

Schools, communities and pedagogies: Diverse possibilities.

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Abstract

This paper provides a sociocultural account of learning within the context of contemporary schooling practices, and critiques recent attempts to change the classroom into a "community of learners". The paper argues for a multiple and diverse re-framing of the notion of community. Rather than a "community", we need to theorise the site of learning as involving multiple and intersecting communities. The vision for re-forming schools needs to be based on the notion of communities for difference and diversity, rather than a community with clear boundaries for exclusion and inclusion. Specific studies are examined which exemplify how teachers can build communities for difference by allowing student space to resist as well as participate, and by valuing the resources that students bring with them to learning tasks.

Community and sociocultural pedagogy.

"Community" is a key aspect of a sociocultural approach to pedagogy. Below I want to raise a number of cautions regarding "community" but it is worthwhile initially considering the diverse range of researchers who have placed community at the centre of their pedagogical projects. Ann Brown (1994) chronicled her journey from a psychologist interested primarily in individual learning strategies and processes, to a sociocultural researcher interested in designing learning communities. Her educational project - a Community of Learners - has been based on engaging students in interpretative rather than transmissive learning, and in collaborative forms of inquiry using formats such as jigsaw, reciprocal teaching, instructional conversations, and peer tutoring. Her goal was to create a classroom culture of tacit beliefs and practices that sustains ongoing student inquiry across the range of curriculum areas. The lived culture of the classroom becomes in itself, a challenge for students to move beyond their established competencies, and enter more fully into modes of inquiry and values that are exemplified in the actions of peers and teachers.

Similarly, Scardamalia and Bereiter (Scardamalia, Bereiter & Lamon, 1994) initiated their Computer Supported Intentional Learning Environments project (CSILE) as an attempt to develop students' metacognitive and self-regulatory processes, but after observing the CSILE classrooms for some time, they changed focus to examine the collaborative processes of knowledge-making that were facilitated by inquiry-based learning with networked computers. Computer technology provided the means for students in CSILE classrooms to work on common problems across a period of time, to add their own ideas to the accumulated record of inquiry, and to comment on the ideas of other contributors. The students in these CSILE classrooms became aware of and commented on the authorship of

ideas by fellow students, and the necessity to sustain collective inquiry across time if progress was to be made.

Community is central, also, in analysing the incorporation of computer technologies into the classroom. Technologies transform the established ways that individuals interact with the material as well as the social world. Wertsch (1998, p26) notes that the notion of individual is redefined not as the individual set apart, but as the "agent operating with mediational means". I would add here that in classrooms the unit of analysis also must include collaborators (whether they are fellow students or the teacher) who interact with the individual. There is a complex set of intersecting mediations here that cannot be reduced or separated - technologies mediate interpersonal interactions as well as interactions between people and the material world. To give an instance of this multiple mediation consider the following description of upper secondary students using a graphics calculator.

We have recently observed such transformations while videotaping a group of upper secondary mathematics students using graphics calculators to solve complex matrix algebra problems. These students were able to achieve in a few minutes solutions to the problems that would have taken them many hours of individual work by hand. Beyond efficiency, however, the graphics calculators transformed the task in various ways. For example, students held up the screens of the calculators to show their progress to nearby students; some students who were confused moved around the classroom to watch a fellow student work through the process on the screen; students engaged in quiet conversation with the calculator as they considered the next procedure to enter into the sequence of moves; students expressed strong emotions when they made mistakes or when the procedure worked well - we observed students hitting their heads on the calculator in mock punishment (of themselves and the calculator), or hugging the calculator when it provided the desired result. Some students engaged in triumphant "high fives" after getting the same answer on the screen, or called out "Yes, yes, yes!". There is the sense here that the calculator entered into the interaction as a participant, as a partner doing half the work, as a dramatic prop in a playful and public activity.. (Renshaw, 1998)

It is observations such as these that give some insight and substance to the view that learning is a process of appropriating cultural tools that transform tasks, and the relationship of individuals to the tasks, as well as to the other members of their community.

By appealing to *community* these different researchers mentioned above are indexing the centrality of communicative practices and cultural tools in the social construction of knowledge. They are also indexing the view that knowledge is a tentative state - a working consensus between members of the community which remains open to challenge and reconsideration. Learning is the process of entering into the community by adopting its practices tools and beliefs in order to contribute critically to its ongoing conversation. The point to consider here also, is that community is neither static nor limited in time and space, since communities can be created on-line with participants calling in from distance parts of the world to contribute to the conversation

Critical dilemmas: Community and compliance

There are a number of dilemmas that arise in using the notion of community as the guide to new pedagogies.. The notion of *community* tugs at our need to belong, to be secure, to sense continuity from generation to generation. In our own *community* we can feel at ease, at home, and within our comfort zone as we interact confidently with others, safe in our

implicit grasp of the tacit norms of our local culture. But *community* also entails exclusion of people from complete membership, unequal access to the varied forms of community capital (material and cultural) and the maintenance of barriers to outsiders. Community as singular rather than plural, suggests a place of uniformity and homogeneity, a state of mind where clear-cut divisions are maintained between members and non-members. In contrast, we can imagine communities "of and for difference", where membership boundaries are blurred and permeable, where resources are made available more equitably, and where processes of marginalisation are resisted and challenged.

If we consider educational institutions as composed of discrete knowledge communities, then learning might be equated with simply conforming to existing community standards and practices. Sullivan (1995) captures this dilemma in critically reviewing Bruffee's book on collaborative learning (1993). Sullivan summarises Bruffee's view as follows:

Educational institutions are collections of knowledge communities, he asserts, each community composed of knowledgeable peers. Learners seeking entry into the communities must hold "boundary conversations"; they must inhabit transitional communities in which they practice the "craft of interdependence". As they strive for consensus in these peer groups, their conversation will be marked by dissent and negotiation. In this dynamic push and pull of meanings, in this arbitration of different frames of experience and modes of expertise, learners gradually become acculturated to the language games of the academy itself, to the disciplinary languages, mores, and values of the knowledge communities they wish to join. Learning is thus the collective effort towards consensus, knowledge the consensus itself (Sullivan, 1995, p951).

The problem with this version of sociocultural pedagogy is that the academy, the authoritative knowledge community, is theorised as separate from the push-and-pull of negotiation and contest. Also, learners are separated from the academy, corralled in transitional communities, from where they can gain entry only when they play the language games of the academy, and conform to its mores and values. This rather elitist and canonical conception of knowledge contrasts with the sociocultural emphasis on learning as a transformative and situated process of appropriating cultural tools for collective and individual purposes.

Critical dilemmas: Community politics and inclusion/exclusion

Another dilemma that arises from "community" is the benign cooperative tone that is conveyed about the process of learning. It is necessary to consider issues of power, the politics of gaining entry into communities, and the subtle and explicit ways that membership might be restricted. Bruffee grants entry to newcomers based on their adopting the language games of the academy. This privileges the epistemological aspect of learning - what we can say and do, and how we say and do it. If we consider the issue of identity - who we are, and who we represent - then the politics of entry and membership becomes salient. When a newcomer speaks (or writes or contributes to the community in any way), two queries might follow - What was said? Who said it? The discordant voice, the different voice, the voice that struggles to be heard and accepted within the community, might be identified more on the basis of who the speaker is and represents, rather than what is being said. These two aspects of voice are interrelated in complex ways and open to myriad forms of interplay. Bahktin addressed these issues in terms of the notion of the privileged voice. In order to be a member of a community, and gain status and influence, one needs to speak in ways that are accepted and valued by the community.

For example, Wertsch (1991) gives an account of a young boy, Ian, who convinced his grade four classmates to accept his solution to a science problem by couching his contribution in the hypothetical and general stance that typifies the 'voice of official science' even though his actual explanation was confused and contradicted the first-hand experiences of the other students. Interviewed later, many students commented that Ian had sounded convincing even though they had forgotten the details of what he had said. Ian was convincing not only because he could sound like a scientist, but for a range of other aspects of his identity that were conveyed through his speech. As Wertsch (1991) noted in commenting on this episode:

...the speech genre [of official science] considered in isolation does not confer automatic power or status on those who appropriate it. One has no difficulty imagining situations in which other children's attempts to ventriloquate through this speech genre would be met with incredulity and amusement in place of the respectful reception Ian's appropriation met (p.138)

This example illustrates the general point that credence and status are given to speakers on the basis of their personal and situated 'voices'. It is important here to recognise that each situated voice conveys information regarding the speakers' gender, sexuality, class, ethnicity and so on, which provide multiple inflections to how the speaker's contributions will be heard and accorded status and credence by others.

Each of us could speculate about the situations Wertsch refers above - situations where speakers might be ignored or marginalised because they sound unconvincing due to their gender, class, ethnicity, and so on. Community should remain a key notion in sociocultural pedagogy, but it needs to be theorised as centrally concerned with the politics of identity. A learning community must be a reflexive and critical community where the processes of knowledge-making as well as the processes of inclusion and exclusion are topics of public consideration and debate.

Critical dilemmas: Community, capitalism and tacit social practices

A related dilemma has recently been identified by Gee, Hull and Lankshear (1996). They argue that sociocultural pedagogy, as exemplified in community of practice classrooms, has already been appropriated to serve the purposes of new fast capitalism. So, rather than offering the framework for a socially critical pedagogy, the notion of community simply offers an efficient means of producing new capitalist subjects. In brief, their case rests on the hidden curriculum of "community", and the alignment they see between the practices of new fast capitalist workplaces and the tacit cultural practices embedded in a community of learners. Both contexts highlight collaboration, team effort and commitment, distributed expertise, playful engagement in tasks, the willingness to change teams and work productively on new projects, and trust in the efficacy of new technologies.

Their critique reveals considerable anxiety about the emphasis given by some sociocultural scholars to the tacit culture of classroom communities, and the lack of critical reflection implicated in the taken-for-granted. Tacitness has to be emphasised, however, because it conveys the idea that learning is not an add-on, detached from the real concerns of students' daily life. Rather, learning is embedded in the social practices of daily life; learning is engagement in these social practices, and is most powerfully demonstrated in the taken-for-granted culture of the classroom. Gee and his co-authors have provided a thoughtful cautionary tale about the power of capitalism to absorb critical voices, and appropriate innovative social formations for profit-making. However, their critique doesn't undermine the importance of community *per se* in a sociocultural pedagogy, and the notion

of tacitness as revealing powerful learning. Rather, their critique highlights again the importance of reflexive and critical analysis as part of the public practices of the community.

Community of learners: Pedagogy for difference and diversity.

Green (1998) argued recently that the pedagogy of New Times should be a pedagogy for difference - not just the accommodation of student differences but the production of difference. At face value, this confronts and challenges sociocultural pedagogy where notions of community, intersubjectivity, and collaboration are important. In the present paper I have argued for a particular interpretation of sociocultural pedagogy, a critical reading that retains the "ZPD" and "Community", but foregrounds issues of difference by considering agency and power. Spaces need to be constructed in schools where students concerns and their diverse linguistic and social practices can be expressed, not to naively celebrate expression for itself, but to provide the conditions for socially critical forms of discussion, reflection, and action. Along with Green, therefore, I would argue that we need a pedagogy for difference, so that when students enter schools they do not have to leave their experiences and concerns at the gate, and they become sufficiently engaged, curious, and critical that they can appropriate powerful social discourses for their individual and collective purposes.

Glimpses of a sociocultural pedagogy for difference

I want to consider at this point two recent accounts of classroom practice that illustrate what a pedagogy for difference might entail within a sociocultural perspective. Ballenger (1997) described a science class where Haitian students from poor families were invited to participate in "science talks" - whole class discussions based on everyday experiences with phenomena such as skin colour, mould, etc. In these discussions the students were invited to draw on experiences at home as well as from specific classroom activities. These are familiar teaching strategies and somewhat passe. However, given support by the teacher to speak in their familiar Haitian Creole and encouraged to talk broadly about the issues, the students introduced concerns that were not strictly scientific. For example, in the discussion of mould, some students spoke passionately about issues such as personal cleanliness, morality and poverty. So what did the students learn from talking outside the strict realm of science? Ballenger suggests that they learned to populate scientific discourse with their own voices, that is, they learned to weave together scientific and everyday discourse into a local hybrid that reflected their specific circumstances. Ballenger notes that this mirrors in many ways the actual practice of the scientific community where personal values, interests, and concerns are present at various stages of the scientific work but are obscured in the final product. From the strictly scientific perspective, Ballenger shows also that the participants in these discussions learned a great deal about the language and practice of science, including a strong desire to inquire and question rather than to seek closure. One student, when asked what he had learned, "laughed and answered in Creole, 'It's not what I learned. I have a question to ask you.'" he then asked, ' How did the mould manage to become green, it became yellow, white, black, brown?' " (Ballenger, 1997, p.10). This account of one science classroom is familiar in many ways, but nonetheless it provides evidence, that a pedagogy which valued diversity and local knowledge, provided the opportunity for students to appropriate scientific discourse, not as an alien and abstract form, but in a personal and relevant manner.

The second illustration is drawn from classroom based research that I have been conducting with Ray Brown. For a number of years we (Brown, 1994, 1997; Brown & Renshaw, 1995, 1996) have been exploring how to reconstitute everyday classroom practices in the upper primary school using a sociocultural perspective as a tool, both to generate new practices and to critically reflect on change as it occurred. One strategy we've used is

"collective argumentation", a small group format that is designed to extend the range of speaking opportunities available to students in the classroom. Collective argumentation is organised around a key word format - represent the task or problem alone, compare representations within a small group of peers, explain and justify the various representations to each other in the small group, reach agreement within the group, and finally present the group's ideas and representations to the class to test their acceptance by the wider community of peers and the teacher.

Each step in the key word format challenges the students to adopt different speaking positions or voices. The initial speaking position is personal - "My representation". This step of representing alone, is important for creating a diversity of possible approaches to the task. Students become aware that different task interpretations and emphases are commonplace and that fellow students can have quite different but equally adequate ways of considering the task. It should be recognised that the representations produced by the students even at this initial step of collective argumentation are not simple expressions of a personal voice. Each personal voice is already multivocal, since diverse experiences at home, at school, and from the media will be drawn upon in constructing the representations.

The small group processes that follow this individual work are designed to move students to an agreed representation (or set of representations) of the task. Here the speaking positions alternate between explaining or defending personal representations and moving towards a common view. There is a movement from "my ideas" and "your ideas" to "our ideas". In the process of collective argumentation, students are required to ensure that all members of their small group understand the common approach to the task. That is, each member of the group must have a sense of their shared authorship of the group's ideas. Finally at the last step of collective argumentation, where the small groups present their ideas to the rest of the class, the students have the opportunity to explain their ideas to a broader audience. The speaking position here is similar to that of the teacher, affording the students both the status of "expert" as well as the challenge to present and defend solutions to an audience of peers.

To illustrate how collective argumentation can create a space for difference in the classroom, a short extract from one episode is presented below where Angela is reporting her group's ideas to the whole class. The collective argumentation task had been to represent the idea of infinity. Prior to Angela's presentation, a number of other groups had already presented their ideas to the whole class - these consisted of drawings of lines, spirals, circles, and other closed geometric shapes which were meant to convey the idea of infinity as endless *space* and *distance* - with neither beginning or end. Angela's presentation of her group's ideas begins by focussing on *time*., and she uses the image of a clock with a very large array of hands to convey the idea of infinite *time*.

Angela: We drew a clock and we had, um, about, an infinite number of handles, because time goes on for an infinity. That's how we represented that, because time goes on.

Teacher: I didn't understand that phrase, could you say it again please.

Angela: Well, we drew a clock and we had an infinite amount of handles, the little things that go around, because time never stops. It just keeps going around.

[Teacher clarified with Simon and Angela the term for the hands of the clock, and then Angela continued]

Angela: Time has no beginning and no end like numbers. And we had the dictionary meaning which says this - infinity has the state of being infinite, infinity of the universe, infinity of space, time, quantity - so infinite space, so, it's so that you can't describe it. Um, (infinite) mass is the concept of increasing (mass) without volume. So we thought that we would make a meaning of our own. So we thought that infinity means everlasting number, object and the universe. So infinity is an everlasting thing.

[Teacher recalled the key ideas from Angela's presentation.]

Angela: Infinity can(not) be determined or explained over a vast amount or period of time, because it is an everlasting idea. And I made this up. I think the word infinity is similar to life. No one can fully explain it and just like infinity it has many definitions. We can't really explain life and we can't really explain the word infinity.

Angela's presentation to the class shows an explicit awareness that particular ideas are related to the stance or position of the speaker - notice how Angela uses "we" "I" "you" and "no-one" to signal her adoption of a series of different speaking positions. For example she adopts four different stances as shown below:

- (a) the authoritative voice of the dictionary, (*"And we had the dictionary meaning which says this"*) ;
- (b) the voice of her group (*"so we thought that we would make a meaning of our own"*) ;
- (c) a personal voice (*"..And I made this up. I think the word infinity is similar to life."*) ;
- (d) the generalised voice of an expert (*"No one can fully explain it and just like infinity it has many definitions. We can't really explain life and we can't really explain the word infinity"*). "No one" and "We" convey Angela's intention to speak authoritatively not on behalf of her small group, or personally, but generally on behalf of humankind.

Angela's presentation reflects the social practices and dispositions that we (Brown & Renshaw) had envisaged in initially designing "collective argumentation", and provides I hope, another glimpse of what a pedagogy for difference might entail. Namely, that students be made aware through the social practices of the classroom that knowledge is always constructed from a particular viewpoint and that the same idea can be expressed in many different ways depending on the context, the audience and the speakers own goals.

Conclusion

In this paper I have suggested that it is necessary to move beyond the individual per se as the object of investigation, to the investigation of the composite sociocultural entity - "the individual using cultural tools in interaction with others". The advantage in adopting this awkward referent for the focus of our research is that it constantly foregrounds the embeddedness of human action within specific cultural contexts, and draws attention to the way that our thinking and problem solving are mediated by a complex array of semiotic and physical tools. It also foregrounds the interplay between communities, technological change, the transformation of interpersonal relationships.

Sociocultural pedagogies are based on a set of assumptions about the centrality of communicative processes, of interpersonal relationships, and community memberships in the formation of individual capabilities and dispositions. These processes, relationships and memberships are diverse, culturally embedded, and dynamic. It is not possible or desirable, therefore, to list a set of classroom practices that could be labelled "sociocultural." However, sociocultural pedagogies must be concerned with *difference* - valuing difference in terms of what students bring with them to schools; valuing the different approaches to classroom activities that students create in interaction with others; and valuing the different stances or voices adopted by students as they explore topics together.

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Table 1: Contrasting core claims of psychological and sociocultural theoretical perspectives

Psychological perspectives	Sociocultural perspectives
The learner is a natural subject whose essential features transcend culture and history.	Learners are embedded in and constituted by cultural and historical processes .
Structures and processes of the mind are the focus of research.	Cultural tools, activities and social processes are the focus of research.
Structures and processes of the mind emerge in a series of universal developmental stages.	Different patterns of engagement in cultural activities mark changes in development.
An optimal stage of development can be described and used as a metric for comparing across learners.	Development is relative to culture and history, and open to new transformations.
The self can be known (as a concept) and is constructed through a series of developmental stages leading to greater stability and consistency.	The self is constituted by engagement in cultural activities - it is a discursive phenomenon that is changing and contradictory.
Cognitive processes and states of mind are revealed by speech and other forms of representation	Speech and other sign systems are appropriated to enable individual engagement in cultural activities
The goal of teaching is the development of non-contradictory and rational systems of thought.	The goal of teaching is to engage learners more fully and critically in cultural activities.