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Deliberative Discourse Idealized and Realized: Accountable Talk in the Classroom and in Civic Life

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Abstract Classroom discussion practices that can lead to reasoned participation by all students are presented and described by the authors. Their research emphasizes the careful orchestration of talk and tasks in academic learning. Parallels are drawn to the philosophical work on deliberative discourse and the fundamental goal of equipping all students to participate in academically productive talk. These practices, termed Accountable Talk^{SM}, emphasize the forms and norms of discourse that support and promote equity and access to rigorous academic learning. They have been shown to result in academic achievement for diverse populations of students. The authors outline Accountable Talk as encompassing three broad dimensions: one, accountability to the learning community, in which participants listen to and build their contributions in response to those of others; two, accountability to accepted standards of reasoning, talk that emphasizes logical connections and the drawing of reasonable conclusions; and, three, accountability to knowledge, talk that is based explicitly on facts, written texts, or other public information. With more than fifteen years research into Accountable Talk applications across a wide range of classrooms and grade levels, the authors detail the challenges and limitations of contexts in which discourse norms are not shared by all members of the classroom community.

Keywords Accountable Talk · Deliberative discourse · Discourse community · Discourse norms · Diverse learners · Equity · Learning community · Reasoned participation

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Introduction

Dialogue and discussion have long been linked to theories of democratic education. From Socrates to Dewey to Habermas, educative dialogue has represented a forum for learners to develop understanding by listening, reflecting, proposing, and incorporating alternative views. For many philosophers, learning through discussion has also represented the promise of education as a foundation for democracy. Dewey proposed a definition of democracy that placed reasoned discussion at its very heart. He spoke of democracy as a "mode of social inquiry" emphasizing discussion, consultation, persuasion and debate in the service of just decision-making (Dewey 1966, p. 56).

Globalization, multiculturalism, and diversity—whether ethnic, racial, or socioeconomic—now require new approaches to decision-making. In an increasingly connected but diverse world, deliberations and discussion must be employed in the service of not simply communicating, but as importantly, in knowledge-building and negotiated solutions to complex political, medical, and environmental problems. An emerging body of work addresses these issues on both theoretical and practical grounds, drawing on Habermas' (1990) notion of "deliberative democracy" and the "public sphere" as an idealized discursive space where debate and dialogue are free and uncoerced.

In Habermas' recent writing on "discourse ethics," he spells out a set of the norms and practices—a procedural and discursive form of democracy—that relies on reasoned and inclusive public deliberation designed to lead to consensual decisions. Habermas calls for dialogical rationality through which participants advance arguments and counterarguments. Consensus is achieved only by the "unforced force of the better argument," so that, after deliberation, participants are convinced by the decisions reached and accept them as reasonable (Dryzek 2000; Kapoor 2002).

The idea of deliberative democracy has been taken up by a wide range of political and legal theorists, along with philosophers of education, many represented in this volume. They see deliberative democracy as a productive response to both liberalism (emphasizing the rights and freedoms of the individual) and communitarianism (emphasizing group solidarity and identity).

A parallel line of investigation in education—developing quite independently of philosophical and legal work on deliberative democracy—has similarly focused on the central role of particular forms and norms of discourse. This work has grown out of the emerging interdisciplinary fields of cognitive science, sociocultural psychology, and situated cognition. It does not focus on democracy or civic participation and decision making, per se; instead its central concern is learning with understanding of complex academic content, with the commitment that this kind of learning be available to all students. The research draws on constructivist and sociocultural principles that emphasize the importance of social practices, in particular, the careful orchestration of talk and tasks in academic learning. Much of this work has been done in the content areas of mathematics and science (see Yackel and Cobb 1996; Resnick et al. 1992; Lehrer and Schauble 2005; Lampert and Ball 1998; Chapin et al. 2003; Warren and Rosebery 1996, among others), where students are expected to master a body of authoritative knowledge (algorithms, formulae, symbolic tools, as well as facts and accepted theories) but also to be able to reason with the ideas and tools of others. Sensemaking and scaffolded discussion, calling for particular forms of talk, are seen as the primary mechanism for promoting deep understanding of complex concepts and robust reasoning.

In the ideal discussion-based classroom community, students have the right to speak and the obligation to explicate their reasoning, providing warranted evidence for their claims so

that others can understand and critique their arguments. The classroom culture assumes that all students have equal access to the floor and to the academic content, and that all students have comparable discourse experience to make their voices heard and recognized as offering reasoned and cogent contributions. Indeed the "rules of the game" in this idealized classroom community look strikingly similar to the norms of discourse called for in theories of deliberative democracy.

We see, then, two heretofore largely independent strands of work—one concerned with democratic education and universal conditions for deliberative discourse, and the other concerned with sensemaking and deep understanding in school subjects, for all children—both emphasizing particular norms and forms of discourse. As sociolinguists and cognitive scientists concerned with learning in culturally, linguistically, and academically heterogeneous classrooms, we see our work growing out of the second strand. It emphasizes the forms and norms of discourse that support and promote equity and access to rigorous academic learning.

Our research on Accountable Talk, conducted over the past 15 years, has entailed intensive collaborations with teachers and students in real classroom contexts in which none of the conditions of the idealized discourse community just alluded to existed at the outset. We have confronted the challenges and limitations of contexts in which the discourse norms we seek are not initially shared by all members of the classroom community. We have worked to discover what it takes to lay the foundations for a discourse culture that includes veterans as well as newcomers, making the discourse norms and moves accessible to all. We believe this work has something important to say to the theorists of deliberative discourse, who similarly confront the real situation where not all parties know, accept, or willingly adhere to the idealized norms of deliberative discourse. We return to these "lessons learned" and their implications for civic participation at the end of our paper.

Accountable Talk: Reasoned Discussion in the Classroom

Our work on Accountable Talk grows out of a Vygotskian theoretical framework (Wertsch 1991) that emphasizes the "social formation of mind," that is, the importance of social interaction in the development of individual mental processes.[1] Over the past two decades, research has accumulated on how discussion methods are used in classrooms and why such discussion may support learning of important school subject matter as well as the process of reasoned participation. This research—blending sociolinguistics and psychology—has repeatedly demonstrated the role of certain kinds of structured talk for learning with understanding (see Anderson et al. 1997; Ball and Bass 2000; Cazden 2001; Chapin et al. 2003; Cobb 2001; Delpit and Dowdy 2002; Forman et al. 1998; Goldenberg 1992/3; Lampert and Ball 1998; Mercer 2002; Michaels et al. 2002, O'Connor and Michaels 1996; O'Connor 2001; Pontecorvo 1993; Walqui and Koelsch 2006; Warren and Rosebery 1996; Wells 2001; Wertsch 1991; Yackel and Cobb 1996. A synthesis of this work can be found in Cazden 2001 and in a recent handbook chapter on classroom discourse, Michaels et al. 2004).

We can point to a number of "success stories" in the literature on instructional change and school reform, where elements of academically productive talk are demonstrated (cf., among others, Lee 2001; Goldenberg 1992/3; Beck et al. 1996; Chapin et al. 2003; Lampert and Ball 1998; Warren and Rosebery 1996; Resnick et al. 1993). These are all

[1] Similar ideas were also developed in seminal work by Dewey (1966) and Mead (1967).

cases of discourse-intensive pedagogical practices that combine rigorous tasks with carefully orchestrated, teacher-led discussion. Through talk, students are encouraged to draw on their home-based genres of argument and explication, while practicing and honing new representational and discursive tools. These practices have been shown to result in robust, sometimes remarkable, academic achievements for working-class and middle-class students alike, and for students from a range of linguistic backgrounds.

Our studies of academically productive classroom talk—across a wide range of classrooms and grade levels—suggest that its critical features fall under three broad dimensions: accountability to the community, accountability to knowledge, and accountability to accepted standards of reasoning. Students who learn school subject matters in classrooms guided by Accountable Talk standards are socialized into communities of practice in which respectful and grounded discussion, rather than noisy assertion or uncritical acceptance of the voice of authority, are the norm. Forms of discussion that are accountable to knowledge and to accepted standards of reasoning are heavily discipline dependent. However, talk that is accountable to the community cuts across disciplines and creates environments in which students have time (and social safety) to formulate ideas, challenge others, accept critique, and develop shared solutions. Combining the three aspects of Accountable Talk is essential for the full development of student capacities and dispositions for reasoned civic participation (Michaels et al. 2002).

In the following sections, we consider each of the three facets of Accountable Talk separately, beginning with the facet we have found easiest to establish in classrooms and moving to the most difficult.

Accountability to the Learning Community

This is talk that attends seriously to and builds on the ideas of others; participants listen carefully to one another, build on each other's ideas, and ask each other questions aimed at clarifying or expanding a proposition. When talk is accountable to the community, participants listen to others and build their contributions in response to those of others. They make concessions and partial concessions (yes…but…) and provide reasons when they disagree or agree with others. They may extend or elaborate someone else's argument, or ask someone for elaboration of an expressed idea.

This community facet of accountability seems to be the most straightforward and simplest to implement in a classroom. Once introduced to the idea, teachers quickly find that a relatively small number of conversation openers or extenders seem to evoke the desired features of student talk. These include:

- Who can put into their own words what Keisha just said?
- Does anyone else want to add on?
- Can you explain what you meant when you said…?
- Take your time. We'll wait…
- Jorge, I haven't heard from you yet. Go ahead.
- Hold on. Let John finish his thought.

When teachers regularly use these and similar conversation guides, it is typical that, a few weeks later, students can be heard using the following kinds of statements on their own:

- I disagree with Nelia, and I agree with Jamal.
- Um, that… can you repeat that question again?
- José, that gave me an idea. Um, what he said at first, that you have to turn them into fractions…
- I wanted to add something. She was probably trying to say…
- I agree now with Alex because…

These kinds of conversational norms and practices go a long way toward instantiating a culture of deliberation—the kind of deliberation that Roth (2003) sought but failed to find in his reported visits to Swedish classrooms (and which are rare also in other countries, including our own). However, it is very important to note that in order for the students to begin using these forms of talk, there have to be interesting and complex ideas to talk and argue about. Implicitly or explicitly, teachers who have implemented these discourse strategies have shifted away from simple questions and one-word answers and opened up the conversation to problems that support multiple positions or solution paths.

Once this kind of talk from students appears, another interesting thing happens. Teachers start to remark that they are amazed at what their students have to say. "I had no idea they were so smart," is a commonly heard remark from teachers new to Accountable Talk. "I was amazed to hear X saying that. He's never talked before." "I was amazed by all the different ideas they came up with, and how they justified their ideas with evidence." It seems that simply opening up the conversation, with interesting and complex problems to support the talk, along with a few key talk moves, gives teachers more access to the thinking, knowledge, and reasoning capabilities of their diverse students.

Accountability to Standards of Reasoning

This is talk that emphasizes logical connections and the drawing of reasonable conclusions. It is talk that involves explanation and self-correction. It often involves searching for premises, rather than simply supporting or attacking conclusions. Earlier research suggests that this is something that people do quite naturally, although it is necessary to use tools of linguistic and logical analysis to detect the rationality of ordinary conversational discussions (Resnick et al. 1993). In a project aimed at uncovering the extent to which informal discussions meet accepted standards of reasoning, Resnick and Salmon and their colleagues conducted a series of studies in which groups of students discussed public issues on which they initially held divergent opinions.

It was not easy at first to find the logical thread in these discussions. They appeared disorganized and sometimes outright irrational. Topics were not explored in orderly ways. There were numerous interruptions and "talkovers." Participants did not always use carefully formed phrases or well chosen words. In other words, normal features of everyday conversation were masking the possible logical structure. The investigators developed a coding system that "took apart" the argumentation, identifying idea units (the content of an utterance or part of an utterance) and the function of the idea unit in the argument.

Charting these functions made it clear that the elements of argumentation were socially distributed as well as distributed over time. To understand the reasoning, it was necessary to take into account structures of conversation and then attempt to detect the logic within them. Once this was done, it became evident that participants in these discussions applied rules of informal logic to appropriate parts of utterances, rather than to each others'

utterances as whole. They often challenged premises, rather than directly attacking conclusions—a strategy that may be at the heart of the nonconfrontational, collaborative knowledge-building "feel" of most of the conversations. New arguments were actually built in the course of conversation.

Several other lines of research suggest that practice without direct instruction in reasoning standards or strategies can lead to improved interactive reasoning.[2] Even very young children, in trying to understand and influence the world around them, can build arguments or question the premises of others' claims. These ideas may be undeveloped, incomplete, or even incorrect. But young children have far more to build on than was recognized in the past.

An example of a teacher-guided discussion in a kindergarten classroom provides a compelling example of the possibilities.[3] As part of a unit called "Seeing Ourselves in Measurement," Ms. Martinez's kindergarteners were about to measure themselves to create a full-size height chart. Each student had a small photograph of him- or herself, and Ms. Martinez had a tape measure attached to the wall. Before they got started, Ms. Martinez said she had an important measurement question to ask them, and they had to come to a decision as an entire group.

Ms. Martinez: Should we measure your heights with or without your shoes on? Sit down in your circle time spots and let's discuss this as scientists. Think about it first by yourself for a minute, and then let's talk.

Hands went up. "I have an idea." "I know." Ms. Martinez waited until many hands were up. Then she said, "You're all going to get a chance to give us your ideas. But you have to listen really, really hard to what everyone says, so we can come up with a good decision." Ms. Martinez called on Alexandra.

Alexandra: I think we should do it with our shoes off because some of our shoes are little and some are big or like high up. That wouldn't be fair.

Ms. Martinez: What do you mean by fair? Can you say a bit more about that?

Alexandra: You know. Someone might be taller because of their shoes but not really taller. That wouldn't be fair.

Ms. Martinez: Does anyone want to add on to what Alexandra said? Or does anyone disagree?

Ramon: (Ramon spoke Spanish at home and was just beginning to learn English.) I no agree. Shoes all the same. All like this big. (With that he measured the bottom of his shoe and held up two fingers.) It make no difference.

Ms. Martinez: So let me see if I got your idea right. Are you saying that since we all have shoes on and they're all about the same size, it adds the same amount to everyone's height and so it *would* be fair? Is that what you're thinking?

Ramon: Uh huh, and no stand on tippy toes. (The kids laughed.)

Damani: I think take our shoes off because some shoes are taller. Look at your shoes! They're way bigger up. (He pointed to Ms. Martinez's shoes, which had two-inch heels.) And mine are short and Lexi's are tall.

[2] E.g., Deanna Kuhn's studies with low SES, minority adolescents, Kuhn (2005); studies of students discussing children's books, Anderson et al. (1997); studies of children's work in science, Michaels et al. (2008).

[3] This vignette is adapted from Michaels et al. (2008).

Damani pointed to his own shoes, which were slip-on sandals with flat heels, and then to Lexi, who was wearing shoes with thick rubber soles. By now several kids had their legs in the air, showing off their shoes.

Ms. Martinez: Okay friends, we have a disagreement here. What are we going to do to make a decision? Alexandra's saying that it wouldn't be fair and Ramon is saying it wouldn't make any difference. Damani says it would make a difference. How should we decide?

Kataisha: We could line up our shoes and measure them and see if they're all the same. But you can see that some of them are not the same, so I don't think we really need to measure them all. Lexi's are really big and mine are not so big. That wouldn't be fair.

Ramon said he changed his mind. Now he thought no shoes would be better.

In 10 min of discussion, the group had arrived at a consensus. Ms. Martinez was impressed. At first she had thought that a vote might settle things, but instead the students had used evidence and a shared sense of fairness. They were able to explain their reasons with evidence (the height of the heels) and challenge someone else's evidence with counterevidence. They even were able to propose a simple experiment to evaluate a particular claim (measure all the shoes). They were able to hear each other out, agree and disagree, and even change their minds as new evidence was introduced. As kindergarteners, they were able to reason about the idea of a "fair test," which later in their education they will be able to extend to the idea of holding variables constant.

Accountability to Knowledge

The reasoning in Ms. Martinez' class was possible because the children, considered as a group, already had some key knowledge about measurement (measures have to begin at the same point of origin) and also had empirical information about differences in their shoe heights available. In most academic discussions, however, students lack fundamental knowledge. Indeed, a key goal of the discussion is often to help students develop this knowledge, along with the academic language and reasoning skills they need to use it well.

This brings us to the most complex and difficult of our three accountabilities—accountability to knowledge. Talk that is accountable to knowledge is based explicitly on facts, written texts or other publicly accessible information that all individuals can access. Speakers make an effort to get their facts right and make explicit the evidence behind their claims or explanations. They challenge each other when evidence is lacking or unavailable. When the content under discussion involves new or incompletely mastered knowledge, accountable discussion can uncover misunderstandings and misconceptions. A knowledgeable and skilled teacher is required to provide authoritative knowledge when necessary and to guide conversation toward academically correct concepts.

An example from a third-grade mathematics class shows how complex this process can be (Chapin et al. 2003): Ms. Davies has given her third-grade students a series of numbers, and in a whole group discussion has asked them to say whether the numbers are even or odd. The day before they had established that if you can divide a number by two with no remainder, then it is an even number. Paulo has tackled the number 24. His contribution is less than completely clear.

Ms. Davies: So Paulo, is twenty-four even or odd? What do you think?
Paulo: Well, if we could use three, then it could go into that, but three is odd. So then if it was … but … three is even. I mean odd. So if it's odd, then it's not even.

Ms. Davies "revoices" Paulo's contribution, attempting to clarify if he is indeed claiming that 24 is an odd number:

Ms. Davies: OK, let me see if I understand. So you're saying that twenty-four is an odd number?
Paulo: Yeah. Because three goes into it, because twenty-four divided by three is eight.

Rather than rejecting Paulo's claim, which though wrong is presented with an argument that appears to support it, Ms. Davies asks if anyone in the class understood what Paulo has said and can restate it in their own words. One student responds, making Paulo's reasoning about "evenness" more explicit by bringing up the fact that there are no remainders.

Ms. Davies: Can anyone repeat what Paulo just said in his or her own words? Cyndy?
Cyndy: Um, I think I can. I think he said that twenty-four is odd, because it can be divided by three with no remainder.
Ms. Davies: Is that right, Paulo? Is that what you said?
Paulo: Yes

The next step for the teacher is to actively solicit other opinions and set the two views side by side.

Ms. Davies: Miranda, do you agree or disagree with what Paulo said?
Miranda: Well, I sort of … like, I disagree?
Ms. Davies: Can you tell us why you disagree with what he said? What's your reasoning?
Miranda: Because I thought that we said yesterday that you could divide even numbers by two. And I think you can divide twenty-four by two. And it's twelve. So like, isn't that even?
Ms. Davies: So we have two different ideas here about the number twenty-four. Paulo, you're saying that twenty-four is odd because you can divide it by three with no remainder?
Paulo: Uh huh.
Ms. Davies: And Miranda, you're saying that it's even because you can divide it by two? Is that correct?
Miranda: Yes.

Finally, the teacher returns the argument to the whole group carefully waiting for broad participation.

Ms. Davies: OK, so what about other people? Who would like to add to this discussion? Do you agree or disagree with Miranda's or Paulo's ideas? Tell us what you think, or add on other comments or insights.

(One student raises her hand. Forty-five seconds go by as Ms. Davies waits; slowly nine other hands go up. One is Eduardo's, a student who is learning English as a second language, and who rarely says anything.)

Ms. Davies: Eduardo. Tell us what you think.
(15 more seconds go by.)
Eduardo: Yes, I agree with Miranda's idea, because the only way you told us to find out if something is even is to divide by two. And we can divide twenty-four by three, and we can also divide it by four. And we can divide it by six, too. And you don't get no extras, um… remainers. So I think we should stick with two only.

Some will see in this example a productive attempt at sensemaking. Others will see a wrongheaded decision to grant class time to an incorrect idea or misconception. In our view, this opposition is itself misleading. In the following section, we develop the view that sensemaking and accepted or authoritative knowledge can develop synergistically.

Is Discussion Antithetical to Authoritative Knowledge?

Of the three facets of accountability, accountability to knowledge is—perhaps surprisingly—the most difficult to achieve and the most contested. Some educators argue that the teaching and accumulation of facts is trivial, and teachers should not "tell" students an answer or teach them isolated factoids. Others say factual knowledge is foundational, and that before students can reason cogently they must acquire a great deal of factual information in any given domain. Getting the facts right and engaging discursively are often treated as if they were mutually exclusive. In the "curriculum wars," one group stresses accurate knowledge (to be acquired by direct instruction and practice), the other the processes of engagement regardless of "correct" facts. The dichotomy fails, however, under the lens of cognitive research on reasoning and knowledge acquisition (Resnick 1987). Good reasoning, hence good discourse, depends on good knowledge. Acquiring good knowledge depends on active processing and good reasoning. Knowledge and reasoning develop best in tandem; neither precedes the other. Yet it is no easy task to orchestrate this interdependent development. Indeed, teaching good knowledge using discursive methods is perhaps pedagogy's greatest challenge.

When teachers use Accountable Talk (or any pedagogy that rests on deliberative discourse, sensemaking, and reasoning) to talk about math, science, or any subject with established bodies of knowledge, they find that understanding of complex concepts does not happen instantaneously. As had happened in Ms. Davies' class, achievement of understanding requires active processing by learners. Inevitably, discussion of ideas that are wrong, mistaken, or incomplete will be entertained. When this happens, as it did in Ms. Davies' discussion, it creates challenges for all the stakeholders. Proponents of "mathematical correctness" (such as members of the press who do not know much about teaching math) are often outraged that children are considering a wrong idea. Math and science educators and researchers (even within the groups who promote discussion) differ in their views about how long to sustain incorrect ideas, how much students should construct ideas for themselves, when and how to "tell" students the correct answer.

We argue for a productive middle ground, where robust reasoning and systematic organization and accumulation of knowledge can develop symbiotically, evident in the example with Ms. Davies' students, as the students participate in carefully designed forms of classroom talk. In understanding such talk, it helps to distinguish between knowledge that requires direct transmission and authoritative sources and knowledge that can be acquired by "figuring things out" (cf. Chapin et al. 2003). A similar idea has been

discussed by a number of socioculturalists (Wertsch 1991; Wells 2007), building on the distinction Lotman (1988) develops in describing two functions of text: monologic text versus dialogic text—ideas to take without challenge versus ideas to think with. In Accountable Talk, both monologic (authoritative) and dialogic discourse have their place.

Interdependencies of the Three Facets of Accountable Talk

The three facets of Accountable Talk—community, knowledge, and reasoning—are analytically separable. Imagine a discussion in a classroom where the students are politely listening to one another and saying things such as, "I want to add on to what Everett just said," but where there is no accountability to knowledge or reasoning. Students say whatever they want, and one opinion is treated the same as any other. It is also possible to imagine a discussion where accountability to reasoning is in evidence, i.e., where the students are building an argument, with premises and evidence and counterexamples, but where their facts are simply wrong.

In practice, however, the three facets are inextricably intertwined, interdependent, and must co-occur if discourse is to promote academic learning. Why should this be the case? First, consider the distinction between accountability to knowledge and to reasoning. Knowledge is most easily identified as agreed-upon facts. Yet disconnected facts are a weak basis for a reasoned argument. What makes facts useable is their connection to other facts, tools, and problem-solving situations, that is, the network of concepts, relationships, and the norms of evidence characteristic of a reasoned argument taking place within a coherent discipline or practice.

Consider next the distinction between accountability to community on the one hand and accountability to both knowledge and reasoning on the other. One might think that surely this is a distinction that would hold up in practice, with social concerns of politeness and civility characteristic of one facet and intellectual concerns relating to academic rigor or content characteristic of the others. As it turns out, accountability to community is needed in order for accountability to knowledge and reasoning to find their full effect. Without accountability to community in place, students will usually not take the risk of going public with good but as yet poorly formulated ideas, ideas that might be wrong but productive, or ideas that might challenge the status quo. Conversely, if accountability to community is in place without the other two, discussions will be polite but empty of content.

But there is an even more important sense in which accountability to community is inextricably linked to accountability to knowledge and reasoning. Disciplinary knowledge advances through a process of peer review and critique. Ideas must be explicated so that others can interrogate them, challenge them, build upon them, or support them. This is especially clear in the advancement of scientific knowledge and theorizing. Many scientists have commented on the role of the community in building an evolving and cumulative body of accepted (but always provisional) "truths." Nobel Laureate and physician Salvador Luria, as but one example, discussed the importance of a disciplined explication of one's procedures, models, evidence, and reasoning, and a rigorous process of peer review in adjudicating whose ideas are considered central and important, and whose are discredited. Advancement of scientific knowledge depends, in large part, on the community's validation of some ideas as more deserving of status, and serious consideration, than others (Luria 1984).[4] Accountability to community is thus a mechanism for guaranteeing access

[4] We are indebted to Courtney Cazden for bringing this point to our attention.

to the conversation and a place for the voices of newcomers, but it is also a mechanism for identifying those ideas or lines of thinking that show promise while sifting out ideas that the community has determined to be nonproductive.

Finally, the three facets of accountability often cannot be distinguished in the actual talk itself. It is rarely possible to examine a transcript and code utterances as belonging to one facet or another. There is no one-to-one mapping of linguistic forms (utterances, such as "Say more about that" or "Do you agree with what Jorge just said?") onto interactional functions (the work that a particular utterance might accomplish, such as holding students accountable to the learning community or accurate knowledge). There is instead, as linguists from Sapir to Searle have pointed out, a many-to-many mapping between forms and functions. The same form can accomplish many functions and one function can be accomplished by many linguistic forms. Put differently, a single utterance can accomplish multiple functions at once, and the very same words can accomplish different functions in different contexts. In the example transcript on odd and even numbers, when Ms. Davies asked whether anyone could repeat what Paulo had just said, she could be argued to be serving accountability to community, knowledge, and reasoning through one move.

A Cautionary Conclusion

The idealized versions of Accountable Talk and deliberative discourse have much in common, in spite of their different origins. Our 15 years of experience in classrooms working with the practices described here have shown us some of the challenges faced by teachers who try to implement these forms and norms of discourse. We suspect that the same challenges may await philosophers and social scientists who are contemplating the value of deliberative discourse for democratic education and broader civic participation. In both arenas, political and pedagogical, failure frequently stems from the details of interaction or the contextual realities that overcome the ideal envisionment. Thus we will conclude with some remarks about such problems. Without careful consideration of them, the potentials of deliberative discourse and of Accountable Talk are likely to remain unrealized in many settings.

The most striking challenge lies in the fact that the Accountable Talk discourse norms are differentially available to students in their homes and communities. Some students, largely those from homes with high levels of Western education, come to school well prepared to use these forms of talk and use them with facility and eloquence; others find them to be unfamiliar, or even in conflict with their home or community norms. Such students sometimes use the target forms and norms of discourse haltingly or resist them altogether. Some students dominate; others are silent.

We will provide just one example, taken from O'Connor (1996), although we have witnessed many. It took place in a sixth-grade classroom in the early 1990s, in a district with an extremely diverse population of students. This classroom included students whose parents taught at the local university, students who had recently been homeless, and everything in between. English language learners included children of high officials in foreign governments and children of uneducated refugees. The classroom teacher had an outstanding ability to orchestrate the kind of classroom discourse we describe in this chapter, and, in fact, her practices influenced our thinking over the years (O'Connor et al. 1998).

In this example, three girls and one boy are engaged in small group discussion about a hands-on experiment designed to support investigation of ratios and proportional reasoning. The experiment involved mixing various ratios of sugar and lemon juice to make

lemonade concentrate. At one point, one girl in the group pointed out that their procedure was flawed and that they needed to remix the concentrate. As the girls began to consider the value of the suggestion—was it really necessary, would it add validity to their results—the boy objected: it would take too long; it wasn't an important point. The disagreement escalated and the boy shouted "Look! I'm not getting a million dollars from the government to do this! This is just a half hour math class!"

This utterance, which shut down the group work, crystallizes some features of this boy's world view. This boy's parents are both physicians. He knows what a federal grant is, and federal grants are real—classroom discussion is not real. Deliberative discourse for him is not a moral obligation. It is rather a politeness norm, to be adhered to when possible. On the other hand, transcripts of discussions throughout the year make it clear that this boy has a great deal of skill in questioning premises, making claims, bringing counterexamples, and engaging in other aspects of talk that are described as part of Accountable Talk and deliberative discourse.

What is missing for this boy is the belief that all parties to this discourse are equally entitled to contribute and that their contributions matter. The teacher is masterful in setting up the norms as reciprocal social obligations and enforcing standards of accountability to the community in large-group discussion. Yet her influence can only go so far with this child whose family provides access to a highly valued public discourse context.

The point of this example is to demonstrate that all social relationships are in play in the accomplishment of deliberative discourse—those between teacher and student's parents, between teacher and student, and between student and student. As O'Connor (1996, p. 496) summarizes:

> … social relationships of various kinds can work against the desiderata of "group sensemaking" and "negotiation of meaning." In this realist scenario, … (p)eers do not respect each other's points of view, but rather ignore them or even expend energy defeating them, not for any intrinsic lack of merit, but solely because of their sources. … Even problem-solving activities or pedagogical practices themselves, as implemented by the teacher, can be resisted by students for vague reasons having to do with their symbolic qualities or their perceived social histories.

Our experience suggests that these issues are pervasive, and present one of the biggest obstacles to using these forms of discourse as the medium of teaching and learning. Socioeconomic privilege is only one dimension of difference. For many students, the forms and norms of deliberative talk require individuals to depart from home-based norms that are associated with a complex amalgam of culture and class. In many of our classrooms we have found that girls from a variety of backgrounds have been socialized to view the asking of questions or the raising of objections as something that girls do not (*should* not) do. Lampert et al. (1996) also describe the personal discomfort middle-school girls express in the midst of classroom discourse that shares the properties of both Accountable Talk and deliberative discourse.

These realities have led us to theorize, empirically study, and document the actual work that is required—by both teachers and students—in explicitly establishing the norms for such discourse practices. Our observations and findings, we believe, have significance beyond the classroom—perhaps even significance for the realization of deliberative democratic discourse in civic life. Starting from the classroom, we have learned that from some students' perspectives, there is a coercive aspect to this discourse; it is not what they are familiar with. In classrooms with great sociocultural diversity, some students will be confronted with peers who already control the discourse norms, having acquired them at

home. Students with prior access to the discourse may be quite facile, using it defensively as well as productively. On the other hand, students encountering the discourse norms for the first time will experience their own lack of facility as a handicap, one that parallels many other handicaps in a stratified society. Their contributions may be devalued by those who are more expert. Finally, the teacher faces this complex dilemma each day, which cannot be legislated or commanded out of existence.

In the classrooms that use Accountable Talk effectively, teachers have been successful at establishing norms and building a discourse culture that involves risk-taking and the explicit modeling and practice of particular talk moves. Over time (and it often takes many months of concerted effort), new forms and norms of discourse are developed and students from widely varying backgrounds begin to listen to one another, build on one another's ideas, and participate productively in complex deliberative practices. As we said earlier, robust academic learning for students of all backgrounds has been documented in these classrooms, across a range of grade levels and subject areas. However, invariably in these cases, there was a strong and authoritative teacher who stood behind the discourse forms and norms of Accountable Talk. Her authority was both institutionally derived and personally earned.

What the classroom can show us is that the gap between the idealized and the realized is daunting.[5] It is never possible to divorce these interactional norms from participants' feelings and beliefs about their symbolic meaning as specific social practices. In the classroom, we have learned much about how these norms must be taught and carefully socialized in order to ensure participation by all and for all. The parallels with broader civic discourse are clear. Deliberative practices are an interactional accomplishment, and shared norms undergirding them have to be established—either negotiated or mandated. But there are important discontinuities between the classroom and larger society as well. In local, national, or international contexts, there may be no analogue to the teacher—no agreed-upon figure of authority to establish the norms and negotiate the ensuing conflicts about them.

It is encouraging to think that if students are socialized early and intensively into these discourse norms in academic settings, they will internalize them and carry them into the civic sphere. If carried out on a wide scale this might become a societal mechanism for preparing citizens to participate in democratic deliberation in civic arenas. However, though it seems we have made some progress in individual classrooms working closely with teachers, there is much we still do not know about how best to set up the conditions for truly democratic discourse on a wide scale. Nevertheless, the issues we grapple with in classrooms will recur in the wider political arena and will have to be faced by theorists and practitioners seeking to bring idealized forms of deliberative discourse into realization.

[5] The same observation was made almost two decades ago by Ellsworth (1989), in a critique of Critical Pedagogy, a distant intellectual cousin of the current work on deliberative discourse. The proponents of critical pedagogy (Freire, Giroux, McLaren) also gave a valued place to Habermas' ethical discourse community and saw a similar form of rational discourse as the way to bring about the new society and the new man and woman. Ellsworth attempted to import these norms into an anti-racism class she taught at the University of Wisconsin and found that many students did not find the norms empowering or even helpful in finding ways to decide on their own group course of action. Their own experiences and norms, and their views of the meaning of the new norms, created barriers to joint action. As the classroom teacher, Ellsworth faced the brunt of their subjective experience of the discourse norms she had intended to put in place.

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