Annual Review of Applied Linguistics (2004) **24**, 284–302. Printed in the USA.
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DOI: 10.1017/S026719050400011X

13. ASPECTS OF COLLABORATION IN PEDAGOGICAL DISCOURSE

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In this review of research, various aspects of collaboration are discussed to understand more completely the phenomenon of jointly constructed activity in pedagogical contexts. This chapter presents the parameter for collaborations, differentiates collaboration from interaction, and reviews studies organized into three themes: collaboration and community, collaboration and language development, and collaboration and identity. Concepts taken from sociocultural theory provide an overarching explanatory framework of learning in the collaborative setting. These concepts include goal-directed activity, human relations, mediation, history, and culture. Consideration for emergent directions for research on collaboration and language learning are presented.

In a volume dedicated to advances in language pedagogy, it should come as no surprise that the topic of collaboration would be addressed. The belief that collaborative activity is consequential to cognitive, social, historical, and affective development has become widely accepted in developmental psychology and educational research. Ironically, although research and theory on interaction is vast in the field of additional language acquisition, relatively few studies specifically take into account the collaborative aspects of learners' jointly constructed activity. This assertion might seem contradictory in view of the ongoing interest in interaction and second language acquisition since the early 1980s.

In this brief review of recent research, I hope to illustrate the various aspects of collaboration that have been described and linked to learner performance and learning outcomes.[1] By reviewing examples of studies that explicitly invoke the concept of collaboration in the analysis, I hope to illustrate how collaborative research differs from other forms of research on interaction and second language acquisition. Additionally, I will argue that sociocultural theory provides an overarching explanatory framework for collaborative learning.

The purpose of this review article is threefold. I first discuss the concept of collaboration and illustrate how it differs from the more general concept of

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interaction. Against this backdrop, I establish a few overarching themes of collaborative research and review representative research studies that address collaborative activity in classroom settings. Finally, based on the review, I connect research findings to sociocultural theory and outline some critical areas where research is needed on collaboration and language learning in classroom settings.

Collaboration versus Interaction

Although the study of interaction is commonplace in the field of applied linguistics and language learning (Hall & Stoops Verplaetse, 2000), interaction does not categorically mean collaboration. As John-Steiner points out, "in engaging in collaboration in Western societies, partners need to shed some of their cultural heritage, such as the powerful belief in a separate, independent self and in the glory of individual achievement" (2000, p. 204). This observation draws attention to the fact that interaction is defined largely based on the psychological and social orientation of group members and can be easily reduced to little more than individuals working autonomously in the presence of others (Donato, 1994). For an interaction to be called collaborative, several aspects need to be considered. To this end, I examine at three perspectives on collaboration to find common ground. The three perspectives come from contemporary school-based collaborations, affinity groups, and Russian developmental psychology.

Three Converging Perspectives on Collaboration

Fullan (1999), in his discussion of collaborative cultures of change, identifies several features of school-based collaboration and the innovations they produce. According to Fullan, collaborative cultures foster diversity while simultaneously building trust, provoke anxiety and contain it, engage in raising tacit knowledge to explicit knowledge, seek connections to ideas that exist inside and outside of the group, and build coherence. Collaboration is about changing social networks and relations through the meaningful and purposeful joint work these networks carry out in historical and cultural contexts, as in the school and community. The result of collaboration is simultaneously the emergence of new knowledge and growth for the group. Additionally, for change to occur, collaboration needs to enable individuals to engage in continuous collaborative involvement, as opposed to producing solely autonomous knowers removed from social connections.

A good example of a collaborative culture of change can be found in the work of Moll and Greenberg (1990) in creating connections between the cultural funds of knowledge socially shared in households in Mexican communities in Arizona and the academic life of children in classrooms. In this project, learning and development occur in the situated production of culturally and historically meaningful educational activity. Through the collaborative involvement of parents and other adults in the community in the academic life of youngsters, education provides new contexts for learning and becomes a societal activity woven from the systems of knowledge distributed across households. These connections have

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reciprocal benefits for children and adults. Within the school, children come to understand their social reality better and adults' tacit understandings are the foundation for explicit academic knowledge of their children. Outside the school, children more fully participate in the social life of the community, and adults value and understand more deeply what they do and implicitly know in their daily lives.

Gee (2003) introduces the notion of *affinity groups*, as opposed to the more romanticized and benevolent term *communities of practice* (see also Holland & Lave, 2000 for a discussion of contentious communities of practice). According to Gee, affinity groups are continually immersed in practice and share common features, whether they are found in the workplace, in the community, or on the Internet. Similar to Fullan's ideas, members of affinity groups bond to each other and learn primarily through a jointly constructed endeavor organized around a process that is carried out through members' knowledge located and distributed in a network of relationships. Members of affinity groups are associated with a given semiotic domain and can easily recognize each other as insiders of the group. Gee provides the example of networked computer games where groups of players collaborate, compete, and learn from each other through connecting several game platforms or computers. In this networked collaborative, Gee argues that individuals know each other through the semiotics of the interactions and can identify contributions and strengths that each member brings to the competition.

A third perspective on collaboration is proposed by Petrovsky (1985) in an insightful book entitled the *Individual and the Collective*. Although the book is close to 20 years old, Petrovsky offers a conceptualization of "group" that reflects current understandings while contesting several Western discussions of the topic. Petrovsky addresses the issue that collaboration implies group conformity and neglects the individual. His theory of collective differs in part from contemporary concepts of collaboration in two respects. First, the individual is unique and derivative of the social. Second, the analysis of collaboration entails multiple levels from deeply rooted cooperative efforts toward a central activity to superficial social affinities. For Petrovksy, socially constructed activity mediates all interpersonal relations and is at the core of the collective. Surrounding the activity base is the psychological level of collaboration and includes the attitudes of each member to the aims of the activity and the social and personal significance that each participant assigns to it. The next level reflects interpersonal relations mediated by the activity itself and is constituted by the historical and cultural backgrounds of the members. At this level, affiliations are explained as instantiations of the ideals and values that members of the collective bring to the specific task. Finally, the surface features of the collective are produced by connections that are mainly personal and affective and that can be unrelated to collective aims of the activity.

The usefulness of this multilevel framework is that it is explanatory and moves beyond descriptive global features of affective personal links and externally defined purposes for collaboration (e.g., a task's intended goals). That is, by analyzing the internal structure of collaboration through and across the activity core, the values the participants assign to their collective work, and the relationships that

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are mediated by and derivative of the activity, collaborative performance can be explained in a coherent way. Additionally, the multilevel analysis provides an insider's view of collaborative activity, accounts for why collaboration may not always appear benign, and underscores why context alone cannot determine the degree of collaboration. Smagorinsky and O'Donnell-Allen (2000) provide an excellent illustration of this model in their investigation of high school students' collaborative work on creating visual and textual interpretations of characters in *Hamlet*.

When taken together, these three conceptualizations reveal common characteristics that set collaborative groups apart from loosely configured individuals. Collaboration involves a meaningful core activity (e.g., playing a networked computer game, creating a visual product, developing curricular innovations) and the social relations that develop as a result of jointly constructed goals for the common endeavor. Additionally, collaboration involves recognition of individuals as parts of a cooperative activity and the acceptance of the contributions of individuals in the service of a larger goal. Finally, collaborative groups build coherence within and among social relations and knowledge located and distributed in its members. In this way, collaboration co-constructs new knowledge that goes beyond any knowledge possessed by a single member in isolation (Donato, 1994). The studies to be reviewed below illustrate these concepts.

Collaboration and Research

Definitions of Collaboration

What is striking is how these three conceptualizations of collaboration differ from how some second language acquisition research typically operationalizes interaction. For example, in many studies of language learning in interactive settings, the relational level of collaborative functioning of participants is ignored. It seems reasonable to assume that outcomes of loosely knit configurations of individuals working together on tasks with preestablished goals and externally defined purposes would be different from collaboratively constructed activity, as defined above (Donato, 1988; 1994). Indeed, in an early study on foreign language learning, Donato (1988) found that students who worked collectively on preparing for a role-play task produced learning outcomes for the group and the individual greater than those of their loosely knit counterparts. Their collective orientation to jointly constructed activity was revealed in the members' extensive use of the pronoun "we," frequent requests for mutual assistance, and a discourse pattern that was synthetic and often indistinguishable from that of a single speaker. Storch (2001) also found that, among four types of relationships in pair work tasks, only those pairs that exhibited a collaborative orientation to their work resulted in co-construction of new knowledge, peer assistance, and the learning of grammatical form and new vocabulary.

Another area that has not received adequate research attention is the importance of time required to establish social relations necessary for collaboration.

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Few studies of language acquisition in interactive contexts, particularly in the laboratory setting, take into account the temporal requirements for the type of supportive learning relationships, activity-based relations, and goal-directed collaborations outlined in the previous section. One study by Brooks, Donato, and McGlone (1997) found evidence that time was indeed a factor in enabling stable dyads to understand the cooperative and linguistic requirements to complete a jigsaw information-gap task. The study showed that over time (here five such analogous jigsaw information-gap tasks), learners' use of English, metatalk, private speech, and talk about task procedures declined significantly. The conclusion of the study points to three important considerations. First, from a theoretical perspective, collaboration takes time for learners to develop socially and cognitively as supportive learning contexts for each other. Second, from a research perspective, studies of isolated tasks performed in short time frames by individuals not accustomed to working together simply do not capture or depict the realities of how learning is dynamically constructed in collaborative contexts. Finally, from a pedagogical perspective, teachers need to be advised that assessments of student performance cannot be based on a single administration of a task.

Depicting Interactivity

A study of the mathematical problem solving of pairs of 13-year-old children (Kieran, 2003) provides evidence for the need to understand and define clearly how collaboration is carried out during partnered learning activity and how it differs from other forms of group work. In her study, children jointly solved complex algebra problems on flight dealing with the relationships among aircraft, wind speed, time, and headwind or tailwind conditions. Kieran defines a collaboration as educationally productive "if it has an impact on students' future participation in related mathematical problem-solving, whether the future participation involves individual or group work" (2003, p. 195).

Using the interactivity flowchart, Kieran graphically displays paired problem solving on the dimensions of communication (interpersonal and personal) and content (talk to advance mathematical problem solving versus talk to advance the conversation and personal relationships). The interactivity analysis showed differential productivity, both for the dyad and the individual, depending on the patterns of joint work during problem solving. In dyads where interactions were characterized by a high frequency of interpersonal communication and talk to advance the mathematical solution path, individuals were able to draw upon approaches to solving the problem that had been discussed during the pairwise interaction. In dyads where one active member engaged in self-talk while the other reacted to what was overheard, the reactive member of the dyad was not able to draw upon the dyadic problem-solving experience at a later time. Interestingly, in the nonproductive pair, one member of the dyad displayed a high degree of vocalized private speech (e.g., telegraphic, abbreviated, and fragmentary utterances) that did not communicate well to the other partner of the dyad. In this case, only the active member gained new approaches to solving the problem. Kieran rightly points out that it is simply not enough to make available our private mental activity to others

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(i.e., our inner speech), as argued by Harré and Gillett (1994). Simply externalizing one's inner speech leaves too much unsaid and lacks the necessary elaboration and clarity to be useable by the other member on the dyad.

This study illustrates that not all group work qualifies as collaboration and that different configurations of joint work result in different outcomes. Moreover, research, including research on language learning, must explain the communicative dynamics of interaction and not assume that all forms of communication are created equal or have the same psychological function. One fruitful area which research could explore is to understand how the ubiquitous concept of scaffolding is an epiphenomenon of collaboration and how scaffolding differs from other forms of interactions.

Learning through Collaboration

The goal of collaborative learning is not exclusively to deposit knowledge as unique acquisitions into the minds of the individual. Rather, it involves apprenticing, initiating, and transforming individuals into participating and contributing members of social networks in various communities in which they live (Lave & Wenger, 1991; Sfard, 2003). Learning, in this view, is seen as "improved participation in an interactive system" (Greeno, 1997), an "initiation in a discourse" (Harré & Gillett, 1994), and a "reorganization of an activity" (Cobb, 1998). According to Wenger (1998), learning in the collaborative creates and sustains the relation of mutual accountability with other members of the community. For the language learner, the value of collaboration is not merely the accumulation of language knowledge as an inert, solitary possession (Larsen-Freeman, 2003). Rather, the consequences of collaborative activity are conceptualized as a way to enable the individual to participate in social activities, either as individuals referenced to a social network or directly connected to others, to promote future learning and development through expanding participation, and to create the potential for the individual's reciprocal contribution to the community (Dyson, 2000; Putney, Green, Dixon, Durden, & Yaeger, 2000). In other words, individuals do not leave a collaborative event simply knowing more while remaining isolated from others. Collaboration transforms individuals from marginal members of a community to contributing participants in expanding circles of community practices that they reciprocally help to forge. Thus, collaboration, and the mutuality of learning it brings about, is the *reason* for and the *result* of goal-directed, mediated social relations.

Kinginger's (2000) study on the acquisition of French pronouns of solidarity (*tu* vs. *vous*) illustrates this point. American students in the United States and French students in France were paired as keypals to discuss parallel texts on remakes of film and children's literature. As an outcome of their collaborative electronic exchanges in and across time, American and French students developed personal relationships, learned appropriate forms of address, and ostensibly gained access into further crosscultural exchanges in their new language. We might imagine how the students' collaboration and new relationships, reflected in relationally appropriate language, resulted in further community participation and learning for both groups beyond the

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boundaries of the project and of the acquisition of discrete linguistic terms of address. Understanding how participation in collaborative events sets the foundation for future collaborations needs to be a goal of research on collaboration in educational settings. This is particularly true in the case of foreign and second language learning where the expectation is to enable learners to interact in target language communities and cultures other than their own.

In the studies that follow, themes of research on collaboration in foreign and second language contexts are presented. The themes of these studies reveal several aspects of collaboration presented in the previous section. The studies include microgenetic analysis of goal-directed partnered activity (e.g., Platt & Brooks, 2002; and Swain & Lapkin, 2003) and macrogenetic studies of classroom community development (e.g., Boxer & Cortés-Conde, 2000; Duff, 2002; and Verplaetse, 2000). Tasks and activities examined in these studies are largely naturally occurring in classroom contexts and involve, for example, information-gap activities, teacher-directed group discussion, student interviews, text-based conversations, and essay writing and revision. The overarching themes are (1) collaboration and community, (2) collaboration and language development, and (3) collaboration and identity. Based on the brief review of literature below, I identify aspects of collaboration that can contribute to an explanatory theory of collaboration in the language classroom. I conclude by arguing that sociocultural theory provides a framework for describing and explaining the dynamics of collaboration.

Collaboration and Community

Platt and Brooks (2002) examine the dialogic interaction as two high school students of Spanish and two university students of Swahili collaborate on the solution of an information-gap task. Platt and Brooks sought to understand the process of collaboration from the perspective of how learners create engagement in the task rather than mere compliance with task requirements. That is, rather than view the task as only an opportunity to negotiate meaning and encode and decode messages, Platt and Brooks argue that analyses of tasks need to include how learners evolve from loosely knit partnered practice to fully engaged communities of language learning practice. Their analysis of the dyads illustrates how achieving intersubjectivity and subsequent engagement was a tedious process marked by moments of struggle to understand the task at hand. Corroborating the findings of the earlier study of Brooks and Donato (1994), they found that the students' struggle was mediated and resolved by gesture, use of the L1 and L2, and other foreign languages known to the students. What is particularly compelling about this study is that it takes into account the transformation of relations that occurs during student interaction. As students' goals and understanding for activity become more clearly defined and the processes of task completion emerge, variable and random behaviors change to focused procedures exhibiting greater control of the target language and of working with each other as a collaborative community. Thus, learners do not simply comply with the task, but rather they actively construct it.

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Verplaetse (2000) reports on the study of a middle-school science teacher during class discussion and the effects of collaborative discussion on mainstreamed English language learners. Her study provides an example of how the teacher's use of paraphrase and repetition produced an environment where the contributions of all students were accepted, valued, and validated. Moreover, she finds that the teacher modeled the process of scientific inquiry aloud for his students and thereby authorized the right to wonder, pose questions, and engage in exploratory talk on science topics. In addition to the collaborative discussion that modeled scientific inquiry, another important aspect of this study was the consequence of this dialogic collaboration on the participation of English language learners. Verplaetse states that, unlike the other two science classes she observed as part of this study, English language learners volunteered more frequently and participated more actively. She concludes that "given the highly interactive practices of the teacher and students, particularly the nonjudgmental, listening nature of teacher responses, even the English language learners were drawn into the participation" (Verplaetse, 2000, p. 238). This study illustrates how classroom relations and collaboration were forged through the teacher's validation of student contributions. In turn, sanctioning inquiry and authorizing the right to wonder through teacher example enabled students to expand their collaboration involvement and become contributing members of a classroom community.

Collaboration and Grammatical, Pragmatic, and Discourse Development

In this section, four studies are reviewed to illustrate how collaboration involves the development of grammatical, pragmatic, and discourse competence. Three collaborative contexts are reviewed: classroom pair activity, adult–child book reading, and teacher-fronted classroom discussion.

Swain and Lapkin (2003) examined a pair of grade seven French immersion students' collaborative work while (1) completing a jigsaw story task orally and in writing, (2) comparing their written stories to a reformulated version, (3) responding to a stimulated recall task, and (4) revising their stories independently at a later time. The data were coded for all the language-related episodes (LREs), defined as any part of the collaborative dialogues where the learners talk about the language they are using, question an aspect of their language use, or correct themselves or others. LREs involved lexical items, form, and discourse markers, with form receiving the greatest amount of attention during the writing, comparing, and stimulated recall sessions (e.g., reflexive verbs). The analysis of discussions surrounding reformulated texts indicated that approximately two-thirds of reformulations were accepted. At other times, the students' rules for language prevailed over the authority of the edited text. Additionally, they rejected reformulated versions of the text when editing was perceived to change the meaning of the original story. During later independent revisions, both learners were able to revise accurately 78 percent of the post test items indicating the power of collaborative dialogue during the composing, noticing, and recall procedures. A noteworthy feature of the study was researchers' investigation of the learners' perception of their collaborative work, specifically the relational conditions of the task and their investment in the partnered work. In final

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interviews, the learners were asked to comment on their level of participation compared to their normal work habits. Both learners confirmed that their attention to the task during data collection was similar to how they approached their work outside of the conditions of the study.

Kim and Hall (2002) report on a four-month collaborative book reading project between adults and eight-year-old Korean children using English as the medium of communication. During the book reading, the researcher prompted with questions, elaborated on the children's utterances, and repeated the children's contributions by paraphrasing and shaping what they said into a coherent discourse. After completing all collaborative reading sessions, the children engaged in interactional role-play situations based on school-related events. These interactions were analyzed for quantity of words used, context-specific vocabulary, utterances, and conversational management skill (e.g., initiations, elaborations, conclusions, and self- and other-repair). It was found that the participation of these children in collaborative book reading led to significant changes in their pragmatic ability dealing with a number of words and utterances, and conversational management features. Kim and Hall suggest that in the context of interesting texts and collaborative talk, meaningful opportunities for the development of children's second language competence arise. It is interesting to note that the procedure used by the tutor reflects discourse features similar to the teacher in the Verplaetse study, with similar developmental consequences, i.e., increased language resources, expanded participation in interactions, and the children's growing ability to manage conversation.

In a conversational analytical study of talk-in-interaction, Mori (2002) examines 12 hours of classroom interaction across two instructional contexts in a university upper-level Japanese as a foreign language classroom. In this study, two contexts were analyzed to understand how talk was constructed in collaboration with peers during a planning session for a future discussion of "fathers" with native speaker visitors to the class. It was found that the design of the task (step-by-step requirements for the interview) presented obstacles for the creation of contingent discourse and coherent discussion with the native speaker guests. Instead, during the visits and because of the rigidity of the task requirements, the students' discourse was highly structured, interview-like, and lacked the sequential and contingency-based features of conversation. Ironically, Mori finds that student discourse during the pretask planning was more spontaneous and involved a mutual exchange of ideas. This discourse contrasted sharply with the rigidity of the talk when the students interacted with the native-speaker guests.

Mori's study raises several important pedagogical considerations for understanding discourse development in collaborative discursive contexts in classroom settings. First, tasks may focus too heavily on content and form and thus restrict the collaborative and emergent development of talk necessary for becoming a discursively competent language user. The reason for these constrained pedagogical tasks, as Mori points out, may be the teacher's assumption of the student's linguistic deficiency, an assumption that proved erroneous when examining the discourse of

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the planning stage of the activity. Second, the structure of the task and its emphasis on information transfer (e.g., "ask the guest what kind of person his/her father is" and "tell the guest about your father") reveals that not all tasks cede control of the content of the talk to the learners. Finally, the native speaker visitors were unaware of the task directions and did not share the same instructional history and goal as the students. Thus, they may have assumed that their role was to respond to questions rather than take conversational initiative to collaborate on developing a more "natural, coherent interaction" (Mori, 2002, p. 341). When juxtaposed with the Kim and Hall study, Mori's study contributes to understanding that collaboration is constituted in particular kinds of contingently organized talk. Moreover, as Platt and Brooks (2002) also argue, the structure of certain tasks inhibits precisely what is needed for collaborative engagement to occur, that is tasks that promote flexible, contingent, and dynamic development of talk in interaction.

The teacher's orchestration of classroom discourse is another type of collaboration examined in the literature. Toth (in press) studies the effects of a teacher's language practice on the verbal responses of second-year university students of Spanish as a foreign language. During two classes, the teacher presented two types of conversational activities to the class based on two different goals for student talk. In the first type of interaction, the teacher structured conversations around Spanish grammatical structures (e.g., present perfect tense, adjective agreement). The second type of interaction was organized around topics and themes that loosely referenced the grammar. That is, in the first case, the topic of conversation was subordinated to the grammar and followed a "meaningful drill" pattern (see Wong & VanPatten, 2003, for a discussion of the limitations of language drill formats). In the second case, the grammar was subordinated to a central topic and followed pragmatic rules of conversation (e.g., conversational implicatures).

Analysis of the discourse of these two interactions revealed two markedly different and contrasting types of responses by the students. During the grammar-focused interactions, students exhibited longer latency gaps and a higher number of remedy sequences where students needed to ask for assistance. Additionally, these remedy sequences were not clarification requests typical of meaning negotiation, but rather expressions of frustration in an attempt to understand the teacher's motivation for the questions posed. This interpretation was corroborated in retrospective interviews with five students who all reported confusion and a lack of awareness of the teacher's conversational moves during the grammatically based meaningful drill interactions. During the topically organized conversations, fewer latency gaps were noted and fewer and shorter remedy sequences emerged during the discussion. Toth concludes that during discussions motivated by the teacher's grammatical agenda, students required more time to respond because they had to focus simultaneously on what they wanted to say and the reason why they needed to say it, i.e., to satisfy the teacher's covert goal for the discussion. In contrast, when conversation was organized in ways that did not violate the students' pragmatic understandings of discourse, time could be used to process the content of an utterance without the additional burden of establishing intersubjectivity at each sentence-level, grammar-focused question.

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The conclusions of this study reflect an important concept associated with collaboration. For discursive collaboration to occur, participants need to share conversational goals, perceive these goals for conversation as legitimate, and understand how each participant's actions move the jointly constructed activity forward, as was seen in the work of the students in the Swain and Lapkin study. When this lack of shared goals occurs, collaboration does not take place and the activity dissipates into a confusing exchange of information, meaningful or otherwise. As was also found in the Mori study, not all forms of interaction in the language classroom promote discourse competence; in the case of the Toth study, some forms of classroom interaction may actually contradict what students know intuitively about the pragmatics of conversational collaboration.

Collaboration and Identity

A recent area of research that connects to the issue of collaboration in classroom settings deals with how one's identity is positioned and constructed by self or others during discursive interactions of various kinds. Duff (2002) illustrates how classroom interaction in an ethnically and linguistically diverse grade 10 social studies class attributed identities to students that they may not have wanted to assume. Moreover, her research into classroom language socialization, participation, and identity revealed that, at times, assumptions made about students were based on misinterpretation of students' cultural participation patterns during classroom discussion. Vocal students were positioned, albeit erroneously, as academically superior, whereas quiet students were viewed as academically weaker and less competent.

Duff observes that, despite the teacher's goals of creating an inclusive classroom that valorized the cultural backgrounds and contributions of all students, the interactional behaviors of teachers and students during discursive collaborations on subject matter created conditions that marginalized some students while providing greater social recognition to others. Her study also alerts us to the fact that collaboration has social and personal consequences for participants. She concludes that "large numbers of minority students in schools worldwide are at considerable risk of alienation, isolation, and failure because of the discourse and interactions that surround them on a daily basis" (Duff, 2002, p. 216). This assertion underscores the importance of recognizing that not all communities of practice, such as classroom life, are benign and that collaboration in these communities may create personal affinities or indifferences despite a collective orientation to academic work.

Boxer and Cortés-Conde (2000) examine how relational group identities develop in a university intensive content-based English as a second language class. Relational identity goes beyond biological, individual, and societal identities. Rather, it is established, owned, and transformed by the group as a whole through their goal-directed collaborations with each other. Moreover, Boxer and Cortés-Conde point out the pedagogical importance of relational identities to language development and how both mutually support each other. That is, "as learners become proficient, not only in the language per se but in how to interact with

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particular individuals, they build a RID (relational identity) that is the foundation for further interaction" (p. 206). Their study explores how a relational identity is fostered or inhibited in a classroom community. Through the analysis of two classes and their discussions of representations of U.S. culture in the media, they find that only one teacher creates the conditions for safely exploring the students' identities in relation to U.S. culture through sharing personal experiences, confronting cultural stereotypes, and airing opinions. In the other class, the teacher created a hierarchical classroom organization by assuming the dominant role of purveyor of cultural information. In this way, he inhibited collaboration and prevented the creation of a relational identity established by the students.

Detailed analysis of the classes revealed that when the teacher took the stance of non-knower and posed questions about students' cultural backgrounds for discussion, students participated actively and collaborated with each other. This discursive collaboration, in turn, led to greater perspectives on U.S. culture and their own while simultaneously creating a classroom community where personal relations, history, and identity mattered. By contrasting the two teachers in this study and comparing this study to others, like the Duff study, it is clear that the outcomes of pedagogical interactions are not always in the best interest of students, despite teachers' best intentions. Moreover, although both classes represent communities of practice, only one class evolved into a fully functioning collaborative where the relational identity of the group fostered a perception of each individual as a valid interlocutor in explorations of U.S. culture and cultural comparisons.

Collaboration and Sociocultural Theory

When reading across the studies, it becomes clear that to describe and explain collaboration, or the lack of it, requires taking into account various aspects of the event. Sociocultural theory provides this conceptual framework for description and explanation of collaboration and the learning and development it simultaneously effects. In what follows, I will outline several important aspects of collaboration that *matter* and need to be considered in any serious investigation of the topic. The aspects of collaboration are not exhaustive and derive from the studies reviewed. Each of the following aspects is relevant to the description and analysis of collaboration in the studies and reflects core concepts of sociocultural theory. Additionally, the aspects are not categorical, but rather act on and interact with each other during the conduct of joint work.

Activity Matters

Sociocultural theory maintains that learning and development emerge and are shaped by the social, cultural, and historical contexts in which individuals engage in meaningful and purposeful joint activity. Moreover, within sociocultural theory, activity is dynamic and not imposed externally on participants. As Newman and Holzman point out, "it is in the *production of activity* that learning and development occur [and] . . . that the activity of *producing* [is] inseparable from the *product*" (1993, p. 74). Moreover, the production of joint activity creates a zone of proximal

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development (ZPD) that permits the co-occurrence of learning and development (Newman & Holzman, 1993; Vygotsky, 1986).

Several studies provide evidence for this claim. In the Platt and Brooks study, we observe how a jigsaw information gap task was shaped as students jointly constructed their activity, regulated themselves as participants, and created a ZPD for each other (see also Brooks & Donato, 1994). Swain and Lapkin's study illustrates how two students' collaboration overrode the influence of an authoritative edited version of their written work. In their study, learners' ownership of their own production of words and meanings during essay writing took precedence over accepting an external definition of idealized performance on the essay. These studies illustrate that the collaborative production of educational activity cannot be detached from the product of the activity without the risk of creating an artificial dualism and a discontinuity between the individual and social. From the perspective of sociocultural theory, there is no need to separate collaboration from what is actually learned, where it is learned, and under what conditions it is learned. Thus, when viewed through the lens of sociocultural theory, the dynamics of collaborative production obviate the need to separate language use from language acquisition.

Social Relations Matter

In the studies of identity, it was apparent that socially and culturally constructed collaboration in classrooms often reflected relations of power (e.g., teachers as knowledge brokers) and the associated institutional infrastructure. Individuals are embedded within these figured worlds where they accept or act upon various positionings of whatever powerful discourses they happen to encounter (Holland, Lachicotte, Skinner, & Cain, 2001; Holland & Lave, 2000). From a sociocultural perspective, persons develop through and around the cultural forms by which they are identified and identify themselves, in the context of their affiliations and disaffiliations with those associated with those forms and practices.

In the two studies reviewed, classroom collaborations have been shown to create hierarchies between teacher and students and disaffiliations among student groups. The result of these hierarchical relations can have negative consequences for students such as that in the Duff (2002) study of culturally diverse classrooms and in the Boxer and Cortés-Conde (2000) study of relational identities in adult content-based ESL classes. Conversely, in classes such as that in the Verplaetse (2000) study where individual student contributions were valued and revoiced by the teacher, student ideas became centerpieces for collaborative scientific exploration, including English language learners who were observed to remain in the silent margins of discussion in other classes.

History and Culture Matter

Collaboration can be explained by examining individuals' motives and goals for actions and by situating activity in the social and historical conditions that constitute and shape the actions, and operational composition of these actions, of

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individuals-in-practice. The results of several studies can be explained through this sociocultural tenet.

In Toth's study (in press), we see how the teacher's covert goals for teacher–student collaboration create obstacles to intersubjectivity and result in interactions that focus on making sense of the teacher's actions and operations rather than co-constructing a meaningful communicative event. It is not hard to explain that the presence of the teacher's grammar goal is the result of the cultural and historical context of language teaching that has emphasized mastery of form (see Dorwick & Glass, 2003 for a similar discussion of foreign language textbooks). In Mori's study, history, or one's past participation in a series of activities, is used to explain why the discourse between the students and the native speaker visitors surfaced as an interrogation rather than a conversation. By examining the history embodied in the students' collaborative planning and the tools that they use, i.e., the task directions, the subsequent interaction with the native speakers is more completely understood and explained.

Mediation Matters

To claim that development of knowledge or self occurs through collaboration requires understanding that the mediation afforded by others or by cultural tools, including language, is instrumental to this process. According to sociocultural theory, mediation, in the form of objects, symbols, or persons, transforms the natural and spontaneous concepts derived through direct contact with experience into higher forms of thinking, referred to as scientific concepts in Vygotskyan theory (Vygotsky, 1986, chap. 6). These higher forms of thinking, derivative of mediated collaborations, may deal with strategic orientations to tasks (e.g., learning strategies, establishing procedures for carrying out an information-gap task), conceptions of self and community (e.g., relational identities), or generalizations of semiotic systems (e.g., problem-solving algorithms or grammar). Since all forms of mediation are developed in a context, they are themselves inherently social, cultural, and historical.

The studies reviewed exemplify the process of mediation and the effects of differing mediation tools on the collaborative activity. In the Mori (2002) study, the task-mediated social relations and produced discourse that was markedly different in two contexts. Platt and Brooks's (2002) analysis of dyads working on information-gap tasks illustrated how talk in L1 and L2 and gesture mediated construction of and subsequent transformation from compliance to engagement in the task. In the Toth (in press) and Verplaetse (2000) studies, we observe how a teacher's goal can serve to mediate the development of classroom discourse and the psychological and affective dispositions of the students participating in the discussion. Mediational tools are, thus, critical, and must be taken into account in any serious examination of the production and product of collaboration.

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Emergent Directions in the Study of Pedagogical Collaboration

Several research directions emerge from the review of these studies. First, studies of collaboration need to provide the reader with rich descriptions of the level of collaborative functioning and differentiate collaboration from loosely knit configurations of individuals. To this end, studies of collaboration should include in their research design and descriptions various aspects of collaboration that have proven to be significant and consequential. No study, to my knowledge, considers in the analysis all the aspects of collaboration outlined above and suggested by sociocultural theory.

Many of the studies of collaboration take place in high school or college classrooms or with adults. More research attention to the early language learner, particularly in foreign language classrooms, is needed. In a study conducted by Donato, Tucker, Wudthayagorn, and Igarashi (2000) of an elementary school Japanese foreign language program, it was found that few planned occasions to collaborate were made available to young learners by the teacher. However, it was also found that elementary school students seized opportunities to collaborate spontaneously on utterance construction and to assist actively the spoken performance of each other using learned material (Takahashi, Austin, & Morimoto, 2000). How collaboration takes place in the elementary foreign and second language classroom is a worthwhile line of investigation.

Studies of collaboration need to investigate the role of history in students, teachers, materials, curricular goals, and instruction, and examine how history manifests itself in jointly constructed knowledge. From this perspective, a longitudinal study would focus on learning outcomes over time for individuals and the history within individuals during collaboration work, including identities that are brought to bear on collaborations or constructed in the process.

Another fruitful area concerns the consequences of collaboration at one point in time for providing the foundation for future collaborations and, therefore, expanded zones of proximal development where learning and development may continue. Second and foreign language studies that document this process would contribute to an understanding of the effects of collaboration on initiating and sustaining learner participation in a community of target language speakers. The social participation consequences of collaboration are also not restricted to face-to-face interaction with others. Socially meaningful individual activity, such as learning how to revise one's writing to communicate clearly to an audience, as in the case of the Swain and Lapkin study, is an equally valid social and participatory outcome for collaboration. Additionally, these outcomes contrast with decontextualized measurements of grammatical forms and judgments.

Investigations of scaffolding and co-construction during collaborative activity need to be expanded and elaborated upon to answer such questions as: What evidence is needed to claim that scaffolding occurs? Under what conditions does scaffolding arise and how frequently? How does it differ from other forms of

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assistance? Is the concept of scaffolding useful and sufficiently robust to explain learning in collaboration; if so, why? Or is scaffolding a discursive manifestation of the overarching construct of activity in the ZPD? Regarding co-construction, we might ask whether collaboration results in co-construction of knowledge or co-opting of knowledge.

Final Comments

The nature of future research into collaboration in language learning pedagogical contexts is an open question. Although this review offers no definitive research plans, a few directions are clearly suggested by the review of literature and theoretical considerations. Based on the review and discussion, three issues warrant attention.

First, research on collaboration needs to *describe* and *explain* the phenomenon comprehensively and adequately. Language acquisition studies from interactionalist perspectives are data-heavy but theory-light. Conversely, research studies from a sociocultural perspective provide rich theoretical concepts to explain what is observed but are often parsimonious with data. Linked to this concern is providing the time required so that collaboration can develop in pedagogical settings and accounting for levels of collaborations when drawing conclusions.

Second, collaborative productivity in language learning needs to be defined better and expanded in all studies, especially within the particular research questions posed. Many studies separate collaborative production from the resulting product creating an artificial language use versus language acquisition dichotomy. The concept of productivity, if more fully explored, might overcome this dualism. Moreover, collaborative productivity needs to be examined for its social and relational consequences, defined in this paper as individual or collective achievements motivated and carried out for a social purpose at the time of collaboration or later. By having a more informed understanding of collaborative productivity, we will avoid providing research answers to superficial questions.

Third, it might be wise to attempt to unite second language learning research with the extensive literature on cooperative learning. There seems to be an intellectual firewall separating the literature on cooperative learning from language learning studies in interactive contexts (McGroarty, personal communication). Cooperative learning has a rich history based on some of the pioneering work of Johnson and Johnson and Slavin (see, e.g., Johnson, Johnson, & Holubec, 1993). Cooperative learning emphasizes the importance of group processing, positive interdependence, and individual accountability as critical elements to productive collaborations in classrooms. Clearly, these concepts come into play in research for differentiating levels of cooperation and for practice in promoting cooperative classrooms.

Collaboration is a powerful concept that moves us beyond reductive input-output models of interaction and acknowledges the importance of goals, the

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mutuality of learning in activity, and collective human relationships. It is hoped that this brief review has outlined some important issues and has provided direction for integrating language learning research with the everyday human realities of collaboration in pedagogical contexts.

Note

1. Special thanks to David Jelliffe, Jenee Wright, and Javier Coronado Aliegre, University of Pittsburgh, for their valuable contribution to this project. Also thank you to Dan Dewey, University of Pittsburgh, for his reactions to drafts of this paper.

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