldenberg, 1994). In the broadly focused and influential work of Tharp and Gallimore (1988), underlying dimensions of this difficulty are addressed as the authors reconceptualize the very definition of teaching. In their view, instructional encounters are most often characterized by teacher direction and evaluation, with students assuming the task of learning or performing independently; that is, very little time is devoted to helping students directly in the act of learning. Tharp and Gallimore argue that this model of *direction-performance-evaluation* must be replaced and, to this end, offer a redefinition of teaching as *assisted performance* (AP), where teachers "rouse minds to life" by helping students to meet and master instructional challenges. They charge that teachers must fundamentally reconceptualize their task as one of assisting students to perform at levels beyond what they can do alone. Furthermore, this revisioning must be appropriated by practitioners and administrators at all levels of the educational hierarchy; just as the task of teachers should be to assist the performance of students, the task of supervisors or principals should be to assist the performance of teachers.

Identifying educational settings in which "assisted performance" occurs, as well as the factors which account for its emergence, are the concerns of this paper. In particular, we are interested in focusing on the *language* of such settings as a means of specifying with some precision how assisted performance evolves and what interactional shape it takes. This focus reflects our view that analyses of instructional language are crucial to in-depth understanding of educational contexts and that, from a linguistic perspective, such contexts remain underanalyzed in the classroom research literature.

Our attempts to "locate" instances of assisted performance suggest that it is particularly difficult to find in the teacher-fronted, whole-class setting. As repeatedly demonstrated in classroom discourse research (Cazden, 1988; Lemke, 1991; Griffin & Humphrey, 1978; Mehan, 1979; Poole, 1990; Sinclair & Coulthard, 1975), teacher-fronted settings are pervasively characterized by the initiation-reply-evaluate (IRE) sequence, which in many instances functions as the interactional instantiation of the direct-perform-evaluate paradigm identified by Tharp and Gallimore. Cazden has fittingly termed such IRE-based interaction the "default script"—in her words, "what happens unless deliberate action is taken to

achieve some alternative" (1988, p.53). In an effort to focus our investigations beyond IRE sequences and the default script, here we analyze novice-expert interactions across a range of *alternate* instructional participant structures (Philips, 1983)—specifically, writing conferences, small group work, a class-made video, and client-consultant interactions in a computer lab—and juxtapose them with more familiar IRE-based lessons. We consider how characteristics of physical and institutional arrangements not only allow for assisted performance, but also how those characteristics affect the nature and extent of expert assistance. Our findings suggest that while participant structure can become a readily available resource to engender change in the default script, the institutional context within which activities are embedded remains a powerful, at times inhibiting, force.

Theoretical Background: The ZPD and Activity Theory

Tharp and Gallimore's concept of assisted performance was inspired by Vygotsky's original admonition that effective instruction precedes and anticipates development (1978, p. 104). Their "assisted performance" defines "what a [novice] can do with help, with the support of the environment, or others, and of the self," (Tharp & Gallimore, 1988, p. 30). Developed for educators, its very wording articulates the two key components of Vygotsky's primary vehicle for effective instruction, the "zone of proximal development" (ZPD): performance by the novice and assistance by the expert. In this view, expert guidance amplifies novice performance, but does so by drawing on novice contributions.

Staying close to Vygotsky's construct allows Tharp and Gallimore to capitalize on the extensive body of research supporting the value of the ZPD. The work of Cole (1985), Griffin and Cole (1984), Rogoff (1990), and Wertsch (1985a; 1985b) documents the effectiveness of ZPD-mediated instructions in many settings. At the same time, the construct has been reviewed and expanded by Vygotsky's students almost from its inception, in part to realize Vygotsky's own ambition to build a comprehensive theory of human development. The resulting theoretical framework—perhaps best known as 'activity theory'—is much less familiar to Western audiences, and has not accumulated the empirical backing enjoyed by the ZPD. It has, however, addressed a few inadequacies in the ZPD's original conceptualization.

While Vygotsky's social account of human development was certainly revolutionary, it was based on a primarily dyadic perspective: Caretakers and social settings are resources for the human child, who appropriates from them socially constructed knowledge. The caretaker's contributions tended to be privileged, with the novice often assuming a recipient-role in the learning process. The issue of novice influence in the ZPD is brought into focus in this study as students are shown to be the *initiators* of learning encounters across several distinct activity settings. In these cases, the content of instruction in the ZPD is determined largely by the novice, a circumstance which points to the importance of another dimension of assisted performance-namely the role of the novice in establishing and carrying out the learning agenda.

Activity theory also locates the larger societal origins of the zone. Vygotsky explored neither the extensive social networks nor the material resources on which caretakers drew before they could offer expert-assistance to novices. From an activity-theoretical perspective, these resources undergird the ZPD, thus playing a key role in fostering (or inhibiting) the emergence of complex thinking (Engeström, 1987). By addressing the larger social forces that create learning environments, activity theory shifts the essentially psychological thrust of much of Vygotsky's early writing towards a more sociological one. Our data has convinced us of the value of this theoretical elaboration; any observer of school discourse practices soon realizes that they are profoundly influenced by their larger settings. The material and social organization of schools reflects their history, and frequently mediates between competing, even conflicting belief systems about what constitutes a "good education."

This observation is partly motivated by the second seminal perspective informing our analysis, the view that social practices originate in the minimal elements of everyday interactions, which in turn reflect the contexts within which they occur (Duranti & Goodwin, 1992; Mehan, 1978, 1979; Mehan & Wood, 1976; Ochs, 1988). In other words, social activities and the discourse used to enact them are *mutually constitutive* phenomena which reflect and mediate one another. It is because of that dialectical relationship that discourse practices are an especially rich source of information about the social and institutional forces shaping the school environment. In Bakhtin's terms, they are replete with the voices

of former users (1981, p. 293-294), and thus provide a window onto the ideas and inclinations that have shaped and continue to influence instructional agendas and their realizations.

In sum, teaching and learning are processes invariably imbued with powerful social and affective undercurrents presenting an additional challenge to the discourse skills of experts and novices. Our effort to locate assisted performance in a variety of instructional settings forces us to probe the multiple and interconnected layers of meaning encapsulated in instructional discourse. This probing, in turn, leads to the links between discourse processes, actions, and settings that account for one event's successful transformation into assisted performance and another's failure.

DATA AND METHODOLOGY

The data analyzed below were pulled from a corpus of instructional discourses collected since 1988 in a variety of educational settings for several in-depth sociolinguistic studies (Ferris, Ferris, Hared, Kowall, & Patthey, 1989; Patthey, 1991; Poole, 1990). Our concerns are two-fold: First, we are characterizing routine instructional language use in both traditional and non-traditional teaching/learning encounters, with a particular emphasis on specifying the ways instructional discourse can vary as contexts change, or alternatively, to change contexts. Second, we are exploring the structuring influence of larger social and institutional forces on observed discourse practices. In collecting the corpus, we strive for both representativeness and variety. It presently encompasses lessons from kindergarten, elementary, middle school, adult, and college education, as well as writing conferences, community-based literacy tutoring sessions, and computer lab problem-solving sessions.

In selecting data for the present study, we deliberately focused on situations diverging from the default script and appearing to represent instances of assisted performance. The data were taken from adult settings, primarily because a greater variety of discourse strategies prevailed in these settings than in the vast majority of "regular" schools.[2] They include, in addition to teacher-fronted interaction, the settings listed below:

1. Teacher-student writing conferences in a freshman writing course;
2. Small group work in a state-funded adult school;
3. A class-made video in a beginning ESL course;
4. Consultant-client interaction in an open-access university computer lab.

Figure 1 depicts the spatial arrangements of these settings. This graphic representation suggests that the discourse differences that emerged can be attributed in part to the physical arrangements of the participants (cf. Philips, 1983); and while we will argue that this is the case, we also point to the wider institutional influences that frequently undergird and are reflected in such arrangements.

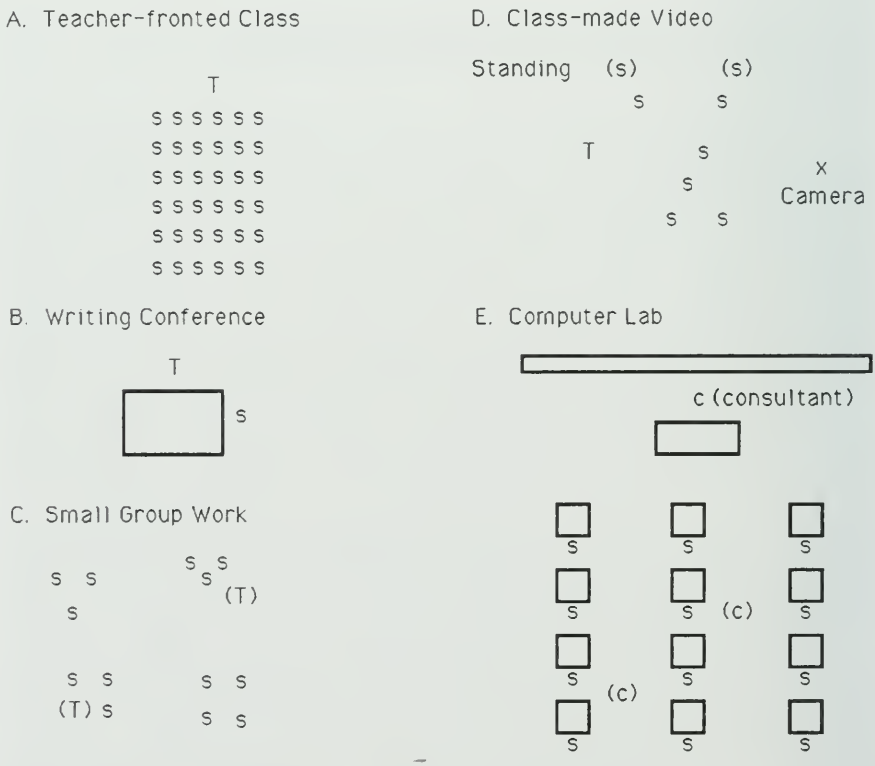

Figure 1: Participant Structures

Audio taped data from each setting were transcribed using a modified version of the Jefferson conventions (Sacks, Schegloff, & Jefferson, 1974; see Appendix A) and analyzed in terms of several interactional phenomena; these included the role of student or teacher in initiating interaction and authoring content of a learning encounter, the constitution of teacher evaluation moves, and the distribution of talk between novice and expert—phenomena we take to index important beliefs about communicative rights and responsibilities assumed by different participants. In using discourse choices as indices to underlying beliefs, we are following Ochs' (1992) and Suchman's (1987) applications of the "documentary method" originally articulated by Garfinkel (1967). According to this view, language choices (as well as other communicative behaviors) do not simply encode a speaker's intentions, but set in motion interpretive processes through which speakers and listeners arrive at jointly negotiated meanings. These situated interpretations will contain a host of social and affective undercurrents which are invoked at the same time as the referential meanings of a given string of words.

The two crucial parameters sensitive to different instructional styles that needed to be operationalized were: a) the participant structure of a given encounter, or its speaking rights and responsibilities; and b) the authorship of lesson content. While tracking the first of these is relatively straightforward, the second forces a detailed analysis of thematic and semantic relationships across turns of speech and across different speakers. For this, Poole's (1990) work on the larger discursive embedding of IRE-sequences, became a primary methodological precursor. In addition, Ochs, Taylor, Rudolph, and Smith's (1992) work on the multi-party production of coherent problem-solving narratives at family dinners suggested ways in which the multiple research perspectives invoked here can be combined to address both micro-analytical phenomena and the larger social forces influencing them.

Characteristics of the Teacher-Fronted Script

The teacher-fronted participant structure—and the (typically) concomitant default script of teacher-student interaction (Cazden, 1988)—remains dominant in many educational settings. As Tharp and Gallimore note, "for many schools, the whole-group setting is the only activity setting and it lasts the entire instructional

day" (1988, p. 163). They acknowledge that assisted performance is difficult if not impossible to achieve within this dominant instructional arrangement, where instructional discourse can most often be characterized as "recitation." Goodlad's study of over 1,000 classrooms similarly found the teacher-fronted setting to dominate, with students overwhelmingly being lectured to or doing written seat-work: "The amount of time spent in any other kind of activity (e.g., role playing, small group planning, problem solving, etc.) was minuscule" (1984, p. 230). A related finding in the Goodlad study was a gross imbalance between the amount of teacher and student talk. In his words:

> If teachers in the talking mode and students in the listening mode is what we want, rest assured that we have it. These findings are so consistent in the schools of our sample that I have difficulty assuming that things are much different in schools elsewhere. (1984, p. 229)

The perspective advocated here is that the difficulty with achieving assisted performance in the whole class setting is tied to the teacher-fronted spatial arrangement and the historical organization of talk which accompanies it. Specifically, we contend that the widely documented initiation-reply-evaluation sequence (Cazden 1988; Griffin & Humphrey, 1978; Lemke, 1991; Mehan, 1979; Sinclair & Coulthard, 1975) in many instances impedes or precludes the emergence of assisted performance. To support this view, we draw on Poole's (1990) recent account of IRE-sequences, which identifies the larger network of teacher-utterances necessary to instantiate many teacher-fronted activities.

In Poole's analysis, the organization of classroom talk is conceptualized as an activity in its entirety; IRE sequences are shown to be embedded in an extensive framework of teacher utterances where ratified student talk typically does not occur. For example, teachers often frame (i.e., initiate, direct, and close) both instructional activities (example A) and topic sequences within those activities (example B) with lengthy single turns within which student talk may be viewed as disruptive or off topic.

(A) Opening frame—Second Grade English for LEP students

> T: <u>Now</u> if you would please put everything you have underneath your chair (.) your pencils and papers so that you can look up here and

concentrate and pay really good attention (.) I like the way I see Nasreen's eyes, she's ready. now. we've been talking about what country and let's speak in whole sentences today okay, like we always do.

(B) Topic Sequence Frame—Developmental Writing/University

T: Monica and I both felt that we are seeing fewer and fewer run-ons-somehow they're all getting on the same papers now. One person had about twenty run-ons (.) in an essay so that person really needs to work but some of you—most of you—are getting it and are paying much more attention to punctuation and I'm really glad because that's going to let you learn how to manipulate sentences and vary sentence length and all those important things. okay.

In addition to such opening turns, both instructional activities and topic sequences within them can be concluded with further teacher utterances, where again student talk is unlikely to occur. Within such a structure, Poole argues that student talk consists largely of a single conversational act or move—the "reply" within the IRE. In other words, the organization of talk in many classroom lessons consists of multiple teacher moves which embed and direct a single student act. In addition, talk is structured so that the floor cannot remain with the student for long, as the reply is typically followed by an evaluation which signals the next move to be the teacher's. This structure in effect precludes options available in the adjacency-pair ordered interaction characteristic of conversations and other more symmetrical or informal contexts (Griffin & Humphrey, 1978). Options such as a shift in the role of initiator, for example, seldom characterize teacher-fronted interactions, resulting in the low frequency of student questions documented in classroom research (Bennett, 1986; Goodlad, 1984).

A second characteristic of the reply move follows from its status as the answer to a teacher-constructed initiation. Within the default script, initiation and reply moves typically constitute a test-question and answer, the familiar asymmetrical sequence in which the expert poses a question to which he or she already has an answer in mind. In viewing this sequence, we draw on Ochs, Schieffelin, and Platt's (1979) analysis of test-questions as "propositions across utterances and speakers." Their analysis proposes that a test-question and its answer are two parts of the same proposition, an interpretation which suggests that when

students speak within the IRE sequence they participate in verbalizing a teacher-formulated proposition (Poole, 1994). In other words, the teacher not only controls the extent and placement of student talk, but its propositional content as well.

In sum, student talk within the default script largely consists of the "reply" move within the IRE, a move which can be characterized as 1) a single conversational act supported by a network of teacher utterances, and 2) the verbal completion of a teacher-formulated proposition. Bluntly stated, the organization of typical classroom talk is skewed to maximize the quantity of teacher talk over student talk and to encourage teacher control of both the placement and content of student utterances. In the discussion to follow, we will juxtapose these characteristics of teacher-fronted instruction with the discourse emerging from the alternate participant structures we examine. In particular, we are interested in identifying the parameters of participant structures which serve to evoke (or suppress) assisted performance. In taking such an approach, we are working toward a goal of predicting what factors characterize educational settings where assisted performance is the norm rather than the exception.

Conferencing

A typical example of a teacher-led ZPD can be found in conferencing, a popular strategy in writing instruction often displacing more traditional methods like lecturing or error-correction (Freedman, 1985; Garrison, 1974; Jacobs, 1983). A conference-based curriculum reflects a philosophy that writing is more than the sum of its parts and that students should experience the entire process of composing and putting ideas to paper. A teacher opting for a writing process curriculum typically meets with students, either individually or in small groups, to discuss a student paper and suggest possible improvements. The paper is not considered a finished product and its development serves as a learning opportunity for student writers.

In keeping with this philosophy, a number of strictures about conducting successful conferences have developed. Conferences ought to be "student-centered" events, a chance for students to go over and re-articulate their thoughts with help from the teacher. Through this conference-discussion an expanded and, hopefully, improved paper is constructed for the student to

appropriate. This proposed instructional strategy bears a striking resemblance to Tharp and Gallimore's notion of "assisted performance." Moreover, post-conference improvements in student-writing are consistent with changes predicted by their framework: The post-conference drafts collected by Ferris, Ferris, Hared, Kowall, and Patthey (1989) and Goldstein and Conrad (1990), for example, could be linked to the conference-talk and reflected changes negotiated during conferences.

Two important and in some ways counter-balancing factors affect the distribution and organization of talk during conferencing. The classic one-on-one interactional arrangement of most conferences is reflected in a more conversational style, particularly with respect to the establishment and maintenance of intersubjectivity. Conferees enlist each other's participation in the talk and they offer and monitor participation-flagging back-channel cues continuously once a discussion is under way. This trend, however, is counter-weighed by the asymmetrical power relationship between the two participants favoring the contributions of the expert. The push and pull of these two forces is palpable in the conference-data examined here.

The excerpt below was culled from a larger corpus collected by Ferris, Ferris, Hared, Kowall, and Patthey (1989) in a freshmen writing program at a large private urban university. Students had been asked to discuss the origin of human intelligence and to take a position on whether it was mostly a result of nature or nurture. They had then been asked to write a paper explaining and defending their positions; the segment below comes from the conference immediately following the writing of that first draft. In that segment, a very businesslike teacher almost immediately prompts her student to formulate an expanded, essentially "improved" position-statement for the beginning of her essay. She thus formally turns over the conversation to the student soon after the conference has started and relatively long stretches of student-discourse ensue.

On the face of it, the interaction is much less teacher-dominated than in the teacher-fronted case. However, the true power relationship between the two is revealed in a number of indices, some to be found even *within the student-discourse itself.* The entire topic-sequence concerned with the elaboration of student R's position statement is reproduced below. The teacher first reconciles a popular requirement for positive student feedback

with her own need for efficient time-use by opting for the classic "wonderful but" opening strategy. That strategy leads straight into her instructional concerns, thereby revealing her agenda for the encounter. The topic sequence as a whole is in fact threaded together as the teacher pursues that agenda. She names and qualifies the problem as she sees it in her initial turns (5 and 7), pursues it extensively as the conversation develops (turns 5, 7, 9, 11, 13, and 27) and returns to it in her concluding recommendation (turn 31). Together, the initiating and concluding teacher-turns frame the sequence as a communicative problem for the student to solve. Within that frame, the teacher constructs a verbal problem-solving scaffold for the student by assuming the role of a critical audience eliciting clarifications. Her verbal moves set up a communicative challenge and provide assistance at the same time. Thus a sequence of assisted performance develops during which the teacher first assists in the production of a more audience-friendly student-proposition (turns 11 and 13), then helps clarify it (turn 19) after the student rises to the challenge (turns 12, 14, 16, and 18). She does not resume her teaching voice until after the student has attempted to explain her thinking (turns 22, 24, and 26):

Example (1) Conferencing

	01	T	'kay I really really like, um, your position.
			I think it's very interesting,
			and I think it's different,
			from what a lot of people would say,
	02	S	((softly)) okay
	03	T	right off the bat,
			and I really think that, it's it's a position that,
			you should develop, I mean, tell me much more about, okay?
	04	S	(un-huh)
Problem →	05	T	d, um, I'm saying here that, you don't support it,
qualified			and that part of the reason seems to be that um,
			you're making assumptions about your audience,
P. qu →	06	S	(what) they already know,
	07	T	that, what they already know. that may not be true,
			and that you need to do,
			a better job of [<u>telling</u> your audience what you're thinking.]
	08	S	[okay, you want me to ((unintelligible))]
Tchr AP →	09	T	yeah so what, I mean tell. me just now here now.
set-up			why do you think (1)

			let's see, where was it, (2)
			all those final things here, which is, the most fascinating, position.
			((reads)) the reason, the main reason behind intelligence is,
			being the result of mostly nature is God father,
			of nature itself. okay
			now that's an interesting position,
	10	S	un-huh
AP setup →	11	T	tell me more about, that position.
	12	S	God [(being father of),
AP setup →	13	T	[I mean how does, how does, God, in- you know,
			affect nature, and how does nature then produce intelligence.
St. AP →	14	S	well God is the creation of all things,
	15	T	un-huh,
St. AP →	16	S	(which all things) he made was good so then (the fact that)
			intelligence <u>being</u> good all lead to the fact that um, (1)
			being good and being, well he,
			they says that he give upon us his inspiration ((unintelligible))
	17	T	un-huh
St. AP →	18	S	you supposed to be smart, have knowledge,
			(have knowledge) you really is born with,
Clarif. →	19	T	how? how does God do that.
	20	S	now HOW he do that uh,
			I really can't tell you but, i- it just this is (someth)
			a belief that I have,
	21	T	un-huh
	22	S	you know from birth you know.
			whether or not we're <u>taught</u> certain things,
			there's some things we (just go and get) automatically,
	23	T	un-huh, un-huh,
	24	S	((unintelligible phrase)) you know, like, take something like a baby,
			[you know
	25	T	[right
	26	S	certain things they just do, (you don't teach them)
			((unintelligible, trails off))
	27	T	do you think that everybody in your audience agrees, with you,
	28	S	probably not
	29	T	do you think that they understand, where you're coming from,
	30	S	understand, y'mean, the belief of mi- the belief of GOD,
			for those who know him yes,
			but for those who probably never heard of him, no.
Final → Recom.	31	T	what I'd like you to do then is to assume that you're writing to an audience that has never heard of God.

The teacher's global strategy is congruent with one of Tharp and Gallimore's proposed means of realizing assisted performance, the

instructional conversation (1988, p. 109, p. 111). It is also strongly reminiscent of the problem-solving practices observed by Rogoff (1990), who sees in such practices a principal way to socialize valued analytical faculties. A zone of proximal development is instantiated through the teacher's combined problem-solving topic frame and questioning strategy.

One of the most striking aspects of this segment is that while it at first resembles an everyday conversation, echoes of the default script resonate through it. The entire sequence can be likened to an extended IRE sequence, but one that *starts* rather than ends with the teacher's evaluation. As the student gradually warms to the teacher's repeated requests for elaboration, her contributions can be considered a lengthy reply move delivered across several turns. And by returning to the central point of audience-awareness in turn 27, the teacher harkens back to her opening evaluative move as she concludes with her final recommendation.

In terms of our second dimension, authorship, the segment is more distinct from the default script: The teacher exerts a strong shaping influence on the student's talk, but *does not author* R's revised position-statement. And yet, a fundamental paradox emerges even in this superficially more equal state of things: The student is given most of the responsibility, but little power over the task at hand. The event may emphasize the student's local authorship rights but only from within a series of prescriptive formulas about how to author, prefaced by the teacher's power-laden "what I'd like you to do . . .". Finally, the exchange also suggests that evaluations are a fundamental part of instructional discourse, a fact that many students are well aware of.[3]

Institutional Context

Our first instance of assisted performance occurred within a freshman writing program that had officially embraced conferencing, promoting it heavily in its staff orientation and training sessions. This produced an interesting paradox, because the ostensive student-centered nature of the program's curricular choices was counterbalanced by its larger institutional function.

The program itself, like many university writing programs, held something of an interstitial institutional position. While its service was invariably described as invaluable in public communications (such as the annual Dean's addresses to writing

instructors), that same service did not rate much staff or professional support. Serving a large undergraduate population, the program was run by only five permanent professionals and a few administrative assistants, with the entire instructional and supervisorial staff comprised of graduate students and an occasional part-time instructor, and was thus quite distinct from the university's academic departments in both make-up and level of material support. Its service orientation as a unit designed to socialize novice writers into the academic mainstream further subordinated the program to larger institutional oversight in matters of curriculum and self-definition.

The paradoxical nature of the program's reason for existence—to serve both its student body and its larger institutional host—parallels the contradictory nature of assisted performance as it arose during conferencing. The prescriptive formulas the teacher draws on to structure her student's performance in effect originate with the larger university, which is providing writing instruction in part to propagate its own academic standards. We thus find in the teacher's voice institutional motives which blend into the instructional exchange between teacher and student in structuring quite a distinct assisted performance—designed not so much to develop the student's writing voice, but to fashion that voice into a closer approximation of the institutional original.

Small Group Work

The second participant structure we examine—small group work (SGW)—is an instructional activity being employed with increasing frequency in educational settings from kindergartens to universities. Advocates of small group work (e.g., Cohen, 1986) or more generally, collaborative learning (e.g., Kagan, 1988) argue for organizing principles such as role assignments for each participant or a goal of reaching consensus among group members. In actual practice, however, group work is often structured with less rigorous parameters. In (2), for example, a group of beginning ESL learners (in a state funded adult school) were given a picture of the "Marlboro man" with instructions to "describe the picture" in the group.

The data of this excerpt corroborates Tharp and Gallimore's claim that students in small groups become adept at assisting one another's performance. In excerpt 2A, for example, Xiang assists

Maria by providing the words "snow" and "cover." Maria's appropriation of Xiang's assistance allows her to assume a more authoritative role in line 15, where she evaluates Xiang's repetition of her original proposition. In 2B, the discourse becomes more symmetrical, and assisted performance is coordinated as students verbalize their distributed knowledge to accomplish the task in an observably joint fashion.

(2A) Small Group Work—Examples of student AP

	01	Maria:	Okay. uh it's a: (.) a view of the mountains,
	02	Xiang:	um humm=
	03	Maria:	=uh huh with- with ice with white
St. AP →	04	Xiang:	the snow=
	05	Maria:	the snow (.) no ice
St. AP →	06	Xiang:	=cover, the snow cover the mountains=
	07	Maria:	=the m- the snow cover the <u>mountain</u> ((pleased)) ahhh
	08	Xiang:	yeh yeh
	09	Wang:	perfect
	10	Sandy:	((laughs))
	11	Wang:	((laughs))
	12	Xiang:	the snow cover the mountains
	13	Maria:	((coughs)) (.) oh (guy)
	14	Wang:	the snow is uh (.) cover this mountain ah?
St. Eval →	15	Maria:	uh-huh

(2B) Small Group Work—Symmetrical AP

01	Xiang:	he wearing a:,	
02	Maria:	hat	
03	Xiang:	hat	
	((several repetitions of "hat"))		
04	Wang:	wearing with this th:: this uh brown:: uh [vest	
05	Xiang:		[shirt
		and the brown [vest	
06	Wang:	[brown vest	[brown vest
07	Xiang:		[brown vest
08	Maria:	ah brown vest. he's wearing	[a brown vest.
09	Wang:		[and a leather, (.)
		leather pants (.) leather (.) pants	
10	Maria:	uh yeah a leather pants	
11	All:	((laugh))	
12	Wang:	a lea::ther, leather pants	
13	Maria:	yeah	

14	Wang:	leather	[pants
15	Xiang:		[a pair of leather pants

The data further suggest that opportunities for teacher-assisted performance are maximized during SGW, as students frequently initiate such sequences by summoning the teacher for help. In (2C) below, for example, students are unable to generate the lexeme "saddle" and thus call for teacher assistance.

(2C) Small Group Work—Summoning teacher assistance

	01	Wang:	this that this I seen this is uh:: board is a (.) beck . . . .
	02	Xiang:	beck back
	03	Maria:	uh huh
	04	Xiang:	horse back
	05	Wang:	horse chair
	06	Maria:	no the horse chair ((laughs)) (. .)
St requ. →	07	Maria:	Jaynes ((calling to teacher)) could you help us please?
Tchr Ass →	08	Tchr:	yeah it's called a saddle
	09	Ss:	((all repeat saddle several times))
2ns req. →	10	Maria:	how you spell that?
Tchr Ass →	11	Tchr:	((spells; students repeat letter by letter))
	12	Tchr:	exactly

Students here attempt to perform the assigned task of describing the picture, but between lines (01) and (06) realize they cannot. In (07), the teacher is summoned explicitly to assist their performance; her presence and verbal assistance leads students to practice the word's pronunciation in (09) and to pose a question (i.e., elicit further assistance) in (10).

In this environment, novices *initiate* episodes of expert assistance, a phenomenon which reappears in the Computer Lab and in the Video Class below. In other words, these settings allow the novice to direct or lead his or her own emerging assisted performance. Examples (2B) and (2C) also demonstrate the students' awareness of their own knowledge levels with respect to the task; that is, in (2B) they know that their collective knowledge is sufficient for the task, while in (2C) they recognize that it is not.

In demonstrating the kind of assistance available to students in (2), we are not advocating a particular type of group work.

What we wish to stress is that SGW, as typically practiced, can evoke both peer- and teacher-assisted performance and that simply and readily structured group activities can provide such opportunities for learning.

Institutional Setting

The adult school in which these sequences occurred differs from the other settings examined here in that it is publicly supported and does not serve a university-based population. And, while it represents a sizable enterprise within the state department of education, it serves the most marginalized population we address. Students are typically of working class backgrounds, in many instances undocumented immigrants. Classes are large (over 40 students) and often housed in elementary or high schools during off-hours.

In the present setting, this marginalized status becomes an opportunity for the classroom teacher to put into practice her belief in the regular use of group work. The teacher in this episode collected the transcript data for an ESL certificate requirement in sociolinguistics, focusing on group work as a matter of methodological preference. In her words,

> I maintain that small group activities are an excellent way to create a non-threatening, challenging practice for language acquisition . . . . As language facilitators and future teachers of ESL, I believe it is each teacher's responsibility to be aware of alternatives to the "traditional learning style." The most common discourse practice implemented within the C. School District is Teacher fronted or "lock step" method. It must be noted that although the lock step mode has its merits, small group arrangement is the more attractive alternative. (Eicher, 1990, p. 2)

In other words, the teacher's instructional choice in these data reflected her belief in SGW as an effective and positive teaching strategy, overriding the historic expectations of the wider activity setting. However, a contributing aspect of the wider setting is the extent to which the teacher controls the curriculum and

methodology of her class, in turn a reflection of the adult school's marginalized institutional status.

Class-Made Video

In the following segment, we again look to the classroom for discourse patterns that deviate from the default script. Example 3 below is taken from a beginning ESL class at a large private university. In this class (D in Figure 1), students were preparing to be videotaped while performing a skit they had previously written as part of a thematic unit on "crime."[4] Although this activity takes place in the whole class setting, it does so within a participant structure that evokes some striking changes in the discourse patterns of the default script. In the video class the teacher is seated with students, facing the group that occupies center stage. She thus assumes a role more akin to that of a coach or director, offering guidance and help from the sidelines. Here that help consists largely of providing needed forms of the target language. In the excerpts below, we again see assisted performance actualized as a natural outcome of doing the activity. In example (3A), where the student asks for help several times, the teacher provides the appropriate form which the student then incorporates into the dialog. In excerpt (3B), those previously coached utterances appear in the actual videotaped performance (indicated with →); in other words the teacher's assistance can be observed in both immediate and delayed contexts.

(3A) Video-class: Rehearsal

T: Teacher S, J, K: Students

	01	S:	Hi. I'm a security- security. (2.0) ((giggling from S, H, and J))
Tchr Ass →	02	T:	((laughs)) S., you can ask what ha- what happened.=
	03	S:	=what happened,
	04	H:	somebody stealed uh (.6) my purse and my watch (.6) and my ring. (2.6)
St requ. →	05	S:	((to T)) I want to ask where are you when the thief come or like that.
Tchr Ass →	06	T:	where- [where were you
	07	H:	[(through the) window
Tchr Ass →	08	T:	where were you um you can say where were you when the

			thief came and H. you were gone- uh out
	09	S:	where were you (.8) =
	10	H:	uh
	11	S	=when the thief (come)
	12	H:	we are shopping. (1.2) we WENT shopping.
St requ. →	13	S:	and what time ((looks at T)) do you leave your house? like,
Tchr Ass →	14	T:	um-hmm:. what time DID you leave your house.
	15	J?:	(about) (half past) three (1.4)
	16	S:	(and what time) ((laughing)) (did you return) your house.
	17	H	(around) (about) eight o'clock (4.8)
	18	S:	((to T)) I uh I forget the question (before) (1.8) [I wi- I wi-
Tchr Ass →	19	T:	[okay you can say UM: (.8) was the purse gone when you came home.

(3B) Video-class: Filming

			((J opens door for S, the security guard))
	98	J:	[Hi
	99	S:	[I'm a security guard
			((X and S enter)) (3.8)
	01	S:	((to H)) hi
	02	H:	hi
Student →	03	S:	what happened
appropriated			((door closes))
tchr-turn	04	H:	somebody stole my purse and watch. (1.6) I can't find (it). (2.6)
" →	05	S:	are you in your hou- in your home when: the thief [come(s)
	06	H:	[no.
" →	07	S:	(and in) what time did you leave your house. (1.0)
	08	H:	(a)bout three o'clock.
	09	S:	(1.0) what time did you come.
	10	H:	(about) seven. (2.8)
	11	?:	(hhh) (1.0)
	12	S:	okay. (.8) (you did not,) (.) see the thief?
	13	H:	no
	14	S:	okay I will check out (.4) maybe somebo- body (.4) saw him.

In terms of the distribution and organization of talk, the video lesson displays two fundamental differences from a typical teacher fronted script. First, in excerpt (3A) the teacher is not leading the interaction but following the lead of the student; there are no teacher-initiated IRE sequences. The second is the sheer attention given to student utterances in terms of discourse floor

space. Excerpt (3B), for example, is part of a 56-turn sequence of consecutive student turns—a phenomenon made possible by the video, which effectively closes off the opportunity for teacher contributions. Even in excerpt (3A), where the video is absent but anticipated, the participant structure allows students to dominate the discourse.

The video class represents a more specific and perhaps less widespread activity setting than the writing conferences and small group work. However, in terms of physical parameters it resembles a number of easily employable student-focused classroom activities such as role-plays, games, and debates. Such activities, if only temporarily, represent a form of "performance based education," which Elbow (1986) has argued allows teacher and students to become allies and assume a less adversarial stance toward one another.

Institutional Setting

The video class examined here was a regularly scheduled component of the ESL curriculum in this setting. That such a structure was possible can be related to several facets of the institutional context. Like many ESL programs attached to mainstream academic institutions, this one represented a marginalized unit within the university. It contributed heavily to institutional coffers, received little of its contributions in return, and was viewed as distinctly non-academic by the mainstream university community. In other words, like the freshman writing program above and the computer lab examined below, the ESL program represented an instructional context peripheral to the core academic concerns of the institution. Our contention is that such settings allow for more pedagogical innovation, and thus facilitate departures from the default script.

In the present setting the four teachers of the class were given virtual autonomy over the structure and content of the 24-hour weekly schedule. These teachers had been trained in and were vocal advocates of a communicative language teaching methodology which focused on collaborative and student-centered activities; moreover, their views were highly consistent with those of the English Language Institute. The decision to incorporate the video class was thus locally based, emerging from the teachers'

own educational ideologies and reflecting those of their immediate institutional context as well.

We argue that these characteristics of setting—peripheral institutional status, teacher and institutional commitment to communicative language teaching, and teacher-control over curriculum—make conditions in this class ripe for assisted performance episodes to occur.

Computer Lab

One of the most striking examples of AP we have observed is found in Patthey-Chavez's work on problem solving (Patthey, 1991). Motivated by a desire to find recognizable instructional discourse in a non-school setting, the study focused on a student computer lab at a large, private university offering unrestricted access to personal computer technology to any member of the university community. The lab served a self-selecting population working on self-selected tasks, with students (and other novices) generally assuming control over the technology put at their disposal. This led to an unending stream of problems with computing which was anticipated by the lab staff. To remediate these problems, the lab made available a corps of peer "Personal Computer Consultants" (PC consultants), whose daily praxis—consulting—yielded unschooled instructional discourse.

PC consultants defined their work as a service to lab users, especially student users. A professional ethos framed consulting events as user-initiated service encounters.[5] This service orientation towards consulting, combined with the peer status of the PC consultants, limited consultant authority over the cognitive activities of client-users. In stark contrast to most schooled instructional situations, in the lab, the acquisition of (additional) computer expertise was left to the novice. For the most part, it occurred as an incidental result of computer use, or rather, of its disruption, at which point novices usually sought out computer expertise—in the form of a consultant. As clients rather than students, users also determined what form that knowledge should take once a consultation was underway. If they involved themselves in the problem-solving process, they signaled tacit approval. Conversely, withholding involvement signaled disapproval and non-cooperation and could abort the entire problem-solving episode. Since neither party was particularly keen

on that outcome, problem-solving turned into an eminently negotiable affair.

Consulting displays a highly cooperative and complementary participant structure and a distinct instructional discourse. Consultants usually took the client's request for help as their starting point and tailored whatever solution they came up with to that request. They judged this to be the most appropriate strategy because varying clients perceived the "same" (technical) computer problem completely differently, and working solutions took these differing perceptions into account. The same wrong keystroke (e.g., hitting a wrong function key and getting a clear screen) had a different effect on an experienced user than on a neophyte. The former would have enough understanding of the function key system to know that a second key stroke could cancel the wrong move, whereas the latter might start panicking at an ostensive file loss. Experienced consultants knew how to exploit the greater systemic understanding of more knowledgeable clients, as well as how to guide neophytes towards a greater understanding of their mysterious machines, but required the cooperation of all clients in order to do a good job. Consultants and clients thus assumed alternating and complementing expert roles, which were reflected in the typical steps taken during a consultation: Clients were experts in problem-description and usually dominated the beginning of each session. Consultants were experts in drafting solutions, taking over control of conversation and action as the session progressed.

Segment (4A) below reveals the balance of power between clients and consultants resulting from these complementary participant roles. The client initially asks about a software program, *Microsoft Works*, unavailable in the lab. Upon being informed of this, the client persists by asking about possible alternatives. She redefines her service request four times until she stumbles onto a possible solution—converting her file to use another available software program. Of the eight initiations in this consultation-opening (starred and numbered below), seven are the client's, allowing her to persist in presenting and re-articulating her needs.

(4A) From the Computer Lab: Perseverated Initiation

1a	01	C1	hi, um, can I have a microsoft works, do you have that?
1b*	02	PC1	works?
2b	03	C1	works, not word
2a	02	PC1	I DON'T have works
1c*	03	C1	you don't?
2c	04	PC1	no we don't have works
1d*	05	C1	you know where I can get works?
2d	06	PC1	um, no.
1e*	07	C1	at the freshman writing center?
2e	08	PC1	they [might] have it but I don't know
	09	GGP	[no] no they don't
1f*	10	C1	so what am I supposed to do if you don't have works
	11	GGP	um
2f	12	PC1	I don't know, because I, don't know anyone, anyone who has that program.
1g*	13	C1	okay. so we can't I can't convert it any way?
2g	14	PC1	yeah you CAN, you can use microsoft word and then save as, uu, microsoft one point o document which is in works format.
	15	C1	[and then]
	16	PC1	[you use microsoft] word, [and sa]
1h*	17	C1	[can you] come and help cause,

((PC1 accedes to C1's request for help))

This one consultation-opening demonstrates how far clients can take their conversational power. What client C1 does above is not simply re-define her request each time she meets with an (to her) unsatisfactory answer. In effect, her service-request redefinitions redefine *the event itself* four times. The consultation is geared to realize the client's agenda. This gives the client licensing control over the way a consultation develops and s/he decides if a consultant response is satisfactory; once again, *the novice directs the expert.* This is most evident at the onset of consultations, but even once the consultant reasserts himself and talks the client through the various steps of a proposed solution, the client maintains her licensing right, as segment (4B), taken from later during the same consultation, shows below. As the consultant winds down his explanation of the conversion procedure, the client interjects the first of a series of clarification requests in turn 29. She is making sure that what he has explained applies to her particular situation, and that she won't find herself with an unworkable file later on.

(4B) Computer lab: Clarification request

18	PC1	okay,
19	C1	okay
20	PC1	see you can do a file,
21	C2	oh yeah I just took it out
22	PC1	save as, it's okay.
23	C1	so you [could get]
24	PC1	[file format], right here, save as dot.
25	C1	oh I see,
26	PC1	and you hit okay and it'll save it like that, [okay,]
27	C1	[okay]
28	PC1	but if it's normal we'll just save like that.
29	C1	so if, when I use the computer I uh I usually use then I'll be on, um, it'll go back to be- to be- it will show up on my computer on microsoft works right?
30	PC1	yeah it will show up like this, sh- show up in this format.

The client will interject five more clarification requests before this one consultation ends and the consultant will attend to each and every one of them. In fact, Patthey-Chavez found that clients frequently exploited their licensing control to prolong consultations by asking for clarifications, transforming original requests, or adding new ones. They took full advantage of their directing authority.

In all the instructional discourse examined in this paper, consultations stand out sharply in this respect. There are no other cases in which the novice directs the expert to this extent, even in situations with a parallel one-on-one interactional design, like writing conferences. The computer lab was the one setting in our corpus where we found students truly engaged in discovery-learning, defining for themselves what to learn and when to learn it. It is also important to note that whether or not users understood or learned what the consultant had to offer was also left entirely to them. Patthey-Chavez found no explicit evaluation moves in her entire consulting corpus of 62 problem-solving interactions.[6]

The reasons for the extraordinary divergence represented by this degree of novice-control over learning and, by extension, over the expert's instructional discourse, must once again be sought in the larger institutional setting supporting consulting activity. The lab's mission was defined as providing assisted access to

technology to the campus community and consulting was explicitly provided as an extension of that mission. The specifics of computer-use were left to the client. The lab did not have any teaching mission other than enabling users to realize their own computing goals. In our other instructional encounters, specific instructional targets were often institutionally defined and these larger institutional motives influenced the structure as well as the course of instruction.

The consulting situation differs from other settings where experts (or teachers) retain final authority over the instructional agenda because they know what behavioral targets their students are to meet at the end of a given period of time (e.g., a semester). This situated expertise is acknowledged by students, who are (frequently) highly motivated to meet with institutional approval. In contrast, in the computer lab, the students ultimately control the parameters and goals of their own instruction.

DISCUSSION AND CONCLUSIONS

In the previous discussion, we have conflated Philips' (1983) construct of participant structure (PS) with Tharp and Gallimore's notion of assisted performance (AP) as a means of locating educational settings that can facilitate true discourses of learning. In particular, we have identified four participant structures which represent alternatives to the teacher-fronted format typical to most school settings, demonstrating the kinds of assisted performance which can occur within their bounds and how that discourse differs from the default script. Our concern has not been to advocate the particular structures and settings analyzed, but to identify dimensions of setting that allow for and encourage interactional sequences we could legitimately characterize as assisted performance.

A second goal has been to view each PS in light of its immediate and expanded context—in other words, to view the interactional sequences not only as the product of specific spatial and task arrangements, but as part of an overarching activity system (Engeström, 1987) in which individuals act within the constraints and influences of their co-present environments and broader institutional settings. Our effort has been to identify not

only the kinds of PS which can give rise to regularly occurring assisted performance, but also the broader dimensions of the activity context that allow the PS to occur and affect particular instantiations of assisted performance.

In examining these settings, several dimensions of context appear to have a critical impact on the nature of novice-expert interaction. Two inextricably related factors are 1) the personal ideologies of the participants and 2) the role of the instructional setting within its larger containing institution. For example, in the writing conference and video class, expert/teacher beliefs with respect to the nature of instruction were consistent with those of their immediate (but marginalized) organizational context. In the instance of the computer lab, the stated institutional goal could be paraphrased as one of assisted performance. In each of these settings, the conflation of organizational and individual beliefs resulted in contexts where alternate participant structures arose with some regularity—in the final instance reaching an institutionalized status. In the case of the adult school, neither the institutional nor the technological support allowing for the kinds of activities seen in the other three settings was available. However, the context's very marginalization allowed the teacher to instantiate her own beliefs with respect to collaborative learning, and thus regularly to structure activities that provided her students with opportunities for assisted performance. In this instance, an individual's ideology and her knowledge of alternatives helped transcend the expected and historical teacher-fronted structure; this turned out to be the crucial factor accounting for the emergence of assisted performance.

The Structuring of Asymmetry

Another pivotal factor affecting the organization of assisted performance in these data is the novice role in articulating or carrying out a given task agenda. The data suggest that a prominent novice role creates a greater likelihood that *novice-led* assisted performance will occur. Of the four alternate settings considered, assisted performance took such a novice-led form in all but the writing conference. Our point is not to devalue the writing conference vis-a-vis the other settings, nor to devalue teacher-led assisted performance, but to suggest that the overwhelming asymmetry of the writing conference contrasts with the more

autonomous novice role in the computer lab, video class and small work group. Each of these represents an instance where the novice either establishes or carries out the agenda and where as a result the novice initiates interactional sequences of AP.

Of the three settings, the computer lab is the sole context where the articulation of the agenda falls to the novice. We suggest that this dimension of computer lab interaction contributes to the lengthy and complex sequences of assisted performance that arise in the lab with such regularity. In the video class and small work group, the agenda is clearly the teacher's, but here the students are given a central role in carrying that agenda out. In such contexts the teacher, rather than leading students in the interactional instantiation of assisted performance, becomes available to assist as needed or when called upon.

In these activity settings, assisted performance and learning in the ZPD becomes novice rather than expert-led. We offer them as alternatives to the largely expert and teacher-led interpretations which have tended to dominate the ZPD literature and which represent the primary thrust of Tharp and Gallimore's definition of assisted performance. We propose, in other words, that both assisted performance and the ZPD be viewed as bi-directional phenomena in which novices not only influence but also direct sequences of learning. In terms of the Vygotskyan notion that instruction precedes and anticipates development, the present data suggest that in some settings the novice rather than the expert fulfills the role of anticipator, identifying and creating zones of proximal development. In such ZPDs, the expert is a necessary contributor, but not the one who identifies what is to be learned. This inclusive perspective, in combination with the Bakhtinian orientation we assume with regards to discourse and meaning, resolves an often noted problem with expert dominated accounts of learning within the ZPD—the problem of variation and creativity (Griffin & Cole, 1984). If what the zone makes available to the novice were monolithic, a relatively invariant transfer ought to result. That is hardly the case. Children and other novices (re)construct their own versions of the lessons given to them, they progress at their own rate, and they come up with creative new combinations. In the assisted performance/ZPD encounters examined above, we have documented how novices and multiple facets of institutional context can exert interactional influence. This range of influences preclude a monolithic transfer of

knowledge, pointing to the instigating role of the novice as well as to ways in which historical and institutional expectations are represented (or altered) in interactional encounters. This multiplicity of factors constitutes the conditions which allow variation and creativity to occur, although these same factors may also constrain the interaction in a given novice-expert episode. The present study represents a step toward the empirical documentation of such phenomena.

NOTES

[1] The order of the authors' names was determined by the flip of a coin. We are indebted to Ronald Gallimore for the thoughtful commentary on an earlier version of this paper.

[2] This is a fact that merits serious discussion in its own right, though it does not form a core concern here. Our impression is that core educational institutions like elementary and middle schools showed a much greater uniformity in discourse practices than more marginalized educational endeavors like adult English as a Second Language classrooms. This dichotomy was even reproduced within a larger institution like a university, where the core area of Freshman Writing evidenced a greater tendency towards what is effectively a hegemonic teacher-centered instructional style than the more marginalized ESL program.

[3] One of the most striking findings of Ferris, Ferris, Hared, Kowall, and Patthey (1989) was that all high-achieving students in their sample persistently asked for very specific teacher feedback about how they were doing. The consistency and specificity of these inquiries indicated to the investigators that part of these students' success lay in their command of this (self) evaluating strategy.

[4] The curriculum of this course revolved around a series of thematic units deemed appropriate for beginning ESL students. These included such topics as family, home, transportation, and food.

[5] This ethos was elaborated and maintained by the corps as a vehicle for peer-socialization (cf. Patthey, 1991, Chapter 4).

[6] Consultants did make an effort to explain problem-solving moves, and to draw clients into the process, but avoided follow-up comprehension checks beyond requests for confirmation (Patthey, 1991, Chapters 5 & 7). Novices were oriented by consultants to attribute the success or failure of a given solution to the computer. Unexpected or unsatisfactory results were represented in such a way that the computer or another part of the technology—for "its own" mysterious and unfathomable reasons—conveniently absorbed most of the blame, allowing both participants to save face.

Segment (5) presents a particularly clear example of this strategy. A non-native speaker, C7, whose limited English proficiency presents a true challenge to consultant PCS, has a disk-error fixed. PCS then tries to explain what was wrong with the diskette, meeting with only limited success. When the client follows up with a further clarification-request (turn 10), PCS falls back on the "irrational computer explanation" to conclude his efforts (turn 11):

01	PCS	right here,
02	C7	um-hm
03	PCS	this is your paper,
04	C7	um-hm
05	PCS	that says that that's the end of your file,
		so that's how it reads,
		(wha) I do is get in there, to change it.
06	C7	so this is, mat- metal file, zero file and this,
		paper, [I think
07	PCS	well [this is, this is your file
08	C7	yeah
09	PCS	this is the,
		the section that, your disk thinks is your file,
		but the first thing it reads, is an end of file,
		so it won't show you anything after that
10	C7	oh, ((quietly))
		(3)
		how it happen, cause I can print out from the diskettes now.
11	PCS	it's just sometimes it hits it and sometimes it doesn't

This kind of "blame the technology" explanation of a problem's origin or development was common with consultants, and it was also used by clients, usually to similar effects.

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Deborah Poole is Associate Professor of Linguistics in the Department of Rhetoric and Writing Studies and the Department of Linguistics and Oriental Languages at San Diego State University. She is an applied linguist with a special interest in classroom language use.

G. Genevieve Patthey-Chavez is an Applied Linguist with the Sociobehavioral Group at UCLA and Institutional Researcher at Los Angeles City College. She is interested in all aspects of the interface between activity, language, and cognition.

APPENDIX A: TRANSCRIPTION CONVENTIONS

[	Overlapping utterances
=	Contiguous utterances
-	Self-interruption, cut-off
?	High rising intonation, questioning contour
,	Low rising intonation, continuation contour
;	Level intonation, completion contour
.	Falling intonation, closure contour
WORD	Increased volume
<u>word</u>	Stressed speech
wo:rd	Lengthened or stretched vowel
(word)	Transcriber doubt
( )	Unintelligible utterance
(1.2)	Timed pause (in tenths of a second)
(.)	Untimed pause (in quarter-seconds)
(( ))	Contextual information
. . .	Deleted word(s)