“WITH, NOT FOR”: EPISTEMIC RELATIONSHIP IN 21ST CENTURY LITERACY AND LEARNING

by

George Lovell Boggs

Under the Direction of James Marshall and Donna Alvermann

Abstract

This essay introduces a dissertation about school-based, collaborative action and 21st century literacies. Methodological and theoretical constraints have tended toward the use of collaboration and 21st century literacies as black boxes, obscure yet necessary components in classroom productivity, not yet including significant inquiry into the realization of the complex array of proficiencies and conceptual understandings that ostensibly position students for success in the as yet unknown industries of tomorrow. Such inquiry is not only important as a way of carrying forward social justice evaluations of the method, but also as a starting point for examining 21st century literacy mediated learning. This dissertation approaches opportunities for such inquiry in three ways: First, it explores a methodology for conducting research among students engaged in collaborative problem solving that can help teachers facilitate opportunities for purposive writing as a ways of encoding social learning for real social action. Second, using the methodology described in the first essay, it models ethnographic listening in a university service-learning course as a way of understanding 21st century literacies as a learning process mediated by both supervisory and nonsupervisory assistance. Third, this project includes an interview and observation-based study of one teacher’s learning about the teaching of writing in an institutional setting with multiple obligations and pressures. This introductory essay finally asks broad questions about the adaptation of schooling for various interconnected purposes of democracy, technological change, collaboration, and writing instruction.

Keywords: Collaboration, 21st century literacies, Teacher education, Concept development
“WITH, NOT FOR”: EPISTEMIC RELATIONSHIP IN 21ST CENTURY LITERACY AND LEARNING

by

GEORGE LOVELL BOGGS

B.A., King College, 2000

M.A., University of Durham (UK), 2006

A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GEORGIA

2010
“WITH, NOT FOR”: EPISTEMIC RELATIONSHIP IN 21ST CENTURY LITERACY AND LEARNING

by

GEORGE LOVELL BOGGS

Major Professors: James Marshall
                 Donna Alvermann

Committee: Ruth Harman
           Nik Heynen

Electronic Version Approved:

Maureen Grasso
Dean of the Graduate School
The University of Georgia
May 2012
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>INTRODUCTION AND LITERATURE REVIEW</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>References</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>LISTENING TO COLLABORATIVE WRITING: ETHNOGRAPHY OF COMMUNICATION IN A 21ST CENTURY CLASSROOM AS METHODOLOGY AND PEDAGOGY</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>References</td>
<td>49</td>
</tr>
<tr>
<td>3</td>
<td>“WITH, NOT FOR”: COLLABORATIVE CONCEPT DEVELOPMENT IN 21ST CENTURY LITERACY-MEDIATED PROBLEM SOLVING</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>References</td>
<td>94</td>
</tr>
<tr>
<td>4</td>
<td>CONSTRUCTING CYCLES OF REFLECTION AMONG STUDENTS AND TEACHERS: A RECURSIVE CONCEPT DEVELOPMENT CASE STUDY</td>
<td>99</td>
</tr>
<tr>
<td></td>
<td>References</td>
<td>116</td>
</tr>
<tr>
<td>5</td>
<td>CONCLUDING REMARKS: 21ST CENTURY LITERACIES, KNOWLEDGE ECONOMY, AND STRUGGLE</td>
<td>118</td>
</tr>
<tr>
<td></td>
<td>References</td>
<td>128</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

Figure 2.1: Ideological theme (1), category of talk (2), and allocation (3) ..............................................37

Figure 3.1: AUFC Discussion. This figure illustrates participation in affinity groups .......................56

Figure 3.2: Timeline of AUFC Activities. This figure illustrates the context of collaborative
writing..................................................................................................................................................58

Figure 3.3: Closeup Image of Park(Ing) Day Protest Installation. This figure illustrates
integration of food and hunger issues into public space demonstration .......................60

Figure 3.4: Blog: Learning Mediated by 21st Century Literacies. This blog post illustrates the
flexibility of Internet tools and, consequently, the relevance of literacies ..................62

Figure 3.5: Vygotsky’s Zone of Proximal Development. This figure points to the zone between
developmental and potential level as a social, communicative, and ideological
space ..................................................................................................................................................66

Figure 3.6: Ideological Theme (1), Category of Talk (2), and Allocation (3) ..............................73

Figure 3.7: Frequency of Discourses Used, by Percentage of Total (100% = 776 total coded
discourses) .......................................................................................................................................81

Figure 3.8: Article Published in Local Print and Online Newspaper. Participants used
elements of the article to spin local event in favor of planned community action .......83
CHAPTER 1
INTRODUCTION AND LITERATURE REVIEW

[Cathy] Davidson's keynote lecture emphasized that many of our educational practices are not supported by what we know about human cognition. At one point, she asked members of the audience to answer a question: "What three things do students need to know in this century?"

Without further prompting, everyone started writing down answers, as if taking a test. While we listed familiar concepts such as "information literacy" and "creativity," no one questioned the process of working silently and alone. And noticing that invisible gorilla was the real point of the exercise (Pannapacker, 2012, n.p.).

Politics of classrooms—past, present, and future—matters. Discussing education as a fundamentally political enterprise, Aristotle (1982) says in the Politics,

The most powerful factor of all those I have mentioned [regarding the stability of the state] is the education of citizens in the spirit of the constitution under which they live. You may have an unsurpassed legal system, ratified by the whole civic body; but it is of no avail unless the citizens have been trained by force of habit and teaching in the spirit of the constitution (V, 9, 1310, a 12-17).

Aristotle’s point is simple, but the cultural context to which it refers is complex: Classrooms should provide opportunities to practice ways of interacting aligned with dominant social arrangements. If it sounds quite conservative, that’s because it is. Conservation of the polis’ order should determine how a teacher organizes a classroom, Aristotle thought.

In a later chapter he argues, “The citizen should be trained in accordance with the particular form of government under which [the person] is to live; for each type of constitution has a distinctive character which originally formed it and makes possible its continued existence” (Aristotle, 1982, VIII, 1, 1337 a 10-20). Ironically, Aristotle laments being in the minority in his viewpoint, showing that plenty of people
didn’t agree with him, or at least not in the same terms. Whatever the popularity of his opinion at the time of the composition of the *Politics*, it’s clear that he did not cordon off citizenship education from other kinds of knowledge, and he even wondered himself whether the education he recommended should be considered primarily moral or intellectual (see VIII, 1338 a 13). The *Politics* is filled with evidence that Aristotle saw knowledge and skills in which people were educated as foundations of sovereign communities.

Inasmuch as a discussion of Aristotle’s ideas serves as a return to first principles, his integration of the polis and the school (1982) depends upon a concept of ideology functioning at two levels: in the kinds of teaching and learning that occur in schools (which Aristotle was talking about) and in the interpretation of educational practice (which Aristotle was doing). Calls for reform in educational media operate on both levels as well. They involve interpretation, theory, and social context to conform schooling, occurring in myriad forms, to a particular social imaginary that proponents argue differs from either a current, former, or alternative approach. In a global economic downturn, it is not surprising that calls for reform imagine the United States as an economic powerhouse and recommend changes in schools that bring them closer to market-oriented constitution. Another theme in educational reform literature is that schools imperfectly embody a democratic, pluralistic society. The 21\textsuperscript{st} century skills or literacies movement, made famous as West Virginia and other states invested in 21\textsuperscript{st} century skills approaches (Global21, 2011) such as “The Partnership for 21st Century Skills” (P21, 2011) and Global21 (n.d) lean heavily on economic competition as the measure of educational success. Ironically, Global 21 and P21’s description of the economic future for which students must be prepared demands the democratization of learning. As working class jobs disappear, perhaps the highly regimented forms of education that developed to prepare industrial workers will disappear as well.

**Problem: From “Democratic Education” to Political Processes of Collaborative Writing**

A version of this link between politics and education likely more familiar to North American audiences (than either Aristotle or 21\textsuperscript{st} century literacy) is the familiar narrative that “education encourages and strengthens democracy” (Hanushek, Machin, & Woessmann, 2010, p. 261). While
definitions of every term in the relation have shifted over time, Aristotle (1982) did have plenty to say about the necessity of virtue resulting from education in a democracy.\textsuperscript{1} The narrative and apparently Aristotle’s own views politicize education, though the implied goal of such politicization in unclear. In 21\textsuperscript{st} century literacy propaganda, learning means the positioning of knowledge as a kind of product of socio-political relationships. Still, democracy could still mean very different things to different people, since, as one historian of education put it, “Aristotle argued that virtue—and education for the virtuous life—depends on one’s position in the society” (Fraser, 1997, p. 59). Global 21 and P21 advocates want a lot of different things from change.

Some aspects of the relation between political positioning and education\textsuperscript{2} have been studied in great depth. Social justice educational research, using a variety of philosophical approaches (e.g., Marxist, Foucauldian, post-structural), has focused on the reproduction of social inequality within schools and the contradictions of inclusive public education and capitalism. Critics of American education have argued in a variety of ways that schooling practices—quality and proportion of student talk (Goodlad, 1984), course content (Said, 1978), literacy (Stuckey, 1991), and even the physical positioning of students (Cole, 2005)—are “commensurate with the forms of economic and political activity” (p. 202) in which they appear, by which the above authors mean racist, capitalist, and/or imperialist and undemocratic. “The precise content of the curriculum,” Cole explains, “depends upon political-economic and ideological foundations of the society” (p. 213). Does the content of student talk likewise depend on political-economic and ideological foundations? How deterministic are these foundations in interactions?

**Research Linking Political Organization, Literacy, Collaboration, and Learning**

These questions inspired a massive psychological experiment carried out in Central Asia in 1931-2, in which a team led by A.R. Luria and Lev Semenovich Vygotsky investigated how changing local political organization (via schooling, industrial labor, collective farms, and Soviets) affected cognition as

\textsuperscript{1} Athenian democracy depended fundamentally on the exclusion of the majority from citizenship (i.e., minorities, slaves, women, and children).

\textsuperscript{2} The exact-phrase search strings “education for democracy” and “education and democracy” returned roughly a third of a million hits each. “Education in democracy” yielded 286,000. Other strings with prepositions or conjunctions suggesting difference or separation returned far fewer results.
indexed by changing word meaning (Luria, 1976). Subsequent research in this line has moved away from Luria and Vygotsky’s cognitivist orientation toward a greater interest in the sociocultural mediators knowledge production (Cole, 1998).

Outside sociocultural literature, research on the relationship between education and democratic political organization has drawn productively on sociological theories, as seen in attempts to link education with pro-democratic social disposition (Glaeser, Ponzetto, & Schleifer, 2007) or ideology Spilimbergo (2009) that fosters certain forms of political participation (Hanushek, Machin, & Woessmann, 2011). Using contingency theory, which argues that ill-structured and uncertain tasks require greater delegation of power as compared with more routine or structured work, sociologists of education have attempted a classroom-based approach to the study of democracy and education, operationalizing constructs of delegated authority, lateral relationships, and democratic work for inquiry into collaborative writing (Cohen & Arechavala-Vargas, 1987; Cohen & Cohen, 1991). Cohen and her colleagues claim that the ways constituents are organized (i.e., politics) predict their “level of interaction” (Whyte, 2007, p. 186) which they believe is a strong component of productivity; productivity, they argue, is a likely index of individual learning.

A principal goal of research in this vein is to argue for increased autonomy for student collaboration in problem seeing and solving as an indirect but optimal means of promoting the development of writing proficiency (Whyte, 2007). The sociological focus is attractive because it enables measurement of the effects of organization styles on the teaching of writing. The implication of contingency theory work on democratic education is that writing instruction should consider the affordances and constraints (Gibson, 1977) of political arrangements and likely constructions of problems with desired writing practices (Howard, 2000). Uncertain processes like writing are optimally employed when political organization places students in lateral, reciprocal relationships, working together on non-routine problems. The problem is shallow understanding of students’ negotiation and construction of problems and the entrenched assumption that teachers can unilaterally enact classroom politics can afford politics that afford sophisticated, transferable writing proficiency.
From “Black Box” Democratic Circuitry to Collaborative Writing Research

Sociological research serves as a backdrop and point of departure for my dissertation, which asks what other factors, in addition to non-routine tasks and aligned classroom political organization, foster collaborations that effectively promote voluntary, sophisticated writing (Vygotsky, 1978). I position this orientation as an addition to important work that bridges an enduring divide in the study of writing pedagogy in schools between microscopic investigations of discourse and macroscopic sociocultural and political investigations. The unit of analysis reviewed above (i.e., in Whyte, 2007) is inadequate for my task of understanding collaboration as a language-mediated learning process, yet cognitive approaches often place human individuality in the heart of the writing process (Hull, Rose, Fraser, & Castellano, 1991). Levels of interaction as an analytical construct helps make the case that some kinds of political organization afford more on-task talk than others, but it blocks what I argue is necessary further inquiry into interaction as a socioculturally mediated process. Level of interaction merely requires that interactions be on-task, so the category is clumsy when it comes to looking at student collaboration, not just what the teacher does, as political; a focus on level of interaction, therefore, begs the question of the ability of the unit of analysis to see democracy at work in students’ interactions, to see its effects in student productivity, or to predict outcomes for individual learning.³

The Glaeser, Ponzetta, and Schliefer (2007) study and the sociological approaches to group writing work stemming from Elizabeth Cohen’s work (Whyte, 2007), treat the democratic processes themselves as a black box. A focus on inputs is not a problem, per se. Hillocks (1999) and Howard (2000) provide important conceptual guidance regarding how to use the black box of an “individual’s interactions with a group” (Hillocks, 1999, p. 26) to teach students to write. The consensus is that inputs must be non-routine tasks and aligned political organization; outputs are productivity and learning. My goal is to examine micro-processes of the black box on behalf of teachers wishing to support and enable interaction, processes that Hillocks and Whyte treat as following from task construction.

³ The question of internalization of group learning has been taken up from non-sociological perspectives as well, notably using activity theory (e.g., Southerland, Kittleson, Settlage, & Lanier, 2005).
The black box approach to collaboration may predominate in classrooms already. Level of interaction and on-or off-task talk are familiar constructs to many teachers who monitor students in order to make judgments about productivity and individual learning. What may be gained, then, from opening the box? I see three closely related opportunities for further research that may come from studying the functioning of collaborative group work, and each one of them has its own family of implications. One, a methodological component, asks how teachers can improve writing instruction by evaluating processes of student verbal interaction. A second asks what transcripts of collaborative discussions can tell us about student learning in relation to political and task scenarios. A third asks how a teacher moves from preconceptual toward conceptual understanding of facilitation of organization for optimal development of relevant literacies.

My first goal is thus to present a method that replaces level of interaction with a means of exploring the processes of interaction in order to reveal factors in collaboration relevant to teacher choices and student learning. Just as instituting lateral organization means more than just saying, “You’re all in charge,” so fostering collaborative problem solving as a stimulus for writing means much more than just pointing to a world full of interesting problems or providing highly-orchestrated, discipline-specific problems. A method that produced indexes of the transition from interaction to collaboration would be widely useful. Such a method could help reveal democratic processes in discussion far beyond measurements of the level of interaction. It could help us consider how teachers can strategically make themselves redundant in student collaborative problem solving, and reenlist as facilitators of nonsupervisory assistance (Gallimore & Tharp, 1990).

Following the adaptation of the method of ethnography of communication (Hymes, 1974) as a way of envisioning the work of a teacher in a collaborative classroom, I ask what the black box of one class’ interaction does and what high levels of interaction with full delegation of responsibility afford. What are the discursive processes that make up and sustain on-task talk, productivity, and individual learning? Level of interaction indexes the political organization that produced it (i.e., high level points to democracy), but framing the teacher implicitly as the origin of political organization, a reification of the
teacher-student binary that contradicts and may affect the democratic-ness of students’ interactions. To overcome the contradiction, research would have to take us into the interactive zone where students and teachers enact the politics. Students are, after all, the demos in democratic education.

Since resistance to demagoguery has always been a central concern for democratic education, at the very least, it would be worthwhile to explore analogous tendencies in student talk. Whyte’s (2007) study recognized the crucial element of demagoguery by incorporating a questionnaire in which students identified the “best writers” and most “popular” students in the class. However, without an investigation of student discourse, the validity of the “level of interaction” indicator is severely threatened when the contributions of the most popular and skilled students elevate the main index of democratic action. On the other hand, using the model of the speech community and focusing on processes of collaboration allow more complex investigations of nonsupervisory assistance.

In the third step, moving beyond a metric of level of interaction to an orientation on processes of discursive negotiation leads to a complementary area of inquiry: how teachers learn about facilitation of a particular political order. Contingency theory underlines the importance of task type in making certain forms of organization necessary (Cohen & Cohen, 1991), a finding supported by research in other fields such as rhetoric and composition (Ede & Lunsford, 2001) as well as sociocultural psychology (Cole, 1998). Efforts to influence learning by giving students certain types of tasks is a crucial part of an integrated approach. Whyte’s (2007) mixed support of the work that developed around Elizabeth Cohen shows that, like any black box, if it doesn’t seem to work, no one knows how to fix it. Like so many reform movements, 21st century literacy risks being thrown away if the learning processes composing it are not well understood.

In practice, teachers actually require a great deal of knowledge about competing and compatible ideologies to evaluate and foster interaction. A major problem for teachers interested in facilitating authentic collaboration is performativity (Bloome, 2001; Wortham, 2001). Students perform collaboration when it’s assigned; they perform productivity through completing assignments; and they perform learning according to their understanding of and desire to accommodate teacher expectations.
Thus, level of interaction may be useful for improving teaching in classrooms like the ones John Goodlad (1984) visited in the 1980s or the ancient one Michael Cole (2005) described in Ancient Sumer, but its reform potential falls as students adapt their behavior superficially to suit different teacher expectations. The problem is not that students perform, but that performances are taken for learning as opposed to indexes of learning. In order to teach collaborative writing as a form of useful labor under the specter of performativity, research is needed that examines the discursive negotiations that make up student collaboration, neither discounting performance nor accepting it as a substitute for learning.

My research furthers understanding of political or relational aspects of knowledge as a critical resource for teachers and researchers interested in problem-based, interdisciplinary, open-ended, and collaborative pedagogies. While these pedagogical characteristics crop up in many instructional formats, they are the focus of a recent trend in educational research, policy, and practice known as 21st century skills or 21st century literacies (Kay, 2008; Kellner, 2000; NCTE, 2008). Proponents of 21st century literacies conspicuously link political arrangements of classrooms to future economic viability of students. For example, they argue that teacher-centered instruction anachronistically prepares students for an industrial workforce and fails to align with processes of globalization and technology-mediated networking (Kalantzis & Cope, 2008). My research does not advocate for 21st century literacies instruction for the global competitiveness it may someday afford (Cisco Systems, 2011); it explores collaborative processes on which 21st century literacies depend.

**A Brief History of a Three-Article Dissertation Project**

On a weekday morning I sat at home reading the *New York Times*, relishing the generosity of my university. I read about Will Allen’s Milwaukee-based burgeoning urban agriculture project and MacArthur grant (Miner, 2008). There was only one registered farm remaining in the city limits. Allen bought it. The article said *Growing Power*, Allen’s nonprofit, had hosted 2500 volunteers in 2008. Allen explained that broad, community participation in the gardens produced a sense of security in a community many see as overwhelmed by hunger, vandalism, and economic stagnation. I tried to imagine what I’d be learning on a tour of the place, given my particular life history, interests, and perspective on urban
Milwaukee. The question itself was a product of all those factors: It was Vygotsky (1987) inside me asking what capabilities “in a stage of maturing would be awakened or roused to life” (p. 212) in that setting?

Thinking of the thousands of volunteers as they passed through the Growing Power gardens and through my sociocultural lens, I tried to imagine a variety of learning that the setting might mediate, as people responded to different elements in light of past experience, cultural background, and ideological influences. I also thought about the setting as an intentional educational setting with distinct, built-in goals, official messages, and ethics. Even the name Growing Power seemed to have been strategically designed for zones of proximal development: The words “spiral” from kindergarten biology to food security, community sovereignty, and prefiguration of a better world.

To put these imaginings into action, I designed a study to observe what and how people learn as they work together to solve authentic community problems. I made Nik Heynen’s class in Athens my Growing Power; Will Allen’s 2500 volunteers became my first five study participants. The keywords for that study were informal education, concept development, and agricultural literacy. Athens, Nik Heynen, and the fabulous first five were blurry mimeographs of a Milwaukee study paradise; Peter Smagorinsky’s case studies of student (Smagorinsky, Daigle, O’Donnell-Allen, & Bynum, 2010) and teacher concept development (Ellis, Edwards, & Smagorinsky, 2010) supplied my theory and method. I asked questions to find out how people saw the course and the big ideas associated with food: hunger, environment, inequality, logistics, and horticulture. Then I observed everybody all semester and conducted final interviews; I analyzed individuals’ speech to spot patterns that might index conceptual change.

The first generation of the study culminated in several short case studies and one full-scale concept development portrait of Elspeth (Boggs, 2011). Her ideas about what counted as knowledge, evidently mediated by the course, were striking in their incommensurability with widely accepted goals of service-learning pedagogy: efficacy and reflective, informal learning (Billig & Watermann, 2003). Critical reflection on experiential problem solving supported with familiar academic tools passed through a kind of filter that blocked informal and peer-mediated activity. She prized teacher-led theoretical
discussion. Hitting Elspeth’s “nail on the head,” as she put it, added to Dr. Heynen’s concept of ideological tension between growing power and schooling.

Then the study began to change before my eyes. Preparing for the next AUFC with Nik diverted my interest away from what individuals learned and what I wanted teachers to learn, as if human software drivers might simply be updated by my research, toward the very human process of internalizing feedback on his teaching. When I began to recognize my work with Dr. Heynen (the pseudonym Dylan is used in dissertation articles) as teacher education in a constructivist vein effected through a reversal of typical power inequalities germane to teacher education as a field, I was stunned at the degree of tunnel vision in my initial excitement about students’ zones of proximal development. While I thought often of Nik’s development of a concept of teaching, I finally began to see that relational and discursive processes were what mattered. As much as I talked about process, up to that point, I had not really understood its application. Language and social relations mediate his concept of teaching as he employs as he uses them to teach and talk about teaching.

In the teacher education portion of the project (the third article in this dissertation), the contexts in which we worked together included unwritten rules and particular language-mediated ways of enacting joint-ness and independence. Dr. Heynen-the-student had tenure; his teacher-yet-graduate-student had virtually no comparable trappings of academic status, but believed in the vision of growing power among UGA undergraduates and wanted to assist. Soon after we began working together, I knew that Dr. Heynen’s philosophy of “with not for” was affecting my own teaching, and I later began to recognize that it shaped our relationship as teacher and teacher educator. At conference presentations and committee meetings, for instance, I harped on the course’s nonhierarchical uniqueness, but I was quite slow to see our collaboration as an activity setting with unique and possibly important relational dimensions. Because I believe that all apparently nonhierarchical relationships are simulations or prefigurations of a consciously or unconsciously desired political arrangement, I can now ask what factors determine a “good” simulation? And how does an inverted power relationship affect the way a (student) teacher engages in educational discourse or learns about teaching?
Studying Nik Heynen led me to a sobering hypothesis that teacher education leans too heavily on the assumption, conventionally attributed to Lortie (1975), that what people know about teaching is getting in the way of good teaching. There’s a great deal of truth in the model, I grant: I had to “get over” the mechanics and rhythm of guitar in order to play the banjo. But it’s nonsense for banjo teachers to predicate instruction on exorcising other knowledge of instrumentation that might be getting in students’ way.

**Method, Collaborative Writing, and Teacher Education**

The first article in this dissertation explicates a method of examining discursive dynamics through ethnography of communication (Hymes, 1974; Saville-Troike, 2003), which I employ in the second article. The project includes a methodological article in order to facilitate expansion into other inquiries into collaboration. Because collaboration is so often treated uncritically as a benefit to students, I wonder to what extent 21st century skills emphasis on collaborative problem solving repackages character education initiatives (Stedje, 2010) aimed at teaching kids to work together. Global21 (2011) and P21 (2011) initiatives join independent scholars (e.g., Kellner, 2004) in arguing that a technological revolution necessitates the ability to work in intimate and remote technological environments; previously the social arrangement of blue and white-collar work environments provided the impetus for group work in school. Perhaps in 21st literacy approaches, a character education element, updated to focus on global capital rather than on the needs of the state, points backward to Aristotle’s now-ironic claim that democratic education was necessary to preserve a highly stratified status quo.

My second article positions 21st century literacy as a context for collaborative concept development in a process leading up to the joint production of texts. In an ethnographic study I listened to fifteen students in a local food activism organization, which doubled as an undergraduate and postgraduate experiential learning course in human geography based in a large southeastern US university. Their conversations, which culminated in a collaborative writing project, were the objects of analysis in which I identified patterns in discourse indicating how they organized, regulated, and interpreted themselves and the tasks they identified. To contextualize 21st century literacy in a concept
development framework, I needed to understand how communicative technologies afforded and constrained development and distribution of conceptual resources among members as they posed problems and responded. Findings suggest that local and national media buzz combined with participation in a demonstration many considered worthwhile and successful privileged some communicative and conceptual resources within the speech community as they continued their negotiations. These experiences of buzz enabled more effective participation by less-dominant members, and the conceptual resources that emerged afforded composition of digital texts as a way of answering these (re)constructed problems. This research frames collaborative problem solving as a literacy-mediated learning process, positioning consumption and production of texts within a broader context of collaborative negotiation. The contingency, rather than fixity, of group conceptual resources raises questions about the role of teachers in facilitating non-supervisory assistance in the teaching of writing.

The third article in this dissertation presents data that suggest that Dr. Heynen filled gaps in pedagogical theory by means of bricolage (Levi-Strauss, 1972), some of which was unproductive, some of which led to sophisticated pedagogical concepts. The crux of the matter seems to be that in spite of the limitations of folk theories and business-as-usual teaching, the building blocks out of which Dr. Heynen is developing a concept of teaching are his own, by and large, hence the constructivist orientation to teacher education.

So while Lortie’s (1975) description of teacher-bricoleurs working with unexamined folk pedagogical theories seemingly fits Dr. Heynen to a ‘t,’ like other deficit models, it threatens to put the cart (teaching about teaching) before the horse (teaching). Since forms of political and economic organization are inscribed in teaching models and the theories that underpin them, the idea that teachers work with incomplete theories of teaching evokes political and economic imperatives of mass production and branding. Lortie’s (1975) apprenticeship of observation, typically read as an indictment of the ineffectiveness of conventional teacher education programs, is ironically used as an implicit justification of educating teachers by batch. The first article explores a world arranged according to anarchist political
and economic goals, one-with-one, a model based on mutual aid. How does he categorize teaching activities? What constructs does he employ to explain problems, new directions, and student learning?

My goal in the partnership with Dr. Heynen was not his betterment, however. My aim was to help cultivate a powerful urban food activism service-learning program that would legitimately challenge advanced geography majors to put prior learning into practice and to participate in social action informed by human geography studies, specifically the politics of hunger and food access. The second article in this dissertation concerns Dr. Heynen’s students. Where the first article focuses on means of analyzing and promoting development of concepts via 21st century literacies, the second investigates the students themselves. That was the original point: to understand a learning process and help it along, expand it, and spark interest in similar ideas.

Closing Remarks

What follows is an account of my efforts to learn to be a better partner to teachers and students. I hope that placing these two ethnographies side-by-side makes sense to those who strive to contribute to these two poles in English education. Because I believe that all action is theoretical at some level, I hope that these two accounts of the emergence of collaborative writing as a means of action motivate others to think about the language of their organizational rationales, the language of their students’ conversations, and the language of their students’ writing. I hope that my research motivates people to pursue their own contradictions as this work has revealed mine: Do I tend to think about my students altruistically, organizing my teaching as though ideology were a problem I might be able to help them overcome? Does my teaching betray naïve assumptions about open-mindedness, even though I believe my students and myself to be “always-already” subjects (Althusser, 1971, n.p.)? How would an observer describe my participation in the collaborative, contested development of common ground that is going on around me? What is my epistemic relationship to my students and to my peers, and does it change over time?

I hang these hopes on the implications of three articles. In the first, I provide a vision, in the form of an ethnographic methodology, for teachers who intend to realize democratic decision-making and related features of 21st century literacy or service-learning. In the second, I use the methodology to
examine communicative interactions in service-learning in which students decided to write together. Findings illuminate novel ways students employ literacy in ideological contexts to address problems that matter to them. In the third article, I explore the consequences of teacher education conceptually aligned to a mutual aid ethic of “with, not for,” examining conceptual development in literacy instruction in particular. Overall, the message of the compilation of articles is that democratic education blurs the distinction between doing and saying or doing and writing. This research is not original in its challenging assumptions of the inviolate individual, the school as a laboratory for learning about the world, and the break between literacy and action. Its contribution rests in balancing advocacy for 21st century literacies with investigation of learning processes and teaching involved in collaboration that leads to writing.
References


CHAPTER 2

LISTENING TO COLLABORATIVE WRITING: ETHNOGRAPHY OF COMMUNICATION IN A
21ST CENTURY CLASSROOM AS METHODOLOGY AND PEDAGOGY

---

4 Boggs, G. L. To be submitted to Democracy and Education.
Abstract

This paper adapts ethnography of communication to help teachers and researchers examine writing as a learning process in the context of democratic, collaborative problem solving. Level of interaction, in the literature and in classrooms, has been positioned as a ‘black box’ that converts appropriately structured inputs to democratic education, joint productivity, and ultimately learning. In a knowledge economy, in which ways of knowing are shaped for global markets by literacy-dependent platforms for collaborative problem solving (Internet, Google docs, etc.), the interpersonal domain is an epistemic space in which ideological positions are vetted both by pooling a group’s resources and struggling to control them.

Framing collaborative, contested interaction as a site for learning, I integrate Voloshinovian and Vygotskian concepts of ideology and language with sociolinguistic methodology to distinguish a way of exploring collaborative processes that lead up to writing. By creating accounts of the groups’ communicative means, the approach functions more transparently, beyond the black box, as both a methodology and strategy for concentrating instructors’ efforts on nonsupervisory peer assistance. The method described here is intended to examine the functioning of the black box through ethnography of communication in order to inform research on relations among 21st century literacies approaches and democratic classroom organization, problem oriented pedagogies, interdisciplinarity, and purposive writing.

Keywords: Listening, Collaborative pedagogy, Collaborative learning, Writing contexts
Introduction

Teachers sometimes lament the influences of ideology on their students—the ways in which institutions like church, school, entertainment, and family may appear to short-circuit some intellectual proclivity, activity, or pursuit. In those moments, teachers position their students in particular ways, offering them ways of being in the classroom. I sometimes hear words like “privileged,” “provincial,” “poor,” “narrow-minded,” or “entitled” in reference to a “mindset.” In response, a great deal of effort is spent every day broadening canvases so limned by ideology. As pedagogical formats continually spring up to liberate students from ideological apprenticeships, it is useful to consider the epistemological and moral significance of ideological liberation of others: How may I investigate the ideological biome of my classroom, the common habitat where ideological negotiation and positioning takes place? Some attention has been given to understanding the function and intersection of ideological apprenticeships in the classroom, but almost nothing has been done to understand the intersection of ideological subject positions as a part of the teaching of writing. My hope is to go a tiny step farther, to suggest that a means of understanding, a methodology, aligns with collaborative pedagogy and does not depend on the ability to stand outside of the ideological world in order to teach within it.

This methodology is built around the long term advantages students gain when schooling includes unstructured problems and delegated responsibility as ways of motivating collaborative writing (Whyte, 2005), and it is intended to help produce strong rationales for collaborative teaching, even standards-based collaborative teaching. Unstructured tasks call upon funds of knowledge may provide important shared resources on which students may draw (Gonzalez, Moll, & Amanti, 2005). Task structure and available funds of knowledge affect how well particular tasks are suited to collaboration, and consideration of this relationship is essential for effective collaborative writing (Howard, 2000). My contention is that, despite this foundation, what is known about collaborative writing depends upon a ‘black box’ that sits between collaborative inputs, which are likely to be separated artificially from the category of writing, writing, and learning.
Problem

One reason for this lacuna is found in working definitions of writing. “[T]he myth of the isolated writer” produces individualistic and mechanistic views of the writing process (Haefner, 2003, p. 516), and much inquiry up to this point may be categorized according to two senses of the word writing. The longstanding dilemma in writing instruction over the definition of writing moves between a focus on writing as product and process, focusing on the act of making letters and words or things written, on one hand, and writing processes that include planning or prewriting as a step (Flower & Hayes, 1981), on the other. The common phrases “comments on students’ writing” and “graded their writing” evoke the definitional difficulty and its consequences for learning to write as written documents are taken as surrogates for complex, inevitably social learning processes. Research on the limited benefit of teachers’ comments on written work (Harris, 1977), decades of criticism of notions of individual authorship (Woodmansee & Jaszi, 1994), and the emergence of technological platforms affording writing together suggest a need for a broader conceptualization of collaborative problem solving and writing.

In writing research a generation ago, ecological perspectives on writing gained some ground (Ede, 2004), as scholars began to recognize that

Writing and what writers do during writing cannot be artificially separated from the social-rhetorical situations in which writing gets done, from the conditions that enable writers to do what they do, and from the motives writers have for what they do” (Reither, 1985, p. 621). Focusing on interdependence as the ecological heartbeat of writing, Cooper (1986) writes, “writing is an activity through which a person is continually engaged with a variety of socially constituted systems” (p. 367).

Adapting Reither’s (1985) statements to refer to teaching writing, I argue that teaching writing and what teachers of writing teach cannot be artificially separated from the social-rhetorical situations in which writing gets done. Adding a similar adaptation of Cooper (1986), teaching writing is an activity through which a teacher is continually listening to and nurturing sophisticated student engagement with a variety of socially constituted systems.
The idea that students bring much to class with them from these socially constituted systems is well-established to the point of losing some of its edge in discussing democratic processes that affect how writing serves students’ own goals. For example, in my research I attend to verbal performances of authority that intertextually link the immediate audience, whose ideological orientation toward a handful of topics was being negotiated in the classroom, with audiences elsewhere, whose ideological orientation was more settled. Connections among verbal and written references to social systems through ideologically charged arguments is one way to open these complex learning settings to empirical research.

Black boxes and crisis narratives go hand in hand. The message of many websites of the 21st century literacies movement is ‘There’s just no time to waste understanding the pedagogy, kids need 21st century literacy or the US loses!’ (Cisco Systems, 2011; Global21, 2011; P21, 2011). Crisis narratives germane to reformative attitudes often blend coercion with persuasion, saying ‘It’s now or never. Commit.’ 21st century literacy, according to Kellner (2000) and Kay (2008), must happen, or the United States won’t be able to compete. Service-learning, I read, is the “ultimate” form of 21st century literacy (What is 21st century education?, 2010, n.p.), the answer to the United States’ educational plagues of low motivation, underachievement, and lack of college and career readiness. Black boxes operate here as a special form of ‘best practices,’ emergency tools that just work.

Many researchers have questioned the black box of direct experience, of which student-led discussion is one component, by looking at the role of ideology (Hope, 2009). Nairn (2005) found that students don’t necessarily drop their apprenticed ideologies with regards to marginalized groups of people, even when critical academic readings, experiential learning, and student-led classroom discussion support cross-cultural encounters. I confirmed these findings (Boggs, 2011) and found that, even among exceptionally committed and involved service-learners, nihilism and difficulty combining school and out-of-school epistemologies are key factors in learning. It is time to investigate the black box to help teachers discover philosophically aligned means of incremental assistance that protect the integrity of classroom organization, especially the centrality of nonsupervisory assistance in 21st century literacy-mediated learning.
With new developments in understanding of the continual engagement of writers with socially constituted systems emerging through ecological approaches to writing (Boggs & Alvermann, 2012) and discussion and writing together (Nystrand & Graff, 2001), pedagogical fads like service-learning and 21st century literacy have much to gain. These predecessors confirm the benefit of examining the communicative contexts of interaction that mediate and are mediated by literacy. Research on the role on cooperative learning offers much to collaborative pedagogies, but there is an important distinction between cooperative learning and collaboration-based models essential to both 21st century literacies and service-learning: student agency in identifying problems and activities that contribute to solving them. To extend Vygotsky’s (1987) metaphor of scaffolding as an external support for building something else, cooperative learning instruction involves scaffolded problem solving through what Engeström calls “known” (i.e., teacher-controlled) contexts. Collaborative pedagogy scaffolds processes of interaction and attempts to leave significant unstructured or ill-defined tasks in order to afford synthetic, creative thinking, which Engeström prefers to “combinatorial problem solving” (Engeström, 1986, n.p.).

As attractive as synthetic, creative thinking may be, concerns over management of behavior and content (Alvermann & Hayes, 1989) persist. This methodology serves as a means of informing and constituting collaborative pedagogical practice by highlighting specific and perhaps new parts of the building project that benefit from scaffolding. Fads of student-led teaching risk the assumption that the black box of collaboration around “authentic” problems magically converts discussion into improvements such as in writing. However, conceptual overlap between collaborative problem solving and writing (e.g., developing arguments, awareness of alternative positions, persuasion, and exposition) has tremendous potential not only for informing but also constituting the practice of 21st century literacy and service-learning instruction. A methodology oriented on communicative interaction would thus serve as a vehicle for enacting collaborative pedagogy, positioning the teacher as a facilitator of communicative processes on which community and service learning and 21st century literacies depend. In other words, the methodology produces rationales for scaffolding new areas of student activity and positions the teacher actively to construct it.
Purpose

The message of this presentation of a method is not that teachers should avoid positioning their students, but that learning about the effects and developments of ideological positioning in a secondary classroom may improve areas of critical need, such as the teaching of writing and administration of effective group work. Moreover, for teachers eager to enact 21st century literacy instruction who wonder how such a complex set of skills, competencies, and critical awareness can be taught, this methodology offers a unit of analysis that promises rich assessments of student learning that preserve the integrity of students’ collaborative processes. The purpose of this article is to describe analysis of interactions among ideological subjects in which more than one set of disciplinary or other socioculturally mediated ways of seeing and saying a problem are realized in classroom talk. This is not precisely a method of tricking students to write, although practitioners stand to learn a great deal about ways to steer students toward maximally effective communicative means in relation to their goals. The connection between students’ goals and writing has been confirmed empirically and theoretically many times; this methodology helps align teachers’ learning from their students with the kinds of competency ostensibly necessary to teach 21st century literacies.

In making speaking communities (Gumperz, 2009) that exist in classrooms the focus of this method, I make several assumptions about writing that must be unpacked. The first is that conversation in which ideological languages intersect is part of the socio-rhetorical context in which school writing takes place. The old classroom crime ‘talking in class’ bespeaks classroom organization in which teachers, provided distracting talk is kept to a minimum, are primarily responsible for delivering information and measuring students comprehension. Writing, in such a context, describes the mechanical process and the complex cognitive process in which knowledge is reported back to a teacher who verifies that a reasonable facsimile has been made of original, authoritative truth. By attending to socio-rhetorical context in a systematic way, by contrast, a teacher may reach similar endpoints of classroom order by fostering nonsupervisory assistance and highlighting possible activation of zones of proximal development (Vygotsky, 1978; Wertsch, 1985) to which students may productively respond.
Even when writing is constructed as an autonomous, invisible means of referencing student knowledge to norms in this paradigm (Street, 2005), a broader, socio-rhetorical definition of writing inevitably plays a role in collaborative writing and learning, and it adds a layer inherent in, and yet at odds with, the autonomous view. As the teacher assesses, she looks for the effects of a socio-rhetorical context, made up, she may imagine, by her lectures and readings, which she may expect to inform the writing before her. In the moment of assessing the knowledge through the supposedly transparent lens of writing (i.e., no socio-rhetorical context), the teacher depends on a much broader definition of writing and an expanded, though dyadic or authoritarian, notion of socio-rhetorical context. Writing, even when it is viewed as the simultaneous functioning of motor and cognitive skills to make letters and words, depends on a broader context of people constructing knowledge together.

Second, I assume that interactions among people are always ideologically inflected. One reason is simply that the means of interaction is language. One may speak of ideology in language in terms of causes or effects. Bakhtin (1981) focused optimistically on causes, citing the fact that language bears the “taste” of its former uses, which individuals may accommodate or resist as they make language their own. Others, such as Vygotsky (1978), Voloshinov (1999), and Althusser (1971) approached language and ideology in terms of effects on consciousness (Collins, 1999). For Vygotsky, ideology in language protects the cultural goals of a community, so that even as massive changes take place, as language is internalized as a way of thinking, it functions to protect institutions such as the family and government. Voloshinov saw ideological themes or threads in language as significant mediators of individual human consciousness. Althusser argued from a social theory perspective that language is the vehicle by which children are subordinated in their families, students to their teachers and schools, consumers to the media, and citizens to the state.

Collaborative pedagogy affords teachers an opportunity to listen to verbal exchanges that offer, and may even synthesize, ideological subject positions. Predicating a pedagogy of collaboration on listening to a group’s development of communicative resources in ideological context offers a vantage point from which to assess and promote learning through discussion. Ideology is central to this notion of
schooling positioned not as looking out at the world to perceive it, but as participating in it with strategic assistance from peers and teachers (Kalantzis & Cope, 2008).

Whereas Vygotsky (1987) dealt primarily with children and adult victims of brain injury, Althusser (1971) used the idea of ideology in language to explain apparent ideological dissimilarities among adult members of the same social class. He argues that various ideological state apparatuses position people in superficially different ways that reduce to class-consciousness. Althusser would argue, for instance, that criminal lawyers and sociologists might find it difficult to agree on the meaning of a local increase in car theft and that their hypothetically divergent ideologies would superficially mask (and strengthen) underlying ideological commonalities based on class: individual agency, stable identity, and rational thought.

Scenarios in secondary and postsecondary education that involve the development of persuasive arguments, collaborative problem-identifying, and interdisciplinary projects often involve discussions that require participants to find common ground or agree temporarily to conceptualize the world in a particular way for a particular purpose. There would no need for the abstraction common ground if it weren’t for the contrasting subject positions that people adopt, which jeopardize the common-ness of ideological ground, even as they may, according to Althusser (1971), reinforce oppression at the level of social class.

There are three parts to interpreting ideological interaction: the ideology, the interaction, and the system of choices that make up interpretation. The philosophical and theoretical constructions of ideology and interaction that enable particular ways of seeing and describing the development of common ground can be more or less exclusive. For instance, I reject the notion that a person can either entirely escape or know her own subjectivity (Althusser, 1971). My goal, consequently, is to promote ethnography of communication as a methodology well-suited to listening projects as a component of collaborative teaching. This paper shows how I identify the species of conversation and construction of problems most relevant to learning, indoctrination, and creativity in a collaborative educational settings.
Such a mission says little about my right or ability to winnow conversational data to reach this goal. A corollary purpose of this paper, is simply to make explicit the methodological steps I take in order to reach this goal.\(^5\)

**Theoretical Framework**

There is a long history and much criticism of teaching people to work together (Higgins-D’Allessandro, 2005). Teaching groups of people always involves a concept of what people are, and what it means for them to interact. A cluster of conceptual approaches positions language as the inescapably ideological mediator of all human interaction, even self-knowledge, but there are myriad trajectories for research that emanate from that narrow starting point. I begin with the assumption that communication is the principle vehicle by which conceptual understanding of phenomena is achieved, through a process Vygotsky calls internalization and appropriation (1978). Because communication begins in the developmental foreground as a verbal correction and then moves to the background as internalized, improved performance, it is important to note that communication is always marked, in the Bakhtinian/Voloshinovian sense, by the histories of its use, and embedded, in the Vygotskian sense, by the sanctioned use of verbal and other tools in particular contexts. This perspective allows me to attend to “theme” as a “property of the utterance taken as a whole, and taken in connection with the historical instant of its generation” (Collins, 1999, p. 138). In this view, classroom speech and writing should be viewed as aspects of social practice (Barton & Papen, 2010; Heath, 1982). In other words, I treat speaking and writing as acts within communicative events in communities whose members may nonetheless think of them as being ‘just the way it is’ or even invisible (Althusser, 1971) as “consciousness takes shape and being in the material of signs created by an organized group in the process of its social intercourse” (Voloshinov, 1999, p. 13).

---

\(^5\) My dissertation project includes an account of one teacher’s movement toward a conceptual approach to some of these choices. I found, in a three-year case study, that he drew on funds of knowledge in novel ways to develop new ways of reading information students provided. This methodology and that teacher concept development study approach the question of listening to collaboration from two important angles: the development of a structured form of listening and learning from students and the development of a rationale for collaborative teaching.
From this theoretical perspective grows a methodology of enacting classroom-based, ecologically valid assessments of writing in order to understand student learning. A final element of the theoretical framework has to do with the nature of teaching. I contend that ethnography is a necessary component of teaching, one that may be executed effectively or ineffectively. I think of the ‘armchair anthropologists’ who visited their focal populations but resided in safe, government or corporate compounds. Before that, much knowledge of how people organized their experiences around and through language came from missionary accounts. Bronislav Malinowski (1920) took a new approach, so in a way it is he who offers teachers the role of participant-observer. For many researchers and teachers, the role of teacher and participant-observer may be mutually exclusive for good reason. How can a person officially acting *in loco parentis* listen and ask about the hidden rules of speech as Malinowski did?

To answer that I turn to Gallimore and Tharp (1990), who upend the notion that authority precedes teaching by saying, “Teaching is the process upon which authority depends to achieve its aims” (p. 189). They believe schools should operate systematically to assist, and thus to teach their constituents—teachers as well as students. Their description of teaching depends not on authority, but on assistance, which begins with ethnography—knowing a group of people. The anthropologists argue, “Nonsupervisory influences can be structured so as to maximize the overall coherence of the overall system of assistance provided by the school” (p. 189), and “Teaching can be said to occur when assistance is offered at points in the ZPD\(^6\) at which performance requires assistance” (Tharp & Gallimore, 1988, p. 184). By invoking the zone of proximal development, they position the teacher as an ethnographer tasked with discovering the situations in which joint productivity might be increased through assistance in the ZPD.

Unfortunately, when Vygotskian anthropologists describe contexts for this assistance, they continue a tradition found in much Vygotskian scholarship of drawing examples and inferences from dyadic relationships between adults and very young children, often within families or tribes (cf. \(^6\)The zone of proximal development, or ZPD, is the imaginary space between developmental level and potential level, where the assistance of a teacher or more capable peer enables more sophisticated performance of a task.)
Vygotsky, 1978; Rogoff, 1990). Families position children through language quite differently from how schools do, especially for older adolescents. Disciplinary languages that shape school-based learning from the elementary grades and increasingly throughout the remainder of schooling are but one way that schools provide multiple, competing or contradictory viewpoints. Accordingly, seeing opportunities for supervisory and nonsupervisory assistance necessitates different sorts of listening in secondary and elementary classrooms. In secondary classrooms, ethnography requires listening to the ways that students position themselves ideologically, how those positions change, in what speech situations those positionings occur, and the speech categories that encode instantiations and responses to people’s positionalities.

Wertsch (1985), too, seems to assume ideological unity among participants in the ZPD when he offers a useful but problematic condition for the assistance of a more capable peer or teacher. He argues that for a ZPD to exist, there has to be agreement between two people about the nature of the task at hand. What he terms situation definition refers to a static condition or threshold for the existence of a ZPD. Wertsch’s stipulation bears the marks of tradition I mentioned above; his definition of the ZPD creates yet another ‘black box’ by excluding the process of defining task situation. Could the definition of the task be part of the assistance? Of course it could. In a situation where multiple ideological positions are available from which to view a problem, Wertsch’s static definition really only works if potentially infinite ZPD’s, each with their own defined task, are allowed. Problem n becomes the ultimate, as-yet-undefined task. Problem n-1 precedes it, in which the task is to define the task. Problem n-2 precedes Problem n-1: The task there is to define the task of defining the task. The greater problem is not that seeing the ZPD this way is a hassle, but that by the time Problem n has been reached, most of the interesting problem solving has already happened—inside a black box. It is far better to conceive of a single ZPD where situation definition signifies a single, ideologically diverse process. For a ZPD to exist, then, a task need not be defined already, but be in the process of being defined.

Wertsch’s (1985) provision signals the importance of negotiations over situation definition as important learning contexts, but it actually occludes such an investigation in its efforts to refine the
meaning of the ZPD. The difficulty is remarkably like Vygotsky’s story that children’s learning to participate in a psychological test was far more interesting than anything the test itself might reveal. In other words, among older adolescents, access to ideologically positioned communicative resources creates complexly moving and interwoven zones of proximal development. This revisions aligns with Wertsch’s (1991) perspective that the ‘personal’ in ‘interpersonal’ should be treated as a kind of shorthand, that the “irreducible construct” of such interactions is the “person(s)-acting-with-mediational-means” (p. 120). Because the ZPD involves at least two (and perhaps several other) means-mediated persons, a definition process is inescapable except in cases where subject positions are very similar or restricted.

Collins (1999) emphasizes the ideological nature of those mediational means, who assimilated Vygotsky (1978) and Voloshinov (1999). Collins places “ideological exchanges” at the heart of human development, saying, “The deployment of these developing words (in utterances within speech genres) in intermental exchanges is the key to understanding the development of human consciousness” (1999, p. 137).

I envision Wertsch’s (1991) persons ecologically (as modified by Collins, 1999) as operating in ideologically saturated epistemic habitats, virtual places where certain formulations of knowledge thrive and others die off. Unlike literal habitat, epistemic habitat is not bound to physical location. Discourses are like habitats in that epistemic agents adapt to draw on resources provided by the discourse. Echoing Althusser (1971) and Wertsch (1991), epistemic habitats produce epistemic persons-with-mediational-means drawn from the habitat’s resources. Social interactions often involve contests over which discourse or discourses, naturalized already in some other social or institutional sphere, will be naturalized in communicative events within the shared epistemic space of the group (Code, 2006).

Gallimore and Tharp (1990) explain a kind of ideal set of relationships that I envision for epistemic habitat: “Authority in the supervisory line should be used to create new activity settings in which joint productive activity will produce the assistance that will increase the competency of supervisees” (p. 189). Based on their assisted-learning model of collaboration, this method answers the
question, *How can teacher-researchers recognize systems of assistance in student collaboration?* To do so it addresses the question, *What unit of analysis is appropriate for studying collaborative negotiation as a means of assistance?* Creative solutions (Engeström, 2004) and groupthink (Rose, 2011) are antithetical products of collaboration, yet they occur as multiple perspectives converge. Finally, then, *How can teacher-researchers identify indicators of learning in collaborative dialogue?*

**Method**

Building nonsupervisory assistance into the structure of a classroom involves political-organizational choices that fall outside the scope of this paper, but descriptions of the context and participants in the example study provide one example of a classroom arrangement structured to afford peer assistance. Inside the scope of this paper is the ethnographic means of producing knowledge about the teaching and learning that occurs in contexts so organized. In other words, this paper describes a method for assessing learning in a classroom setting designed for collaboration.

The background of my method lies in anthropological approaches developed in the 1920s (Malinowski, 1920) and adapted for classrooms in the early 1970s (Cazden, Vera, & Hymes, 1971). Disillusioned with pure linguistics, socio-linguists explored ways of accommodating other aspects of language’s functioning besides grammar and form. Gumperz and Hymes (1986) developed a sociolinguistic approach in which they first ask how speech in a given group orders the actions and experience of its members, then ascertain what speech events characterize communicative situations, and what types of talk make up these speech events. Then they ask how communicative resources are distributed, interpreted, and managed within the group. This second level of analysis allows a researcher to see changes in the patterns of communication within the short space of the academic semester. Some changes in the allocation of communicative resources may be viewed through the lens of sociocultural psychology as indexes of social or individual learning. The ZPD is an example of a psychological

---

7 Disillusionment with linguistics did not decrease interest in grammar and form across the board. Other applied linguists retained traditional units of analysis and attended to meta-functions of language.
construct the presence of which may be triangulated by changes in who makes assertions, asks questions, and so forth.

Because I am interested in the collaborative problem solving processes that precede writing, I use Gumperz and Hymes’ (1986) ethnography of communication as the methodological bridge between socio-rhetorical context and explicit writing events. Using an ethnographic approach that focuses on talk to understand the writing process depends upon awareness of a complex domain shared by collaboration, problem solving, and literacies. Overlap among element in this domain is evident in Vygotsky’s (1978) assertion that reading and writing are learned optimally when they are “necessary for something” (p. 117). In other words, talking traces the parameters of content that may be useful in writing, but much more importantly, talking helps identify “compelling reasons” for writing and social contexts to receive information conveyed (Dyson & Freedman, 2003, p. 968). Talking helps identify perspectives on a problem that strike individuals and groups as valid and important. At the same time talking helps identify social contexts into which to write.

In broadest terms, collaborative classroom political arrangements afford interactive behavior, but students may be hindered from participation by the dominance of class, race, and gender-biased ideology realized in discourse. People appear to manage unfamiliar unequal relationships differently than familiar ones. They perform subject positions, which of course are realized in choices of words, differently over time as they develop common ground with their counterparts. For example, performances of apathy are probably familiar to most secondary teachers, as is the hunch that a student’s apathy may be a knee-jerk response to alter the balance of student-teacher or student-student power. Practically speaking, as teachers work to maximize access for all students and foster high levels of interaction, what knowledge about the interactions matters?

Ethnography of communication provides a way to open the black box of the intersection of ideological inflected conversations. It affords seeing beyond level of interaction and seeing collaboration as a living process by identifying and then analyzing participation in communicative situation, communicative events, communicative acts, and categories of talk in a given social setting (Saville-
Troike, 2003). Communicative situation is the context in which verbal and nonverbal interactions take place that support other evidence of the existence of a somewhat distinct social group. Communicative events are the salient sections of a group’s interaction. Typically, the example is given of a religious service in which the names given to the various parts of the service contain significantly different sets of communicative acts. Communicative events often involve more than one speaker, and their beginning and end are indicated by changes in speaker, role, or speech category. Communicative acts are the utterances that make up communicative events. Communicative acts may be divided into categories of talk.

Context of the Investigation

**Communicative situation.** Over a period from Spring 2009 to Fall 2011, I recorded and transcribed classroom discussions in four iterations of a service-learning human geography course taught by multiple instructors. The study population (n=15) consisted of undergraduate and graduate geography majors and non-majors. Using interviews as a source of background information on students’ interests and prior knowledge of topics relevant to the course, I confined my detailed discourse analysis to class meetings in Spring 2010 which preceded the publication in local newspapers of two articles collectively written by the class.

The biweekly class meetings were 90 minutes in duration. The class convened in a seminar room on the third floor of the Geography building and included periodic excursions to a rooftop garden. The classroom contained several whiteboards, a projector, screen, and computer. The classroom provided wireless internet access, though only two participants typically brought computers.

Every class meeting began with opening comments by the instructor. Students were expected to read and discuss journal articles and activist media published online, not all of which were obviously tied to questions of urban food insecurity. Students were encouraged to keep reflective journals, although no grades were ever assigned to students or student work during the course except on midterm and final grade reports. Everyone received As. Students were expected to take responsibility for the direction of
the course with the readings, discussion periods, journaling, and the required cultivation of the rooftop
garden as scaffolds of reflective learning.

I had observed the instructor, Dylan, once before, published a case study of two of his students,
collected data on his development as an instructor, and talked with him extensively about the
development of the course and his goals and philosophy on many occasions. He describes himself as a
scholar-activist in the tradition of Bill Bunge (1971), who argued that geographers should position
themselves in contexts of local struggle to bring conceptual resources of geography to bear on local
oppression. Dylan located the genesis of the course that became Athens Urban Food Collective (AUFC)
in a conversation two years prior with a colleague and students in courses they were teaching: “There was
a discussion around the AUFC that [another instructor] and I facilitated with
groups of students, where we
said, ‘We don’t want to make all the decisions. But this is our job. We don’t want to just shoot the
[breeze],’ so we have some structure, but we also wanted to have some degree of ownership on the part of
the students, to level the playing field.” Dylan’s report of that discussion demonstrates how the course
was intended to complement traditional courses in geography with nonhierarchical facilitation as the
model of teaching, consensus as the model of learning, fusion of dialogue and meaningful action as the
source of stimuli, and professional alignment of teaching and activism as his motivation.

**Instrumentation.** I relied on prior observation of the course and semi-structured interviews (see
attached protocol) with prospective students of the focal course to learn about the rhetorical positions and
organizational ideologies students were likely to adopt based on their prior education, interests. I judged
these organizational ideologies according to Althusser’s ideological conception of discourse as the verbal
encoding of a subject position that appears naturally or self-evidently true. In this way, biodiversity,
action, and government intervention are ways of framing problems or topics that streamline the process of
situation definition.

**Design.** I determined the communicative situation of the group based on enrollment in the course
and attendance at class meetings. A common characteristic among participants was significant experience
in other speech communities. All participants in the course were enrolled in other university courses
simultaneously. Additionally, all of them had taken courses in other fields, and most were close to or beyond completion of an undergraduate degree. Four graduate students in the class were seeking or held graduate degrees outside geography. Nonacademic speech communities were important, too. Some issues discussed in the class are familiar topics in national and local news. Many books and documentaries recently have approached topics important in the course from a variety of perspectives. Among the most obvious are: economic distress across multiple scales, widespread criticism of industrial agriculture, environmental degradation, and soaring hunger statistics nationally and globally. Participants reported having read or knowing about popular books on biodiversity, sustainable agriculture, and the ethics of local food consumption. The academic fields participants represented (human geography, history, social work, education, international affairs) are broad with respect to possible ways of looking at issues of food security. The resulting communicative situation was rich in terms of established communicative resources from ideologically diverse sources.

Because the goal of this method is to produce data about collaboration as a learning process and position ethnographic listening as a feature of collaborative pedagogy, my research attends to classroom negotiations that provide participants multiple, extended opportunities to hear and ‘try on’ new or alternative subject positions. I focus attention on communicative events in which a variety of ideological resources are brought to bear by more than one individual. Discursive or heteroglossic negotiation is a communicative event involving two or more ideological positions, two or more speakers, and extensive dialogue or reference to extensive dialogue.

With a focus on extended negotiation and collaborative problem-seeing as sites for concept development, communicative acts become visible when they a) appraise the ideological positioning instantiated by another participant or b) include didactic or persuasive genres of talk that alter the flow of conversation by inviting other participants into a controlled communicative space.

Coding for appraisal, I draw attention to speech acts that serve to cut off or reinforce others’ positionalities (see Figure 2.1). The role of silence and body language, for instance, in appraisal can hardly be overestimated. However, in the interest of making this method available to the widest possible
audience, I include only verbal appraisals in which the ideological basis may be inferred from the appraiser’s statement. Two steps of analysis are involved in verbally articulated appraisals: indication and ideological grounding. Some appraisals superficially confirm preceding statements (indication, pointing in the same direction) but do so from differing ideological standpoints. Other appraisals can disconfirm preceding statements but strengthen ideological common ground.

A variety of speech genres often occurs in conversation because people recognize, usually implicitly, the affordances and constraints of categories of talk. These affordances and constraints operate on the levels of authority and content. Genres of speaking position people differently in relationship to one another and to the content of an utterance.

![Figure 2.1. Ideological theme (1), category of talk (2), and allocation (3).](image)

The communicative events containing instantiations of multiple ideological discourses characterized by varied appraisals and appearance of divergent speech genres are useful for interpreting collaborative learning. The ingredients, as it were, that make up extended negotiations are significant from the perspective of sociocultural psychology, and because they align with Gallimore and Tharp’s (1990) prescription for zones of proximal development. I use the collaborative writing endpoint to throw my emic listening to the speech community into relief as I search for signs of the genesis of writing. The awareness of endpoint also makes etic perspectives valuable as well, so I tally the use of various
discourses at various times to get a useful, if limited, bird’s-eye view of how changes in the communicative map the experiences and learning of the participants.

Once the communicative landscape has been charted using this hierarchy, I consider participation in communicative events and categories of talk early on in the course, as the speech community regulates itself. I wonder whether and how students will expand and regulate the distribution of communicative resources over time, and how this micro-cultural process will afford and constrain their problem seeing and problem solving. Somewhat like a community of practice approach (Lave & Wenger, 1988), which expects to find changes in participatory action, ethnography of communication focuses on changes in the distribution of communicative resources, such as categories of talk employed mainly by a teacher early on, but increasingly by students as they develop communicative competence through teacher and peer assistance. I use the tools to identify trends in the use of communicative resources for the purpose of teaching and persuading, again drawing upon the interconnection of authority and assistance.

I then ask what, if any, factors affect apparent changes in the patterns of talk. In the case of the service-learning course, participants engaged in a local demonstration that was part of a global protest of the use of public space; several coordinated distributions of vegetable plants to school gardens in the area; all participated in organizing the third iteration of a major community activism event to which citizens interested in addressing questions of local food were invited. In addition, the rooftop garden, the journals, the discussions, and the readings were specifically intended to stimulate reflective thinking about participants’ presuppositions regarding food insecurity. Owing to my theoretical framework, I note words heavy with attribution that appear to point to a known, shared, or interjected ideological source.

**Procedures.** As a participant-observer, I attended all class meetings of the service-learning course. I recorded and transcribed the meetings, but only used transcripts following the collaborative writing project as supplemental sources. I contributed verbally in the discussion four times in the twenty class meetings that comprise the focal data set. Data presentations exclude my contributions. Students were informed that I was collecting data for a study about how people learn in a service-learning context.
I coded 98 single-spaced pages of classroom discussion for ideological discourses, communicative events, and categories of talk.

For ideological discourses, I used content-oriented, open-coding to discern historically and ideologically identifiable social orders *imported* into the communicative situation by participants (i.e., what Voloshinov, 1999, would call “ideological thread” or theme, p. 19). The second type of coding was an examination of the communicative events, the regular boundaries of particular types of communication. The third type was the categories of speech acts that encoded ideological positions in different styles and according to different rules. Speech categories are useful as indexes of peer teaching, conventions of representing expert or anecdotal knowledge, and other forms of interpersonal evaluation.

I added a fourth category, which consisted of references to or uses of technology in carrying out course activities, following up discussions, and organizing mediates students’ learning. I coded for technology in order to make visible 21st literacies as a type of communicative resource students and teachers may already take for granted as means of working together to solve problems.

**Validity**

The validity of the method described here rests, on one hand, in its application of a theory of social learning and collaboration, and on the other, in the weaving together of emic and etic perspectives on speech patterns within a group. The use of code tallies is problematic due to spurious certainties and inevitable uncertainty in the coding process. Because the use of etic perspectives raises more questions than it answers, I address several important issues here concerning coding choices.

The definition⁸ of ideological discourse I employed precludes absolute certainty about the subject positions or social roles that students perform. I coded all subject positions that met the criteria of representing a distinct rhetorical position or social role. It is therefore likely that fairly similar subject positions were coded differently, lowering numerical frequency of the appearance of a given position. By

⁸ Althusser (1971) argues that it is impossible to know someone else’s positionality with perfect certainty. One cannot even know one’s own positionality completely, although a person may be aware of it. Despite the layered lack of certainty, people behave as if it were possible to understand where people are “coming from” when they speech, enough to fight about it and learn from it. The objective nature of any positionality is both assumed and irrelevant to the investigation.
the same token, I inevitably code a unit of text as embodying two or three subject positions when only one was present.

The theoretical meaning of the codes themselves and the interactive processes they suggest mitigate limitations on the validity of my coding process. That is, the process of discursive negotiation necessitates that over time, people tend to use a common set of discursive tools, even if they retain a preference for tools that are not widely shared. The frequency of certain codes provides an indication of the results of discursive negotiation. Contrary to some dialogical approaches, in which notions of open-mindedness are paramount, my method assumes that mutuality serves not only group interests but also self-interest. Productivity requires a product, and I expect the product of collaboration to begin with shared language, a phenomenon that this coding scenario was designed to reveal despite obvious limitations on my ability to represent the subject positions of others.

The above defense does not account for the related validity issue of more subtle shifts in subject positions. My coding process involves a degree of crystallization or reification of subject positions. Coding categories make subtle changes within subject-positions invisible, so finer in-category analyses are necessary, but involve decisions about which changes matter. Qualitative changes within positionalities appear in the data only in relation to other, more obvious changes. Without doubt, I coded some qualitative changes as new positionalities (most likely lacking sufficient frequent to stand out), and some form invisible subclasses of other codes. I addressed the problem in two ways. First, I compared early and later instances of frequently used codes to ascertain qualitative differences in the presentation of ideology. Second, on the assumption that conversations during the writing of the two articles represented the most naturalized discourses, I checked codes that predominated by frequency against those that predominated at the end of the sample period. This step corrects for validity problems associated with inflexibility of codes as well as the general problem of assigning significance to discourses based on their frequency of appearance.
Assumptions

Although appraisals and speech genres function to regulate people as well as the mediational means being used in a discussion, I believe it is theoretically invalid and impossible reliably to determine whether an appraisal applies to a way of approaching a topic or to a person. Collins (1999), citing Voloshinov (1999), rejects any “disjuncture between referential meaning and evaluative connotation” (p. 139). I assume philosophically that all interpersonal communication involves the use of ideological subject positions realized in speech. People cannot be separated from themselves as language users (Wertsch, 1991), but they may employ additional or different mediational means in their very next breath that position them quite differently.

Scope and Limitations

Limitations apply to the method of analyzing students’ talk outlined here. In terms of generalization to other populations, as I described in the introduction, sociocultural literature sometimes assumes that children share organizational ideologies with their immediate peers and teachers. Differences in ideology are often assigned to culture, a position I accept wholeheartedly, but I wish to underline the importance of older students’ participation in a variety of overlapping and non-overlapping speech communities. Nonetheless, this question amounts to a limitation in the generalizability of my research, since my participants have been influenced for a longer period of time by academic disciplines as ideological state apparatuses. However, the disciplinary and organizational transitions between elementary and middle school coincide with developmental changes that position my research as a source of conceptual inferences across contexts. In other words, the positioning that takes place as students gain experience with discrete academic subjects makes middle and higher school contexts the very ones in which to search for conceptual resonance. It is reasonable to assume that as students are indoctrinated into academic disciplines, not to mention their increasing participation in discrete social groups outside the home, the likelihood of significant divergence in ideological positioning increases, thereby reducing this limitation.
An overall limitation of the study’s generalizability is manifested in an array of unique features of the activity settings that afford the formation of zones of proximal development. In the data, I identified fifty examples of interactions across a significant ability gap, with subordinates attempting to participate in discussions of complex issues with the help of more capable peers. The conditions under which zones of proximal development arose distinguish activities in the course from “typical academic activities,” as one graduate student called them. Rich and, at times, pronounced differences in age, level of education, race, profession or career goals, disciplinary training, and relevant work experience are not always evident in all academic settings, and difference is a fundamental part of zones of proximal development. Similarly, the course was organized on the assumption that students would have significant say in the direction of the course. Definitions of service-learning typically include students’ ability to govern the course as an identifying feature of service-learning (Billig & Waterman, 2003). It is plausible that rhetorics surrounding students’ roles shape collaboration in important ways. Other AUFC courses in my larger study included collaborative writing as an assignment required by the instructor. Despite the limited generalizability of analyzing communicative processes that produced voluntary (i.e., suggested, but not assigned) collaborative journalistic writing as one among many action possibilities, the utility of the research in under-researched areas outweighs the applicability of another study of students forced to write.

**Discussion**

21st century literacy is an emerging factor in pedagogy, research, and educational policy. The term signifies the need for collaborative, interdisciplinary, technologically advanced, future-problem oriented teaching and learning. The approach shares elements with the New Literacy Studies (New London Group, 1996), critical media, and learning with digital literacies, but orients toward the development of a workforce with particular competencies tied to economic viability in the context of

---

9 Over its history, public education in the US has limited difference through its design of schooling through classification by age, monolingualism, grades, and curricula, all of which are designed to reduce difference, not just the appearance of difference.
global competition. This research was designed to inform pedagogies driven by awareness that much is unknown about the competencies necessary for life fifty years from the turn of the 21st century.

As teachers, researchers, and policymakers explore possibilities for learning both within and beyond disciplinary divisions through collaborative, there is considerable agreement that increasing productivity by transcending individual limitations through enhanced connectivity is a literacy issue. The argument goes, “Just as the transition to print literacy and book culture involved a dramatic transformation of education…so too does the ongoing technological revolution demand a major restructuring of education today with new curricula, pedagogy, literacies, practices, and goals” (Kellner, 2000, p. 246). As conventional economic markets vanish and new ones emerge, this research provides a means of understanding the dialectics of transcending horizons of disciplinary thinking. As such, this research applies to several specific areas: to project-driven contexts where instructors make room for problem identifying as the core 21st century literacy; to open-ended instruction of reading and writing where those skills must be “necessary for something;” and to the problem-identifying stage in service-learning pedagogy, which includes some teacher education courses that position students as capable of identifying problems.

The method outlined in this paper does not follow in the tradition of quick fixes in educational reform; the approach assumes that teachers want to arrange students in autonomous or semi-autonomous collaborative groups. A great deal of effort has gone into making the case that classrooms should be characterized by authentic student dialogue, but more needs to be done to help teachers understand their role in the politics of epistemic location beyond promoting on-task talk and providing authentic assignments. This approach helps a teacher move from monitoring student behavior (on/off task) to aggregating sets of subject positions. Moreover, by listening to and retrospectively discussing the processes negotiation, teachers may find that their students achieve temporary, collaboration-induced critical awareness of the forces influencing their thinking and speech. As for collaborative writing, since the best tasks are uncertain, understanding processes of discursive negotiation forms a crucial step in
teacher and student decision-making regarding affordances and constraints of various forms of writing or composition.

Vygotsky’s work in Central Asia (Luria, 1976) is the best source of insight into theoretical modifications Vygotsky judged appropriate for working among older research populations. The importance of extra-familial subject positions to older research participants may be seen in the research design. In their design schooled and non-schooled children corresponded to collectivized and non-collectivized farmers. Scribner & Cole (1981) launched their critique of Luria and Vygotsky’s findings based on this equivalency, in which Vygotsky expressed a rather bold claim: Schooling is to young children what socially unfamiliar collaboration is to older children and adults. Continuing the analogy, division of labor and other institutionalized means of subjectification are to the adult mind what illiteracy is to the child’s.

To talk of collaboration as a process necessitates analysis of the negotiation of different subject languages (i.e., heteroglossia) by speakers whose motivation and ability are not absolute, but relative to the subject positions they adopt. This negotiation obviously involves struggle over which conceptual framework will prevail over others. To illustrate, probably no one who understands Jim Croce’s experience and success as a songwriter was surprised when he said, “I love you” in a song, nor that drawing on different communicative means made the words come out wrong. The genre and the ideological positioning of romantic love affect his capability, which he says is contingent upon the form (and I add the subject position) of the song. But it is easy to imagine an actual audience of the song retorting, “I wish you’d say ‘I love you’ in some other way that suits my interests better.”

Two very surprising things happen alongside, and perhaps as a result of this kind of discursive struggling. First, testing and efforts to naturalize various conceptual frameworks can create activity settings that fulfill the “overall system of assistance” that summarizes one Vygotskian approach to school reform (Gallimore & Tharp, 1990, p. 189). Second, subject positions can change as they become shared tools for collaborative work.
In order to see development of and threats to epistemic trust among collaborators, I encourage examination of the give-and-take between ideological languages (Voloshinov, 1999) as both a pooling of resources and a struggle over their use. Bakhtin’s (1981) options of authoritarian and internally persuasive discourse inadequately characterize the conditions the method I have presented is intended to reveal. It is unlikely that extended negotiations, which have been treated as a black box in collaborative writing, would ever be reducible to options so ideologically biased against power inequality.

While many critical linguists locate these differences in morally problematic social inequality, Vygotskian (1978) theories afford a utilitarian view in which learning depends on interaction with more capable peers. This recognition is crucial to understanding a research where people have widely different interests in and experience with a particular topic. Capability crucially depends on the ideological position established for a given topic. The rules of my PhD program, for example, allowed me to choose, within limits, the theoretical approach that made me maximally capable. Returning to the notion of situation definition, which Wertsch (1985) used to clarify the definition of the ZPD, a slightly revised definition of the ZPD may be necessary. Opening ZPD’s assumes a process of partially resolving ideological heteroglossia. By identifying extended negotiations as a salient event occurring regularly in a communicative situation, I demonstrate the value of kind of multiplayer or collaborative ZPD, in which the capabilities of the provisionally more capable peers are contingent upon the process of vetting available ideological resources. To illustrate, if three persons discussed how best to help me profess love to someone, the process of negotiating and adjusting ideologies that played a role in personifying the individual members would affect how capable any one of the three would be as my guide.

Language does not passively or automatically reflect but “refers to a world that it claims to describe, to express, or to represent” (Ricoeur, 1986, p. 145); language appears inflected with ideology (Bakhtin, 1981; Althusser, 1971). The theoretical transition from describing the world to claiming to do turns on the recognition of the fusion of ideology and communication: Discourses posit worlds created in their own image. An implication for understanding cognition is that verbal aspects of thinking and talk are laden with ideology and rhetorical strategy (Billig, 1991). Althusser, Bakhtin, and Vygotsky placed
ideological struggle as the foundational justice question. Racism, sexism, and so forth, are effects of contradictions of capitalism, not causes.

Different ways of talking index different cultural worlds, which teachers may be expected to respect. Often, teachers use the assumption that students have been positioned differently by their families and life experiences as a way of getting them to want to write. Teachers should also know about productive intersections and changes in those worlds in student talk. The intersections have infinitely more promise than sterile treatments of difference that frame students as isolated individuals playing out their poverty, ethnicity, privilege, or gender. Teachers should not expect older students to write ethnicity or gender in ways that are automatically recognizable, a point Cameron (2005) corroborates in terms of speaking and Fen (2008) confirms empirically. Luria’s (1976) study of isolated and cosmopolitan Uzbeks found that culturally-mediated ways with words indexed ways of thinking, but recognized that the goal of education is to foster particular interactions with a particular goal in mind. While Luria’s study provides a few examples of cultural insensitivity, his findings confirm the hypothesis (in my words) that interactions across ideological boundaries are sites of conflict, humor, confusion, and learning.

I live in a world where religion, music, politics, academic discipline, and many other such categories contain multiple, identifiable, reinforcing, competing discourses. In academic learning, it may be convenient to think of classroom talk and thinking as if its social context were mono-discursive, like Rogoff’s (1990) families. Tharp and Gallimore (1988) make just this assumption, but it damages the strength of their prescription for school reform. Extrapolating the zone of proximal development to older students and adults necessitates the addition of a theory of heteroglossic negotiation.

The question is, what knowledge do teachers need to foster interactions among students rich in terms of one or more disciplinary content areas? Obviously, knowledge of students’ ethnic background and welfare is important in a general sense, but it would only be a starting point for teachers who promote student-led problem identifying and solving as an instructional format. This article assumes that teachers and researchers require two kinds of knowledge about student discourse: First, they need a method for identifying organizational ideologies that shape students collaborative encounters with problems.
Cultural background serves as one possible source for guess at likely discursive positions, but race and residence may not be primary sources of a person’s environmentalism or views about civil rights. Second, equipped with information about organizational ideologies, teachers’ can transform their “knowledge of students” into knowledge of the layered interaction of organizational ideology and persons.

In terms of my study of students’ talk, the central finding is that collaborative discussions contain periods of negotiation of preferred subject positions or discourses. Complex appraisals of one another’s statements offered by multiple members and changes in people’s genres of speaking index periods in which discourses vied for dominance in heteroglossic negotiations. ‘Winner’ positionalities changed over time and in relation to outside events and participants’ experiences together; problem posing as a speech genre was increasingly distributed among participants; and multiple students contributed conceptual frameworks as part of the situation definition process in zones of proximal development.

Recently, a focus on 21st century learning links the need for collaboration with authentic problem-based interdisciplinary learning as the basis of a workforce of possibility (Kellner, 2000; “Framework for 21st Century Learning,” 2011). While familiar scenarios like developing arguments collaboratively and new developments like 21st century literacies play important roles in individual academic learning and other areas of development (“NCTE Definition,” 2008), research-based practices imperatives (“The Access Center,” 2012) necessitate qualitative examination of processes in which interaction becomes collaboration.

“Y’all, talk!” is likely as misguided an approach to facilitating collaboration as “Think!” is to motivating perspicacity. Schooling that relies on elements of 21st century literacies education—book clubs (“Professional Development,” 2012), service-learning (“What is 21st Century Education,” 2010), and future-problem based initiatives (“Future Problem Solving,” 2011)—offers potential data sources for inquiry into the processes and problems of collaboration students are likely to encounter.

In order to incorporate authentic, collaborative, interdisciplinary projects into a content area course, teachers must develop instructional capacities that correlate to 21st century literacies expected of
students. An example of such a capacity is the ability to awaken maturing skills like writing (Vygotsky, 1987) by altering activity settings to extend goal-oriented co-construction of knowledge (Tharp & Gallimore, 1990) that makes literacy necessary. In terms of English Education, understanding how to align group interaction, problem identifying, and responsive student action with literacy goals is what 21st century literacies instruction is all about.
References

www.k8accesscenter.org/training_resources/reasearchapproach.asp


Emerson & M. Holquist, Trans.). Austin, TX: University of Texas.

London, UK: Continuum.


Teachers’ College Press.


CHAPTER 3

“WITH, NOT FOR”: COLLABORATIVE CONCEPT DEVELOPMENT IN 21ST CENTURY LITERACY-MEDIATED PROBLEM SOLVING

---

10 Boggs, G. L. To be submitted to the Journal of Literacy Research.
Abstract

This project positions collaborative problem solving as a context for collaborative concept development in a process leading up to the joint production of texts. In an ethnographic study I listened to fifteen students in a local food activism organization, which doubled as an undergraduate and postgraduate experiential learning course in human geography based in a large southeastern US university. Their conversations, which culminated in a collaborative writing project, were the objects of analysis in which I identified patterns in discourse indicating how they organized, regulated, and interpreted themselves and the tasks they identified. To contextualize 21st century literacies in a concept development framework, I needed to understand how communicative technologies afforded and constrained development and distribution of conceptual resources among participants as they posed problems and responded. Findings suggest that local and national media buzz combined with participation in a demonstration many considered worthwhile and successful privileged some communicative and conceptual resources within the speech community as they continued their negotiations. Buzz enabled more effective participation by less-dominant participants, and the conceptual resources that emerged afforded composition of digital texts as a way of responding to problems (re)constructed using literacy tools. This research frames collaborative problem solving as a literacy-mediated learning process, positioning consumption and production of texts within a broader context of collaborative negotiation. The contingency, rather than fixity, of group conceptual resources raises questions about the role of teachers in facilitating non-supervisory assistance in the teaching of writing.

Keywords: Concept development, Service-learning, Collaborative learning, 21st century literacies
Introduction

This study addresses collaborative problem solving as a context for social learning. In the picture (see Figure 3.1), the participants of a university service-learning class called Athens Urban Food Collective (AUFC) have divided into affinity groups (i.e., based on preference) to discuss ideas they’re developing for anti-hunger action projects. Much of the first half of the semester is spent in round table discussions; sometimes, small group negotiations happen online, by telephone, or informally. One part of the class is, as Dylan (the instructor’s pseudonym) says, “nonnegotiable,” in that they have to plant a garden as part of their learning about food, yet the project is a context for much negotiation about what to plant in a class garden located on the roof of the Geography building. Throughout the negotiations in the classroom and on the rooftop, Dylan continually reminds participants of the importance of consensus-based decision-making.

Figure 3.1. AUFC discussion. This figure illustrates participation in affinity groups.

Back in the classroom, as students discuss readings and talk about their action ideas, there is a great deal of pushing and pulling about how to approach the various issues that come up: staggering global hunger statistics, skyrocketing local and national poverty and government assistance levels, and
trepidation regarding crossing cultural boundaries to talk about food security. Teri (a pseudonym, as are all names in the study) argues, “You can’t separate hunger from other forms of inequality.” Chan responds with what sounds like agreement, but isn’t, really. “Yes,” he nods at Teri, “Corporate takeover of food is killing our food system.” I marvel at the nature of the interchange and wonder why Teri didn’t contest Chan’s effort to change the ideological ground of the discussion. But the negotiation moves forward. Everyone seems aware they’re arguing over how to see these problems; it’s a friendly and serious battleground. Some people in the room have invested deeply in particular ways of thinking about these issues. Others appear eager to try out a position provided in a popular book, movie, or online article. A third sit silently, listening, maybe bored or irritated. Most everyone seems happy to get to talk about ways to act on problems that other courses or experiences have made visible.

In the middle of the semester, the class decided to write an article together to “extend the conversation [they were] having” and keep what they called “momentum” going and growing (See Figure 3.2 below). Whether writing an article could be considered action or not was hotly contested. Some who liked the idea of writing an article did not think writing should be considered action because they didn’t want to miss the unique opportunity for ‘real action’ that the course promised. One student, Aaron, who initially resisted the notion of writing as action, remarked in an initial interview that writing was as example of “typical academic activities,” and the course appeared to him to emphasize other ways of learning. As the motivation to write overcame objections (a turning point: when Aaron said even talking is action), I knew I had a story, analysis of which might be useful to others who strive to create opportunities for purposive writing. What made writing an expedient form of action came down to participants’ desire to maintain and build momentum in the gap between two community action projects: one a local twist on a global protest of the use the public space called Park(Ing) Day, the other a convocation of local citizens interested in social change related to food access, quality, and economics (see Figure 3.2, AUFC timeline). The decision to write followed their contributions to the Park(Ing) Day event and coincided with their initial discussions of a plan to organize a large-scale networking session
for food activists. They wanted to get people to attend, keep people excited about local food possibilities: Writing gave them a chance to tell a story that might help their overall efforts hang together conceptually.

Figure 3.2. Timeline of AUFC activities. This figure illustrates the context of collaborative writing.

The competencies underlying the writing project were complex. They exemplify multi-vocal, democratic, technology-rich learning known as 21st skills or literacies (NCTE, 2008; P21, 2011). The National Council of Teachers of English (NCTE, 2008) define 21st century literacies as having the following six characteristics, which I illustrate using Athens Urban Food Collective activity.

- Develop proficiency with the tools of technology. AUFC participants conducted research on their topic, which they incorporated into an article published in print and online. They used GoogleDocs, video projection, and email to share drafts of article subsections.

- Build relationships with others to pose and solve problems collaboratively and cross-culturally. Participants interviewed numerous citizens, including low-income and nondominant residents, prior to publishing the article to measure community support for various approaches to their areas of concern. The entire semester consisted of negotiations among participants regarding how to view and solve problems associated with hunger.

- Design and share information for global communities to meet a variety of purposes
Participants helped create a nontraditional art installation (see Figure 3.3) as their local contribution to a worldwide demonstration against loss of public space for parking, and they added their own auxiliary demonstration specifically addressing food insecurity resulting from market-based food systems. They shared their ideas through the demonstration itself, which attracted media attention (articles, videos, sound and still photo documentation published on the Internet). They collaboratively planned, composed, and edited articles for print and online distribution.

- **Manage, analyze and synthesize multiple streams of simultaneous information**

  Participants read and discussed information about food insecurity, hunger politics, popular education, direct action, and community organizing while deciding how to allocate their time during the semester among several possible projects. Participants worked together with groups of students from other academic fields in the Park(Ing) Day demonstration. Participants wove various perspectives on food insecurity into the public demonstration.

- **Create, critique, analyze, and evaluate multi-media texts**

  In addition to multiple forms of multimedia composition described above, participants critically evaluated readings, mass media messages, other available perspectives on food waste, hunger, descriptions of the problem, and solutions. Participants responded to the publicity sparked by the Park(Ing) Day event.

- **Attend to the ethical responsibilities required by these complex environments**

  Participants used the ideas of justice and mutuality as guides for their discussions of potential community action.
As a set of goals for teaching and learning, 21st century literacies seem quite open to the interconnectedness of multiple learning processes; in combination, they blur the division between individual and group learning. There is room for useful classroom based research on any one of the six characteristics, but the real need, I argue, is to try to understand how these interconnected components shape people’s appropriation of new modes of communication.

These proficiencies are intertwined in 21st century careers and communication, hence the 21st century literacies construct provided by NCTE (2008) but in fact reaching back another decade (New London Group, 1996) and perhaps farther (Boutwell, 1962). The Common Core’s (2011) framework of College and Career Readiness condenses NCTE’s characteristics in Anchor Standard 6, but other aspects
of 21st century literacies are distributed across the writing standards: Supported claims; substantive topic; valid reasoning; complex ideas; organization of content; awareness of task, purpose, and audience; writing process (“College and Career Readiness Anchor Standards for Writing,” 2011, n. p.).

21st Century Literacies and Formal Education

A good question that follows from NCTE’s (2008) definition and the Common Core’s (2011) reference to 21st century literacies proficiency is how 21st century literacies mediate learning. Proponents of this framework for understanding educational need stress that the kind of learning that matters for the 21st century is already happening, particularly outside formal schooling, and that schools need to catch up with what children are learning in video games and as fanfiction authors (Kay, 2008). This rationale and the combination of rapid changes in technology and significant shifts in global demographics through immigration raise important questions about the special role of schooling in stimulating the development of the literacies that the NCTE definition describes. The bind is fairly obvious: If people are learning ‘what really matters’ independent of schoolteachers and curricula, through rapidly changing collaborative platforms like Twitter then why bother adapting curricula to meet 21st century needs? Considering the way funds are disbursed in schools, it seems highly unlikely that being current technologically is really in the cards. A recent blog post from a web developer illustrates the fluid networking of technological platforms, democratic/meritocratic organization, and highly personalized educational opportunities (see Figure 3.4). Structural features of formal schooling ironically stand in the way of rags-to-riches stories that depend on catching up with rapidly changing knowledge environments.
What's Twitter good for anyway?
Submitted by Hal Misseri on Thu, 02/16/2012 - 18:16
The other day my mom asked me, "What is twitter good for? How much can you say in 140 characters?" [I responded,] Sure, you can use twitter to see what Ashton Kutcher and Kim Kardashian had for lunch. You can also use it to organize an uprising as we saw last summer in the Middle East. I (and I'm not alone in this) use Twitter to learn new things. Like any tool its what you use it for that makes it worthwhile.
When I lost my job a couple of years ago I faced a situation where I was burned out on the sign industry. I wanted to move back into web development and design but realized quickly that in the past 10 years the world of the web had moved on and I was in the weeds. With my lack of funds and excess of time I turned to the internet for help. I quickly realized that every good tutorial I found had that little bird icon at the top. A quick google search of "top css tweets" led me to a list of industry leaders willing to give away all the knowledge they had on the subject. Ditto for Photoshop. Illustrator. HTML 5, and so on.
Each morning I would make a pot of coffee and start my day by looking through my twitter feed for links to articles, blogs, and tutorials. Not everything I found was great, but not every teacher I had in school was great either.
Over a couple of months I had weeded out the not so great and was left with a core listing of fantastic resources that posted articles three or four times a week. Within 5 months I was back up to speed on what the latest web technologies had to offer and was well on my way to mastering the ones that were important to me. I even learned how to rebuild my cars engine but that's another story.
We all know the internet has more information than you can possibly keep up with. Twitter makes it easy to find and follow the best and brightest of their respective fields. 
.... I now have a full time job as a front end developer with carters.com and make thrice as much as I did in the sign industry. I still don't follow Ashton Kutcher.

Figure 3.4. Blog: Learning Mediated by 21st Century Literacies. This blog post illustrates the flexibility of Internet tools and, consequently, the relevance of literacies as mediators
NCTE’s (2008) 21st Century Literacies definition is particularly useful, in light of the blogger’s comments, in that it foregrounds technological tool use but emphasizes collaboration, learning, and production as the meaningful outcomes of working in technology- and media-rich environments.

I infer, based on NCTEs (2008) having issued the definition, that some people believe teachers in schools can foster 21st Century Literacies. However, the question of what schools’ role is in contemporary culture is not a settled matter. As an optimistic example, Lev Vygotsky (1978) saw schools as a kind of paradise for the development of conceptual thinking, where everyday experiential concepts and scientific theory flow together and inform one another in the form of robust, flexible, applicable, abstract concepts. Tarp and Gallimore (1988; Gallimore & Tharp, 1990) extend Vygotsky’s line in an argument that schools therefore play a special role among other social institutions, all of which have educational characteristics. Only schools, argue Gallimore and Tharp (1990), are fundamentally defined as systems of assistance. In other words, while corporations and churches are undoubtedly educational settings, their primary purposes make failure to learn grounds for punishment, marginalization, or termination; schools, they argue, have no other purpose than to teach and so should be organized to integrate assistance in conceptual thinking systematically.

One doesn’t have to read deeply in criticism of schooling to see the idealism of Gallimore and Tharp’s (1990) notion. Schools serve many social purposes, and in a stratified society, it follows that schools will tend to safeguard the “constitution” of the state, to use Aristotle’s (1982, V, 9, 1310, a 12-17) formulation. However, the idea of a system of assistance is an interesting one for examining instruction in an area in which people are tending to learn informally outside the school arena. The question then becomes how to organize such a system for the particular educational goals, sociocultural setting, economic context, and politics in question. Vygotsky defined schooling for a union of socialist republics that was rocketing into the Industrial Age in their famous accelerated catch-up to the West under Stalin between 1930 and 1940. He and his colleagues recognized the significance of the Green

---

11 The word translated by Tricot and Rakham in Aristotle’s Politics (1982) is politeia, or how the polis is run by its citizenry, hence constitution.
Revolution and conducted a study of changes in consciousness in a region where ten million acres of steppe, orchards, and desert were being replaced with cotton produced using 20th century agricultural and communication technologies.

One of the most remarkable things about Vygotsky and his circle is their attention to the relationship between socio-economic development and consciousness. That recognition enabled them to identify educational contexts that mattered: The teachers’ colleges for women, elementary schools for children, adult agri-scientific education programs, and workers’ collectives (Luria, 1976). The notion of “digital natives” (see Bennett, Maton, & Kervin, 2008, for a history of the term) offers a parallel to the drastic socioeconomic changes and concomitant changes in consciousness that faced the U.S.S.R. Interestingly, while many scholars associated those changes in consciousness to changes from oral to literate communicative technologies, the digital native notion is being used to suggest that technology is changing consciousness once again—a rehash of the orality/literacy debate (see Kellner, 2004).

Two main viewpoints have emerged among proponents of 21st century literacies: one that recommends economics as the primary driving force for educational reform (Cisco Systems, 2008; P21, 2008; Pearson Education, 2008), another that critically examines economic and related social issues such as inequality (Gee, Hull, & Lankshear, 1996; Lankshear, 1997) and contradictions inherent in late capitalism (C. Collins, 1999, Wilder & Dressman, 2006). Both positions hold that not only technology, but also global collaborative possibilities, commerce, and distribution of labor mediate the development of “digital natives.” Implicit in some rationales is the notion that American industrial dominance has been radically altered by transnational corporations ability to make use of unskilled industrial laborers in less developed regions to save money. For post-industrial countries experiencing significant economic decline and even financial insolvency since 2008, the 21st century literacies approach has a great deal to recommend it, from relying on cheap technology rather than costly industrial infrastructure for growth to democratizing problem solving as a post-assembly line workforce skill.

The problem is that, in order to make 21st century literacies part of the overall system of assistance in schools, two things have to happen: Schools have to become systems of assistance (rather
than systems of stratification, for example), and stakeholders have to understand how 21st century skills develop. This research attempts to help the latter step on the assumption that the organization of schooling is tied to material economic conditions that are changing. In other words, schools may not become systems of assistance, but their institutional organization may adapt to new economic and political realities, as it is the nature of education, whether we look to Aristotle or Althusser (1971) to suggest ways of being human that support the overall constitution of a society.

My goal is to inform teachers and researchers about 21st century literacies as means of learning in a knowledge economy. Those passionate about (e.g., Cisco Systems, 2008; Kalantzis & Cope, 2008) and those who want to resist the knowledge economy (e.g., Carrette, 2007; Gee, Hull, & Lankshear, 1996) see collaboration as the molecule of measurable, economically significant (i.e., commodified) knowledge production. Recognizing oppressive dimensions of the knowledge economy (Boggs, 2010), I recognize risks and benefits associated with exploring the black box of student collaborative writing. On one hand, disciplinary boundaries are slated for reorganization and liquidation in the knowledge economy. Equipping teachers and schools to teach beyond disciplinary boundaries thus helps global capital commodify knowledge in accordance with its own goals as a prior state-oriented privileging of disciplinary boundaries withers (Carrette, 2007). On the other hand, the potentially critical nature of media literacy and collaboration presents the possibility that “Attend[ing] to the ethical responsibilities required by these complex environments” could produce meaningful resistance to exploitive economic processes (NCTE, 2008, n.p.).

In order to structure my investigation of collaborative writing as a 21st century literacy-mediated learning process, I asked the following research questions:

1. What communicative characteristics developed among participants in a service-learning program that enabled joint production and publication of a newspaper article online and in print?
2. How did group interactions index conditions for concept development?
3. How did 21st century literacies shape collaborative learning processes?
Theoretical Framework

I assume, after Vygotsky, that collaborative work is mediated symbolically, in language, that the linguistic tools people use together shape what they are likely to count as knowledge (Vygotsky, 1987; Wertsch, 1991). While Vygotsky’s theories of development are often used more narrowly than Vygotsky did, to study learning, my theoretical framework draws on Vygotsky’s wider project, which theorized the origins and development of human consciousness (C. Collins, 1999). People participate in multiple social groupings with different ways of speaking, so they may have a variety of conceptual and communicative resources on which to draw in any one interaction. In practice, though, these choices are afforded and constrained by ideology, which functions as the bridge between word meaning and the cultural goals of a group of people.

The media, state, religious systems, families, and other social institutions suggest acceptable ways of speaking, writing, and interacting through subject positions (Althusser, 1971). These subject positions are especially important in smaller groups, such as students in a class, because nonsupervisory assistance in the group catalyzes opportunities for entrenching subject positions or providing alternatives. Vygotsky’s (1978) zone of proximal development (see Figure 3.5) brings this relationship between ideology, communication, and social learning together in a cogent way, as he argues that language- or other sign-mediated peer assistance extends individuals’ ability to respond successfully to cultural (ideological) expectations.

Some tasks Maria can… do alone.
not do even with help.

Figure 3.5. Vygotsky’s Zone of Proximal Development. This figure points to the zone between developmental and potential level as a social, communicative, and ideological place.
Smaller groups of people may experience sustained interactions that are more difficult to “blow off” than ephemeral encounters outside those groups. The adage that it takes ten years to get over high school points to the significance of small groups in reinforcing ways of being in the world. It’s important to adopt an analytical methodology focused on communicative resources groups of people have and the ways that these resources are shared, learned, and changed. Analysis of speech patterns in a community can reveal important things about learning taking place, which includes people’s ability to manipulate and be manipulated by words, sounds, and images.

Do concepts, as Vygotsky (1987) saw them, represent the fruit of ideology or power over it? I regard ideology as a fundamental condition of human life (Althusser, 1971) and therefore see Vygotskian concepts as psychological tools that equip people to think effectively in particular ideological worlds dominated by academic disciplines, religion, and so forth.

**Methodology**

Because I am interested in the collaborative problem solving processes that precede writing, I use Gumperz and Hymes’ (1986) model of ethnography of communication to provide a methodological bridge between socio-rhetorical context and explicit writing events (Reither, 1985). Using an ethnographic approach that focuses on talk to understand the writing process manifests the assumptions I described earlier about a complex domain shared by collaboration, problem-solving, and literacies. The overlap in this domain is evident in Vygotsky’s (1978) assertion that reading and writing are learned optimally when they are “necessary for something” (p. 117). In other words, talking traces the parameters of content that may be useful in writing, but much more importantly, talking helps identify “compelling reasons” for writing and social contexts to receive information conveyed (Dyson & Freedman, 2003, p. 968). Talking helps identify perspectives on a problem that strike individuals and groups as valid and important. At the same time talking helps identify social contexts into which to write.

In broadest terms, collaborative classroom political arrangements afford interactive behavior, but students may be hindered from participation by the dominance of ideological discourse rooted in disciplines, class, race, and gender bias. People appear to manage unfamiliar unequal relationships
differently than familiar ones. They perform subject positions, which of course are realized in choices of words, differently over time as they develop common ground with their counterparts. For example, performances of apathy are probably familiar to most secondary teachers, as is the hunch that a student’s apathy may be a knee-jerk response to alter the balance of student-teacher or student-student power.

Practically speaking, as teachers work to maximize access to quality instruction for all students and foster high levels of interaction (Whyte, 2007), what knowledge about the interactions matters?

André’s comments illustrate the complex social, emotional, and performance issues that accompany the collaborative problem solving process, especially when intensified by collaborative writing:

I didn’t like [collaborative writing] all that well, which is different. It’s not the way I work. One, I hate writing. Two, it was so much, my mind could not handle it. But the end product was way better than I could have independently written. Better than any of us. I gained a lot of respect for the process when I read the final product. Even though I couldn’t handle it, I say, “Wow, that really worked.” The blue, red, and black [editing procedure] was the only thing I could handle.

People were saying stuff, but I didn’t even know what I wanted to say.

Seeing writing simultaneously with old and new eyes points to the importance of attending to the processes of negotiation that afford opportunities for peer-assisted transformation.

Ethnography of communication provides a way to open the black box of the intersection of ideological discourses. It affords seeing beyond level of interaction (Whyte, 2007) and seeing collaboration as a living process by identifying and then analyzing participation in communicative situation, communicative events, communicative acts and categories of talk in a given social setting.

Communicative situation is the context in which verbal and nonverbal interactions take place that support other evidence of the existence of a somewhat distinct social group. Communicative events are the salient sections of a group’s interaction. Typically, the example is given of a religious service in which the names given to the various parts of the service contain significantly different sets of communicative acts. Communicative events often involve more than one speaker, and their beginning and end are
indicated by changes in speaker, role, or speech category. Communicative acts are the utterances that make up communicative events. Communicative acts may be divided into categories of talk (see Figure 3.6).

Context of the Investigation

Communicative situation. This research focuses on one semester from a three year study in which I recorded and transcribed classroom discussions in five iterations of a service-learning human geography course taught by multiple instructors. The study population (n=15), which represented all participants in the fourth iteration of the course, consisted of undergraduate and graduate geography majors and non-majors. Using interviews as a source of background information on students’ interests and prior knowledge of topics relevant to the course, I confined my detailed discourse analysis to class meetings in Spring 2010 which preceded the publication in local newspapers of two articles collectively written by the class.

The biweekly class meetings were 90 minutes in duration. The class convened in a seminar room on the third floor of the Geography building and included periodic excursions to a rooftop garden. The classroom contained several whiteboards, a projector, screen, and computer. The classroom provided wireless Internet access, though only two participants typically brought computers.

Every class meeting began with opening comments by the instructor. Students were expected to read and discuss journal articles and activist media published online, not all of which were obviously tied to questions of urban food insecurity. Students were encouraged to keep reflective journals, although no grades were ever assigned to students or student work during the course except on midterm and final grade reports. Everyone received As. Students were expected to take responsibility for the direction of the course with the readings, discussion periods, journaling, and the required cultivation of the rooftop garden as scaffolds of reflective learning.

I had observed the instructor, Dylan, once before, published a case study of two of his students, collected data on his development as an instructor, and discussed the development of the course and his goals and philosophy on many occasions. He describes himself as an scholar-activist in the tradition of
Bill Bunge, who argued that geographers should position themselves in contexts of local struggle to bring conceptual resources of geography to bear on local oppression. Dylan located the genesis of the course that became Athens Urban Food Collective (AUFC) in a conversation two years prior with a colleague and students in courses they were teaching: “There was a discussion around the AUFC that [another instructor] and I facilitated with groups of students, where we said, ‘We don’t want to make all the decisions. But this is our job. We don’t want to just shoot the [breeze],’ so we have some structure, but we also wanted to have some degree of ownership on the part of the students, to level the playing field.” Dylan’s report of that discussion demonstrates how the course was intended to complement traditional courses in geography with nonhierarchical facilitation as the model of teaching, consensus as the model of learning, fusion of dialogue and meaningful action as the source of stimuli, and professional alignment of teaching and activism as his motivation.

**Instrumentation.** I relied on prior observation of the course and informal interviews with prospective students of the focal course to learn about the rhetorical positions and organizational ideologies students were likely to adopt based on their prior education, interests. I judged these organizational ideologies according to Althusser’s (1971) ideological conception of discourse as the verbal encoding of a subject position that appears naturally or self-evidently true. In this way, biodiversity, action, and government intervention are ways of framing problems or topics that streamline the process of situation definition.

**Design.** I determined the communicative situation of the group based on enrollment in the course and attendance at class meetings. One of the salient characteristics of the communicative resources in the situation is that all of the students had significant experience in other speech communities. All participants in the course were enrolled in other university courses simultaneously. All of them had taken courses in other fields, and most were close to or beyond completion of an undergraduate degree. Four graduate students in the class were seeking or held graduate degrees outside geography. The issues discussed in the class are topics that crop up in national and local news frequently. Many books and documentaries recently have approached topics important in the course from a variety of perspectives.
Among the most obvious are: economic distress across multiple scales, widespread criticism of industrial agriculture, environmental degradation, and soaring hunger statistics nationally and globally. Participants reported having read or knowing about popular books on biodiversity, sustainable agriculture, and the ethics of local food consumption. The academic fields participants represented (human geography, history, social work, education, international affairs) are broad with respect to possible ways of looking at issues of food security. The resulting communicative situation was varied in terms of established communicative resources.

Because the goal of this method is to produce data about collaboration as a learning process, I attend to negotiations in classroom dialogue that provide participants extended opportunities to hear and “try on” new or alternative subject positions. I therefore focus my attention on communicative events in which a variety of ideological resources are brought to bear by more than one individual. Discursive or heteroglossic negotiation is a communicative event involving two or more ideological positions, two or more speakers, and extensive dialogue or reference to extensive dialogue.

Given the focus on negotiation and problem-identifying as sites for concept development, communicative acts become visible when they a) appraise the ideological positioning instantiated by another participant or b) include didactic or persuasive genres of talk that alter the flow of conversation by inviting other participants into a controlled communicative space.

In coding for appraisal, I draw attention to speech acts that serve to cut off or reinforce others’ positionalities. I include only verbal appraisals in which the ideological basis may be inferred from the appraiser’s statement. Two steps of analysis are involved in verbally articulated appraisals: indication and ideological grounding. Some appraisals superficially confirm preceding statements (indication, pointing in the same direction) but do so from differing ideological standpoints. Other appraisals disconfirm preceding statements but strengthen ideological common ground.

A variety of speech genres occurs in conversation because people recognize, usually implicitly, the affordances and constraints of categories of talk. These affordances and constraints operate on at least
two levels: authority and content. Genres of speaking position people differently in relationship to one another and to the content of an utterance.

The communicative events containing instantiations of multiple ideological discourses characterized by varied appraisals and appearance of divergent speech genres are useful for interpreting collaborative learning. The ingredients, as it were, that make up extended negotiations are significant from the perspective of sociocultural psychology because they align with Gallimore and Tharp’s (1990) prescription for zones of proximal development. This ethnographic design is valuable because of its specificity. Because I know that writing merged as a form of action in the middle of the semester, I use that endpoint to throw my own emic perspectives on the speech community into relief as I search for signs of the genesis of writing. The awareness of endpoint also makes etic perspectives valuable as well, so I tally the use of various discourses at various times to get a useful, if limited, bird’s-eye view of how changes in the communicative map the experiences and learning of the participants.

Once the communicative landscape has been charted using this hierarchy, I consider participation in communicative events and categories of talk early on in the course, as the speech community regulates itself. I wonder whether and how students will expand and regulate the distribution of communicative resources over time, and how this micro-cultural process will afford and constrain their problem seeing and problem solving. Somewhat like a community of practice approach (Lave & Wenger, 1988), which expects to find changes in participatory action, ethnography of communication focuses on changes in the distribution of communicative resources, such as categories of talk employed mainly by a teacher early on, but increasingly by students as they develop communicative competence through teacher and peer assistance. I am interested especially in the use of communicative resources for the purpose of teaching and persuading, again drawing upon the interconnection of authority and assistance. Figure 3.6 demonstrates three steps of the process: coding ideological themes, speech genres, and allocation of communicative resources.
Figure 3.6. Ideological theme (1), category of talk (2), and allocation (3).

I then ask what factors, if any, affected apparent changes in the patterns of talk. In the case of the service-learning course, participants engaged in a local demonstration that was part of a global protest of the use of public space; several coordinated distribution of vegetable plants to school gardens in the area; all participated in organizing a community event to which citizens interested in addressing questions of local food were invited. In addition, the rooftop garden, the journals, the discussions, and the readings were specifically intended to stimulate reflective thinking about participants’ presuppositions regarding food insecurity. I pay special attention, owing to my theoretical framework, to words heavy with attribution, that appear to point to a known, shared, or interjected ideological source.

**Procedures.** As a participant-observer, I attended all class meetings of the service-learning course. I recorded and transcribed the meetings, but only used transcripts following the collaborative writing project as supplemental sources. I contributed verbally in the discussion four times in the twenty class meetings that comprise the focal data set. Data presentations exclude my contributions. Students were informed that I was collecting data for a study about how people learn in a service-learning context. I coded 98 single-spaced pages of classroom discussion for ideological discourses, communicative events, and categories of talk.
For ideological discourses, I used content-oriented, open-coding to discern historically and ideologically identifiable social orders imported into the communicative situation by participants (i.e., what Voloshinov, 1973, called “ideological thread” or theme, p. 19). The second type of coding was an examination of the communicative events, the regular boundaries of particular types of communication. The third type was the categories of speech acts that encoded ideological positions in different styles and according to different rules. Speech categories are useful as indexes of peer teaching, conventions of representing expert or anecdotal knowledge, and other forms of interpersonal evaluation.

I added a fourth category, which consisted of references to or uses of technology in carrying out course activities, following up discussions, and organizing. I coded for technology in order to make visible types of communicative resources students and teachers may already take for granted as means of working together to solve problems in a 21st century context.

Findings

Characteristics of the Communicative Situation

Class discussions were organized through different sequences of communicative events over the course of the semester. Early class meetings were typified by opening remarks by Dylan, which were followed by explicit problem posing prompts and fixed discussion models such as “The Snake.” I marked a third communicative event at the point in those “snaked” discussions when multiple participants began to direct their comments toward a common topic. I identified a third communicative event based on the intersection of multiple ideological themes around a narrow set of topics, a situation always marked by ideologically evaluative appraisals and often by the use of non sequitur speech categories. Initially, these discussions, primarily related to issues located in the readings, concluded as students reorganized as small groups to discuss and plan particular action items. Later in the semester, the negotiations hovered around action topics. This transition may be attributed in part to the planned shift in emphasis from readings to readings-informed organizing, and in part to the action context itself. While one initiative that represented a possible AUFC project was in preliminary phases, AUFC representatives were dispatched to informational meetings about university food services waste management. Several class meetings were
dominated by planning and action discussions following that encounter with a potential adversary. Subsequent class meetings emphasized planning and discussing action.

A common characteristic of the discussions of readings and the discussion of action was the extended negotiations, in which students struggled over and pooled ideological-communicative resources through evaluative appraisals of each others’ communicative acts and the use of alternative speech genres for various persuasive purposes. The use of these categories of talk represented performances of authority in the discussion. Changes in the allocation of communicative resources like evaluative appraisals, illustrations, personal narratives, endorsements, and problem posing are not immediately attributable to any single cause. Multiple factors contributed to opening access to ways of communicating: A variety of kinds of activity (small group, gardening, discussing readings, discussing action), sustained interest in a narrow set of issues (hunger, action ideas), changes in the types of readings being discussed, and increased familiarity with activist projects. Changing consciousness was a factor as well, an obviously important finding, which I will discuss in greater detail below.

The garden project may have acted as a kind of equalizer, in that three of the four most experienced food activists in the class had very little experience gardening. That project provided opportunities for verbal participation by a wider range of participants that may have acted as “training wheels” for other discussions with more pronounced ideological negotiations with higher stakes. More generally, the perception of active engagement shaped students’ overall experience narrative, as Jarius remarked, ironically on the topic of the writing project, “This class was one of my favorites. I’m going to miss this class. I don’t want to put any dirt on [other instructors of the course], but this class was a lot better. We were not so much in the books, but in the community trying to get stuff done.” The perception of efficacy is an important feature of 21st century literacies and service-learning pedagogy, so this type of comment raises questions about the development of writing as a form of social action well-suited to the affordances and constraints of academic settings.

Among the changes in patterns of communication I observed was the emergence of new discourses and the alteration of discourses that had occurred previously. The data show that a discourse
of “spark” was unused in the latter portion of the course, although previously teacher and participants had
framed the goals or endpoints of organizing and activism as a spark. The discourse of “momentum,”
logically quite different than “spark” appeared only in the second half of the data collection period.

Changes within discourses presented a significant challenge to the coding process, which already
involves a level of reification. I assume theoretically that discourses are not fixed and stable, but always
emergent and contingent. My approach was to identify discourses that appeared to change significantly
and explore them locally and individually. I had special difficulty with people’s reference to “social
change.” Toward the end of the data collection period, I found that “social change codes” had a much
narrower meaning and application than earlier statements coded as examples of a discourse of social
change. In the first class meetings, especially, participants attached social change to an array of other
ideologies. These pairings included reference to environmental degradation that demanded social change,
government entities that could effect it, and activist groups that should work toward it. As a code, social
change referred to demands for change in what students referred to as “the status quo.” There was
widespread agreement about the need for change, some agreement about the problems that suggested the
need for change, some agreement as to local food security as a characteristic of a change for the better,
and little agreement about the specific action steps that should be taken at the local level.

Alteration of the social change discourse is interesting as a characteristic of the speech
community because it indexes changes in the ideological positions that participants employed initially.
The fact that initial heterogeneity gave way to discursive “common ground” may be interpreted in more
than one way, but multiple possible interpretations include an overall narrowing of focus onto one among
many possible ways of resisting the status quo. Similarly, although many possible explanations exist for
the appearance of “public space” as the immediate context for social change, the change provides a good
reason to consider broader contexts in search of explanations. One of the reasons the alteration in the
meaning of the category “social change” is that the predominant meaning at the end of the data collection
was all but nonexistent in the first several class meetings. Thus the value of public space as a discourse
shifted from available, to useful, to dominant way of approaching the issue of public space.
Performance of authority. The distribution of communicative resources among participants can indicate, among other things, how authority and experiences of authority are encoded in language. This encoding ranges in its forms from the general to the very specific, from the use of ideological subject positions to shifts in genre during speech. Generally, participants asserted authority by articulating ideological positions that intimated their established logic, secure rationales, and relevance. As such, articulating an ideological position was an important means of asserting and possessing authority. In practice, many such articulations of a subject position, which were supported implicitly by hypothetical or real others outside the group, occurred in the form of evaluations of prior speech, or appraisals. Moving toward more specific ways of seeing the way language encoded authority, categories of talk (institution of discussion, problem-posing, personal narrative, illustration, and endorsement) broke patterns of dialogism that signal lively conversation. The use of alternative speech genres within conversations indicates how differences (and experiences of difference) were encoded in language. Participants adopted alternative speech genres especially as they sought to persuade and to teach. Although ideological discourses were often identified apart from the use of alternative categories of talk, no uses of alternative categories of talk were found without pronounced ideological subject positions.

Less than half of the total participant group voluntarily participated in early open discussions. Those who did invariably relied on identifiable ideological discourses. In structured discussions, which included all participants, not every statement presented clear ideological arguments. For more experienced and more vocal students, the use of particular ideological angles was commonplace. For reluctant participants and those less knowledgeable about course topics, whose contributions were often quite neutral (“I don’t know about that,” for example), taking an ideological position on a topic represents a significant step forward as a member of a speech community, in terms of the performance of authority especially.

Subtle changes in speech patterns indicate both the assertion of authority by formerly peripheral participants and flexibility regarding how authority was shared in the group over time. Traditionally issues of power help identify how and why people are excluded from participation, but the course puts the
sharing of authority into special focus. In other words, my goal in investigating performances of
authority in this course was primarily to show how authority could spread under circumstances
intentionally and consciously arranged to challenge oppressive relationships.

Recognizing the course as an experiment in fostering dialogic, socially just classroom
relationships, I found that changes in performances of authority were mediated by additional factors
beyond the arrangement of classroom discussions. The description of changed discourses above is an
example of a trend in shared meanings shaped by an external factor, in that case the public space
demonstration with which the changes in the coding categories coincided. The data suggest that the
community engagement component of the course also provided an important auxiliary means of
redrawing relationships. As a category of speech, “posing authentic problems for discussion” originated
with the instructor at first, but, later, three graduate students employed that speech category. Over the
entire data collection period, the problems posed broke down fairly evenly between teacher and non-
teacher, with non-teachers posing considerably more problems in the latter portion of the data collection.

Although I was unable to collect data on all small group breakout meetings, I did notice that they
provided special opportunities for newcomers to pose authentic problems, ostensibly to be vetted by more
intimate peers. The small group meetings I attended also suggest the value of the work-oriented
discussions over the discussions of required readings for eliciting significant changes in communicative
participation. A student who expressed frustration with the writing project went to extreme lengths to
express his satisfaction with the course as a whole for being “in the community trying to get stuff done.”
The orientation on work in small group settings and during community projects afforded peer
communication that included collaboration about writing, even among students who “hate” writing.

**Supervisory and nonsupervisory assistance.** The use of alternative categories of talk such as
illustration and personal narrative are also important as a means of exploring the way assistance was
provided in a collaborative effort. From a Vygotskian (1987) standpoint, perfectly equal distribution of
communicative resources represents an effect of cultural developmental processes. Looking at
communicative choices through the lens of the zone of proximal development, significantly unequal
distribution of communicative resources can be very interesting as examples of learning, but the Vygotskian lens provides certain requirements. A zone of proximal development almost inevitably depends on this inequality, but teachers and learners must negotiate the task before them for a zone to exist. In terms of discourse, I found that extended ideological negotiations provided the best contexts for work in zones of proximal development. Importantly, my data only reflects work among peers that took place as part of larger dialogues. I did not follow students down the hall or on email as they taught one another. Even more importantly, I have evidence in the larger study that many such exchanges did in fact took place, especially among female research participants and one female graduate student, whose passion for addressing issues of food waste stimulated significant longer term choices among several of her peers.

What the focal data offer, on the other hand, are glimpses into the opening or creation of zones of proximal development through extended discussion by multiple participants of a single topic through a variety of ideological themes. Seldom do the data show the whole working of the zone. Two patterns indicated these openings, one of which was student-driven, one of which the teacher (or someone in the teacher’s role) initiated on behalf of listeners. Participants would express a combination of ignorance, apathy, and curiosity in a statement like “I don’t know anything about that at all” to which multiple students would respond from their respective ideological vantages, or the teacher would interrupt a discussion to point out tacit knowledge required for participation, which would precipitate explanation.

The excerpt below illustrates how the two patterns, which appear together here, act as openings of a zone of proximal development. Dylan and Jasmyne both recognize the unequal distribution of communicative and conceptual resources. They each prompt peers to provide assistance.

Teri: It’s the commodification of food. If I’m a grocery store and I sell x portion, I don’t give a crap about the rest—just throw it way, don’t even compost it. Enclose it in a plastic bag so that things will never happen to it.

Jasmyne: I don’t know a lot about it. Not trying to offend.

Teri: Oh, just try and offend me!
Dylan [instructor]: Guys, we’re talking about this process without saying what it is.

Four different students respond to the combination of prompts, each explaining the concept of commodification in ways that fit their experience and expertise. Looking at the data for the first time, one might argue that Jasmyne wasn’t really asking for help, that she was actually trying to help people see how low the use value of the conceptual and communicative resources were to her and perhaps to others. While that may have been the case, it must be considered that only about a third of the group was participating in any way in the conversation up to this point, and Jasmyne, in particular, was actively listening without asserting control over the discussion. Her interjection is no less a cry for conceptual help if she didn’t actually want the help that was offered. It is a testament to the power of nonsupervisory assistance that Jasmyne was helped so much. A year on from the course, Jasmyne is employed by the university and president of a student organization tasked with reclaiming and thus “decommodifying” food. Her role as a spokesperson for the cause at multiple levels in the community, among low-income residents, among her peers, and within the university continues to provide stimuli for learning and teaching about the concept of commodification. So whether she wanted it or not, her interjection prompted significant nonsupervisory assistance.

In the excerpt the teacher attempted to act as a facilitator of nonsupervisory assistance, rather than provider of assistance. Participants’ use of alternative categories of talk and the progressive distribution of problem posing as a form of teaching indicates development of the group as a system of assistance within the broader system of the school context.

**Conditions for Concept Development**

The numerical predominance of discourses of critical awareness provides an etic perspective on the course as affording the development of robust, scientific concepts (see Figure 3.7). The three ideological subject positions that predominated were “Language as action,” “School norms,” and “Representation.” All three categories depended on critical awareness of socially constructed messages and norms.
This critical awareness did not happen by accident, but was part of the overall pedagogical format, the design and history of the particular course, and the core message of the first several class meetings. The critical awareness thread was nurtured by supervisory assistance initially and then by nonsupervisory assistance: The teacher was initially more responsible for prompting critical readings of messages in required readings and discussions earlier in the semester. Students increasingly took responsibility for positioning critical awareness from their within own perspectives. The biodiversity excerpt presented in the methodology section above as an example of the coding process shows communicative resources played into this process. Alex used his father’s position against biodiversity to solicit support for a pro-biodiversity position, yet Aaron responded by drawing attention to hidden ideology as a source for both answers and better questions (“Whose purposes?”). In effect, Aaron gave Alex exactly what he needed in terms of ammunition for his ongoing debate with his father. Because Alex’s father had many years’ experience in the nursery industry, Alex probably understood immediately how useful the new ideological angle might be.

<table>
<thead>
<tr>
<th>School norms</th>
<th>Prefig. politics</th>
<th>Wealth/Priv. Disparity</th>
<th>Anarchy</th>
<th>Local Food</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.6</td>
<td>2.7</td>
<td>1.7</td>
<td>0.9</td>
<td>0.6</td>
</tr>
<tr>
<td>Language as action</td>
<td>Action</td>
<td>Waste</td>
<td>Food System</td>
<td>Biodiversity</td>
</tr>
<tr>
<td>7.0</td>
<td>2.7</td>
<td>1.6</td>
<td>0.9</td>
<td>0.5</td>
</tr>
<tr>
<td>Representation</td>
<td>Social change</td>
<td>Compatibility w/ mission</td>
<td>Meaningful Action</td>
<td>Delegation</td>
</tr>
<tr>
<td>6.3</td>
<td>2.6</td>
<td>1.5</td>
<td>0.9</td>
<td>0.5</td>
</tr>
<tr>
<td>Organizing</td>
<td>Mutual Aid</td>
<td>Affinity</td>
<td>Audience</td>
<td>&quot;Meeting world where it is&quot;</td>
</tr>
<tr>
<td>5.9</td>
<td>2.4</td>
<td>1.4</td>
<td>0.8</td>
<td>0.5</td>
</tr>
<tr>
<td>Popular education</td>
<td>Growing Food</td>
<td>Bureaucracy</td>
<td>Food Knowledge</td>
<td>&quot;Become more human&quot;</td>
</tr>
<tr>
<td>4.5</td>
<td>2.4</td>
<td>1.4</td>
<td>0.8</td>
<td>0.4</td>
</tr>
<tr>
<td>Collaboration</td>
<td>Experience</td>
<td>Spark</td>
<td>General Direction</td>
<td>Broader econ/social issues</td>
</tr>
<tr>
<td>4.5</td>
<td>2.3</td>
<td>1.4</td>
<td>0.8</td>
<td>0.4</td>
</tr>
<tr>
<td>Agency/futility</td>
<td>Scale</td>
<td>Enjoyment</td>
<td>Interaction</td>
<td>Identity Politics</td>
</tr>
<tr>
<td>4.4</td>
<td>2.2</td>
<td>1.3</td>
<td>0.8</td>
<td>0.4</td>
</tr>
<tr>
<td>Trust</td>
<td>Momentum</td>
<td>Struggle</td>
<td>Social Services</td>
<td>Building Blocks</td>
</tr>
<tr>
<td>4.0</td>
<td>2.2</td>
<td>1.3</td>
<td>0.8</td>
<td>0.1</td>
</tr>
<tr>
<td>Food regime</td>
<td>Intervention</td>
<td>Interconnection</td>
<td>Cultural Values</td>
<td>Environmentalism</td>
</tr>
<tr>
<td>3.2</td>
<td>2.0</td>
<td>1.1</td>
<td>0.5</td>
<td>0.1</td>
</tr>
<tr>
<td>Direct action</td>
<td>Embodiment</td>
<td>Political</td>
<td>Hunger Upsetting</td>
<td>Food Access, Structure</td>
</tr>
<tr>
<td>3.0</td>
<td>1.9</td>
<td>1.0</td>
<td>0.5</td>
<td>0.1, 0.1</td>
</tr>
</tbody>
</table>

*Figure 3.7. Frequency of Discourses Used, by Percentage of Total (100% = 776 total coded discourses).*
Four conditions for concept development are visible in this interchange: (1) problems, (2) political arrangement that affords participants opportunities to pose and counter-pose those problems; (3) communicative resources for soliciting collaboration; (4) and communicative resources for providing critical evaluations of ideological foundations. These conditions produce communicative mobility, from not being able to contribute to a conversation to taking responsibility for campus-wide communication, including video presence on the Internet.

**Writing decision(s).** Strategic communication required for writing replicated the conditions above in concentrated form. Participants deliberated over how to represent themselves to a different audience. While the writing represented a different medium of communication, participants drew on shared resources, some of which had not been realized prior to their decision to write articles for local news outlets (see Figure 3.8).

The ideological work of the collaborative article was to connect the discourse of public space, which had generated considerable local buzz, to the discourse of local food insecurity. In particular, participants wanted to co-opt public space buzz for the benefit of a local food activist networking meeting (Athens Food Activist Networking Session, or AFANS), which they were organizing. The article text reinforces findings reported above about the rise of a momentum discourse and the narrowing of focus on social change to public space as the desired context for that change. The article’s 728 words contain eight references to momentum or continuing a positive trend and fifteen to “space.” It mentions “food” twenty-three times. The word “hunger” does not appear at all until late in the article, but there the word appears three times.

Strategic communication plays out in the structure of the article even more clearly. As I indicated before, the title suggests the transition from one discourse to another, with the goal of co-opting momentum attached to the former to strengthen the latter. Similarly, the first two paragraphs demonstrate the compatibility of the two ideological positions by blending them, first in a discussion of the local economy, public space, and food, next by means of an exemplary municipality that they claim fused the ideas of public space and hunger reform. The following two paragraphs described the local version of the
global public space protest, highlighting its orientation toward food security as well as apparent community support for such a stance. The fifth paragraph blended the discourses in a way that set up their overall emphasis on alleviating hunger, by representing schools as public spaces where issues of food matter. Citing chilling local reports of food insecurity in schools, the article used the public space concept as a way of hammering the notion of hunger. A sixth paragraph takes a broad look at the relation between public space and community needs. The final paragraph represents the food activist networking meeting as a valuable context for discussing those needs and ways to meet them.

Figure 3.8. Article Published in Local Print and Online Newspaper. Participants used elements of the article to spin local event in favor of planned community action.

The article stages a struggle among ideological positions. It is no coincidence that course participants conceived their public address in a way that drew on their shared resources as a group that had reached productive consensus on several matters that had splintered them initially.
It’s easy to say that the article represents shared resources, but it’s significant that some of the resources represented in the article did not appear among ideological positions participants adopted early on. Public space only appeared one time in the data prior to the Park(Ing) Day event, which for most people the group, represented an opportunity to protest the waste of food through a free picnic consisting of reclaimed waste foodstuffs. After the event, however, the discourse appeared forty times. To say the article represents shared resources, then, is not the same as saying the article contains the shared resources of the class. It represents their collaborative problem solving in a new, but conceptually related, context. That process of extension, flexion, and adaptation is what conceptual knowledge is all about.

**Compressed stimuli.** The shared resources were essentially compressed as students began to compose. The effect of this compression was overwhelming to some and exhilarating to others. The many different ways that participants characterized the writing share this thread of compression or encapsulation of the prior collaborative problem solving. Maria said, “I think it’s good to have final end products, like the article and the demonstration, so yeah, [the collaborative writing] was good.” Maria framed the article and the demonstration as *products* of earlier collaboration; Aaron took a slightly different approach, linking the larger socio-rhetorical context of the semester with social change through his own reflection, which was stimulated, it is assumed, by the writing, which served as the topic of his statement: “I've been doing a lot of reflecting over the last couple of days. Cool way to end semester. I’ve been encouraged cause I feel like in a lot of ways, we’re ‘being the change that we want to see.’” Alex’s frustration with the compression is evident in his description of the writing process, quoted above, in which he recognized the writing as intensely concentrated reconstruction of prior activity. Also adopting an affective stance was Trey, who framed the writing as a means of transcending temporal and official limitations as a university course: “This is what cooperation should and does feel like. I acutely don’t feel that this class begins and this class ends. For me, I hope that same can be for y’all. It’s the first article I’ve ever collaboratively written.”

The group interactions culminating in the article point to epistemological conditions that favor concept development. Widespread awareness that perceptions are shaped by experience and bias
differentiates older adolescents and adults from children with respect to their concept development. Alex goes a long way towards defining the conditions of collaborative concept development without ever using the words ideology or critical thinking. He understanding that the learning process is not a passive pooling of resources nor joint action on topics of common interest, but more of dynamic, constructive process:

Not everyone has the same experiences, but we’ve come together [in this article], built consensus, not just to state what we feel, but also to learn by taking each other’s viewpoints on—to educate one another. It came together, what we all offer to a common thing.”

If nothing else, the decision to write made for a more authentic review of the available conceptual and communicative resources. From a concept development perspective, collaborative writing functioned as a concentrated recapitulation of nonsupervisory assistance, distribution of communicative resources, and ideological positionalities.

**21st Century Literacies Shaping Learning**

To see conditions for concept development requires attention to the unique sociocultural context in which such conditions appear or fail to develop. 21st Century literacies means more than just technological change, and it should not be read as an implicit suggestion that changing technologies determine changes in cognition, although some theorists informing 21st Century literacies education clearly draw on these ideas (e.g., Kellner, 2004). But technology is an important feature of what’s happening. The communicative resources available in the course (especially ideological positions) are indeed on the tips of computers’ and Smartphone’s tongues at any moment. When a student says, “I read an article about this, but I can’t think of the name of it,” only a few moments pass before the online archive has been located. That a peer went hunting for it while Alex was still speaking is significant, too. Online and cellular communication tools enabled students to work together ‘beyond the bell.’

The data suggest that most important developments in learning that 21st century literacies highlights are democratized access to discursive resources and new available modes of action. Going back to foundational beliefs about writing as technologically mediated mode of purposive action, the
question becomes how does the (media rich, global/local) sociocultural context mediate the ways people appropriate technology, the construction of purpose, and the concept of action. In short, the course, as an example of 21st century literacies instruction provided students a context in which to discover writing as a mode of action. What’s important about that context, and about the idea of context in contemporary schooling, is the interpenetration of school and nonschool worlds (Alvermann & Hinchmann, 2012).

Park(Ing) Day, newspaper write-ups, YouTube videos, and grapes reclaimed from a dumpster afforded and constrained the use of communicative resources in a university course oriented on urban hunger. These phenomena became integrated as buzz that made the writing necessary. An instructor would struggle to replicate the collaborative and ad hoc development of reasons to write for his or her students.

My approach to 21st century literacies assumes the possibility of maintaining critical awareness of the ideological inflection of language. However, the data do not clearly indicate that students responded to buzz while maintaining critical awareness. It is plausible that students strategically located themselves ideologically to magnify the effects of their writing on the community and the activist networking meeting. It is also possible, however, that they were caught up in excitement that temporarily or permanently constrained the value of critical discourses.

Looking at 21st century literacies teaching and learning raises questions about the relationship among critical thinking, indoctrination, and writing. Participants appear to have largely set aside critical discourses in favor of the public space/hunger strategy; they appeared captivated by the Park(Ing) Day buzz in many ways; and they sidelined more nuanced, critically aware academic language in favor of promoting the food activist meeting. Teri’s comments provide a good example of the combination of dizzyingly creative and strategic awareness of multiple perspectives:

You know what I think would be really fun? A banner made out of a bed sheet that has a question for people. With markers. What are your ideas? It could say “How would you reconceptualize public space in Athens?” It could be very specific or general. It could be interactive; it’s not just our message but it would be.
Has she drunk the Kool-Aid of public space or is she positioning herself as a strategic speaker recognizing the power of buzz, using it to her own ends?

Saville-Troike (2003) argued that ethnographers of communication have too easily assumed that maximal use of communicative resources indicated power. She counters, saying that demurring, playing dumb, and hedging are important means of controlling the world through words and other communicative means. I would add to that list the kind of spin in the participants’ article that raises questions about students’ critical awareness. Perhaps only in schools (and on standardized tests) are people encouraged to act as though written communication should manifest the most sophisticated means at the writers’ disposal. All the while many teachers feel they must jettison this notion in order to help students craft responses for a particular audience of test graders (Stewart, 2011). 21st century literacies represents a significant challenge to strictly disciplinary concerns and their autonomous writing requirements (Street, 2005).

**Implications**

Framing 21st century literacies as mediational means has important implications. The data do not support assessment of individual participants’ possession or non-possession of elements of 21st century literacies. Instead, the data and findings suggest that attention should be paid to the effects of 21st century literacies on the possibilities for learning and participation in society that emanate from changes in consciousness. Setting aside the question of whether and how the brain changes through the mediation of 21st century literacies, the findings raise questions about ideology and consciousness that may form the basis of future inquiry. In particular, the findings imply the need for revision of the zone of proximal development, the notion of audience as an important feature of reasons to write, and scale as a way of relating ideology and consciousness in secondary and postsecondary writing instruction.

**Double Contingency of the ZPD**

A theoretical implication of these findings is an emphasis on the double contingency of the zone of proximal development. In other words, considering that relationship simplistically as a learner-helped dyad, the learner’s ability is contingent upon the presence and skill of a more capable peer (Vygotsky,
1978), but the more capable peer’s capability is also contingent upon the definition of the task situation. Much of the extended negotiations identified in the data may be interpreted as struggles from various subject positions over epistemic location or ideological positioning, a point supported from multiple perspectives (Code, 2006; Holland & Lave, 2009).

These struggles are important because the value of access to funds of knowledge (Gonzalez, Moll, & Amanti, 2005) fluctuates depending on how a group winds up deciding to know about something (their epistemic location). The politics of epistemic location creates a ZPD with a double contingency: the learner on the more capable peer, and the more capable peer on the location of particular capability within the imagination of the group. As I came to understand this point, I often thought of students choosing research topics in my high school classrooms. In my first few years of teaching I was frequently frustrated that my students who typically earned high marks chose safe topics, while students who scored poorly chose topics that were less familiar to me. As I negotiated with both groups of students, I was trying to locate shared epistemic positions likely to produce useful challenges for all my students through my (contingently) competent support.

Wertsch (1985) was interested in this point in his effort to explain Vygotsky’s (1978) notion of the ZPD. Wertsch argued that for a ZPD to exist, parties had to be in agreement on the “situation definition” (p. 8). The data from the present study suggest that an important feature of the ZPD in collaborative settings is the process of defining a situation. The long-term choices of five participants confirm the opening of zones of proximal development in poorly defined situations. The ZPD has a long history of assuming ideological unity, and while Wertsch’s (1985) argument is useful in its recognition that undefined situations cannot produce extension of a learner’s capabilities, the condition doesn’t sufficiently take into account the effects of ideology. Vygotsky’s (1987) background in the psychological development of very young children is a possible source for the assumption of ideological unity, and perhaps more research is necessary to unpack Wertsch’s (1991) insight in the corollary proposition that people always know each other as “person(s)-acting-with-mediational-means” (p. 120). How can situation definition fully resolve if inter-action is mediated by ideologically inflected tools that cannot be
exhaustively understood? Rather than resolution or definition as a fixed state, it seems more likely that situation definition is contingent, provisional, and approximate.

In the extended negotiations, ideological positioning was the very issue being discussed. Peers were struggling over positions, the status of which would determine their capability as peer teachers and their interest in the work itself. A 21st century literacies approach extends the issue of contingent capability to teachers as well. Positioning students in relation to their gifts and interests is a well-established technique, but ideological exchanges within conversations show that a static view of what students are supposedly good at or what is supposedly relevant to them is insufficient. Students are capable of developing new areas of expertise in remarkably short periods of time as they navigate collaborative tasks. Public space is the most obvious example in the data, with the discourse of food waste close behind. The bottom line is that peer teachers’ capabilities are contingent, and the process of defining the task may be a missing link in the current literature on the ZPD. It is crucial to recognize that the process of approximating situation definition was not fully resolved when the composition took place. When Aaron said he reflected, for instance, he may have been referring to his ongoing concerns about the relevance of publishing an article as a means of action instead of canvassing neighborhoods or other forms of action that could target a different demographic from the readers of an independent newspaper known for its coverage of the Indie music scene.

What Buzz Does

The findings raises important questions for further 21st century literacies research on the interpenetration of school and nonschool contexts. Buzz is one obvious and poorly understood phenomenon that has the potential to shape students’ experiences of school activities. That teachers already know about and use buzz may be seen in the ubiquity of playlist assignments, reading *The Hunger Games* (S. Collins, 2008) in anticipation of the release of the feature film, creating Facebook pages for literary characters, and so forth. The situated nature of buzz offers a fresh way of approaching the notion of ecological validity and authenticity of assignments. Efforts to evaluate the authenticity of certain uses of popular culture in the classroom often focus on a comparison between classroom and non-
classroom appropriation, purpose, and activity involving particular content or technological elements, but this approach masks the political dimension that buzz reveals. An implication (perhaps unintended) of some inquiry into validity and authenticity is that, provided teachers do their homework, they can still work unilaterally without input from students. As a way of measuring ecological validity, buzz emphasizes the social or organizational component of authenticity, directing attention to who owns and recommends action in response to buzz. Without undermining existing critiques of inauthentic uses of popular culture, from a buzz-oriented standpoint, making a Facebook page for Hamlet may or may not be authentic, but such a determination cannot be made unilaterally by a teacher.

An example of the way buzz can focus attention on the political dimensions of authenticity is Dylan’s opening salvo in which he cited buzz about hunger (recent global statistics, census data, local increase in poverty) and the local food movement. Dylan’s goal was to balance a normative stance against hunger with critical awareness that any representation or claim about hunger or local food reflects a particular positionality, addresses the problem at a particular scale, and sets parameters for potential solutions. One participant’s comment about the role of hunger buzz was instructive about assumptions that teachers don’t always notice. Teri said, “People can only take so much starvation. They want it to be fixed or just go away.” Her sentiments remind me of students’ attitudes toward unilaterally “hyped” curricula, such as Holocaust units and Black History Month. Perhaps more attention should be paid to how buzz develops, who “owns” it, and how it claims particular people’s interest in particular social contexts and particular times in particular ways.

Two aspects of the theoretical framework outlined for this research point to areas of further inquiry. First, if buzz hails people and positions them as subjects in particular ways (Althusser, 1971), then 21st century literacies research should recognize this aspect of the heterogeneity of media messages and their role in positioning people. In other words, reading dystopian novels as part of a propaganda unit in a high school classroom may evoke a kind of conventionalized critical media literacy that makes other kinds of media influence invisible. The experiences of study participants raise ethical questions about the
adequacy of media literacy education in which teachers retain control over which media, assumptions, propaganda, or messages become the subjects of critical examination.

Second, buzz helps define social contexts in which particular ideas, words, and actions are likely to be relevant. Buzz thus intersects with Vygotsky’s (1978) claim that writing and reading are best learned when they are necessary for something, when “compelling reasons exist for writing and when the information conveyed through the writing is a valued part of the social network” (Dyson & Freedman, 2003, p. 968). Buzz affected both requirements for purposive writing. Park(Ing) Day buzz provided study participants a reason to write, but it also constructed an audience for that writing that was partly know and partly imaginary. Common sense tells teachers that buzz is good for getting students to do things, but buzz deserves more attention, both for how it mediates the discovery of compelling reasons to write and on account of its potential to shape students’ conceptions of audience.

Another dimension of buzz that deserves attention is the issue of students’ civic engagement and other forms of action. Whether in or out of formal school activities, the political, economic, and social consequences of students’ and teachers’ choices are on display. Setting scandal aside, students increasingly have access to and participate in local buzz, and the school cannot be treated as a separate venue from which to evaluate the world at a distance (Kalantzis & Cope, 2008). As Holland and Lave (2001) put it, “Much of what is contested in local struggles is the very meaning of what is going on. The world is not a given in this perspective” (p. 22). From the standpoint of 21st century literacies, the role of the school is to provide students opportunities to engage in the struggle for meaning as legitimate contributors to local and global conversations. The article the students composed attempts to do just that; it thus resonates with Aristotle’s (1982) combination of political organization and education, with Wertsch’s (1991) notion of mediated interaction, and economic imperatives within the 21st century education movement. The participants wanted to make public an argument about what a local event was, to try to direct the energy it created, and to try to use that energy to solve a problem they saw as real and worth the trouble.
Scale

Buzz offers new ways to talk about authenticity because of scalar components that often come with the term. The data bring attention to the issue of scale. Scale is a new concept in literacy studies. In geography, scale was taken as an objective measurement, a means of managing space for the purpose of creating particular kinds of maps or models with particular kinds of uses. Similarly in education, the term is conventionally used to rank literacy skills, readability, and so forth from low to high. Recently, federal grant agencies have required longer studies in order to bring funded ideas to scale, which means extending the benefits which government monies are ostensibly buying to as many people as possible. Some inquiry into scale has occurred under other names, especially in the area of authorship. The question has been raised whether individual authorship is an adequate construct for describing writing. Individual authorship is a social construction that serves certain established interests such as publishing companies and copyright holders. This criticism is similar to developments in the idea of scale.

Recognition of the role of scale in the writing process would entail not simply discarding the notion of the individual author, but recognizing that authorship is a concept that has a scalar element. To illustrate, American Psychological Association citation guidelines decreasingly require exhaustive citation as an idea becomes better established, to the point that authorship vanishes when an idea becomes a received fact (Matusov, 2011). In other words, authorship is neither collective nor individual, but determined by scalar dimensions of the argument being used. In my study, participants spoke differently when they were considering conveying information at a different scale by means of the article. As they explored the use of alternative speech genres, Teri jumped scale when she suggested asking a question to Athens. She posed questions to her classmates, and simultaneously planned with them a question at a completely new scale. Then she and her fellow participants interpreted the answers to the question they had asked and represented that information at yet another scale, in the newspaper article. At each level, they made choices about the strategic use of detail, how to present arguments, and the ways in which word choices and other representational elements would likely steer readers. I would argue that scalar
dimensions in my data are not unique, but are assumed in the NCTE (2008) 21st century literacies emphasis on multiple environments, streams on information, and choice of audience.

A significant challenge in 21st century literacies education is to understand how students navigate moves from one scale to another. Many readers of this essay may recall being required to create informational note cards as part of a research project in middle of high school. The assumption was that these notes would somehow support the eventual composition of the research paper. I always knew that mysterious circumstances could render them absolutely useless. Now I wonder whether scale may have had something to do with it. As I moved from finding information for myself to presenting information to others my participation in a broader conversation changed dramatically. If NCTE’s (2008) definition of 21st century literacies is any indication, awareness of scale will become a necessary feature of learning to write, a feature currently masked by static ideas of audience and authorship.
References


CHAPTER 4

CONSTRUCTING CYCLES OF REFLECTION AMONG STUDENTS AND TEACHERS:

A RECURSIVE CONCEPT DEVELOPMENT CASE STUDY\textsuperscript{12}

\textsuperscript{12} Boggs, G. L. To be submitted to \textit{Studying Teacher Education}.
Abstract

Vygotsky’s concept depends upon epistemological diversity, genetically different ways of knowing. The dilemma in teacher education over what to do with teachers’ “experience” depends in part on the mode of production in colleges of education and concomitant organization of teacher education. This essay presents a case study of teacher education in which an early-career teacher tried to foster epistemologically diversity learning through a university service-learning course. A three-year study fostered and analyzed interlocking cycles of reflective learning among students and their teacher in order to understand the interaction of goals, experience, and theory as he learned teaching. I noted the teacher’s goals for the course, developed an ecologically valid measure of student learning to stimulate his reflection, observed subsequent instruction, and analyzed changes to make visible the process of melding narratives of experience with signs from other epistemological sources. He inscribed his teaching with categories and applied reflective learning within them in (apparently) nonlinear ways. As a principled response to perennial dilemmas in teacher education research (i.e., learning from experience, reflection, and the integration of educational theory) the study explores a future for teacher education predicated on relationships and power-with as educational policy decreasingly supports universities’ power-over those to wish to teach.

Keywords: Experience, Concept development, Service-learning, Teacher education
Introduction

Teacher education has been categorized as a form of service-learning pedagogy because of a tendency to assume that reflection upon ‘real’ action or experience outside the walls of the university facilitates deep learning within and across disciplines (Gordon & Debus, 2002). The idea that exposure or action benefits students is complicated for many reasons, but the proliferation of nontraditional initial certification avenues and federal endorsement of ‘on-the-job’ teacher training programs draws out the issue for colleges of education in a particularly thorny way. Considering the prospects of lost revenue and privilege, colleges of education have reason to publicize strong rationales for blending pedagogical studies, content area requirements, and experience in the schools.

Teacher education programs tend to lean heavily on experiences in the schools. One solution to the problem of experiential learning in teacher education has been to emphasize the value of critical reflection on experience. This argument optimistically assumes that professional scholars can guide critical reflection in compulsory initial certification or other degree programs and foster the development of concepts of teaching and appropriate teacherly dispositions.

But students perform their competence for their teachers (Garfinkel, 1967) in ways that do not always carry over to or produce desired changes in their schools. My students often narrate experiences of what I call ‘teacher’s metanoia,’ where they admit the faults of a former teaching philosophy as they ascend to new heights thanks to a conversation, reading, or activity from their coursework.

The idea of shaping the dispositions of preservice and early career teachers verges on deficit models of learning and even prejudicial character education (Smagorinsky, Boggs, Jakubiak, & Wilson, 2010). Deficit-based characterization of preservice teachers is rife in teacher education literature and discourse, even in articles that specifically criticize deficit-based teaching. The most famous account of difficulties in teacher development frames prior educational experience as a fundamental obstacle to
learning to teach well (Lortie, 1975). Apprenticeship-of-observation is evidently\textsuperscript{13} taken to mean a lack of what matters, namely critical reflection. If preservice teachers are so deficient in critical understanding of their own linguistic, economic, and cultural presuppositions that they are likely to treat their students as similarly deficient, then the problem may not be with either set of “victims,” but with discursive, political, and economic patterns that privilege certain kinds of knowledge.

Invocations of a blank or bad apprenticeship in performances of being a teacher of unreflective students signal the need for adaptive emancipatory teacher education that “eschews all temptations to claims of moral elitism and superiority, as well as all posturings of innocence” (Gouldner, 1976). An observer of one program gleaned a perspective that grotesquely complements my students’ excitement:

Trainee-teachers define their experiences at the Teachers’ College in terms of fear and loathing. They feel they are being forced to attend, to “put in time” against their will, an unwelcome official requirement of gaining a diploma. They rarely discuss experience in terms of intrinsic value. They do not describe College attendance in terms of increasing their knowledge and personal understandings towards becoming professional teachers. (Mealyea, 1993, p. 182)

Performances of metanoia on one side and eyes rolling on the other call for structurally more respectful engagement those who wish to teach. Perhaps preservice teachers’ expenses exceed time and tuition and may include loss of dignity.

\textbf{Concept As Epistemological Diversity}

Is it possible to examine teacher education under circumstances in which participants are contractually, politically, economically, and institutionally free to reflect on experiences, seek assistance, and make changes to suit their own goals? Constructing teacher education around voluntary association

\textsuperscript{13} Randomly selected articles returned by Google searches for “apprenticeship of observation” reveal a deficit discourse associated with the use of Lortie’s term: Lacking awareness (unconscious, unexamined, implicit, unarticulated, latent, alter the dispositions,); lacking viability (failure, failing, negative consequences, without evidence, contradictory evidence); and lacking connection (isolated, individualism, noncollegial). Discourses that reify educational experience as a monolithic impediment to understanding may have some similar effects on preservice teachers as they have on students told they must overcome their background.
and direct action would radically change whose goals dominate. I challenge the assumption that teacher education can and should be conducted in factories of education prior to teaching. The strength of Vygotsky’s concept is the heterogeneity of epistemologies integrated into it—the everyday and the scientific, as well as relational, affective, and other domains (Wells, 1994). Vygotsky naïvely (and forgivably) underestimated the persistent influence of various regimes of privilege in schools, so Vygotskians like Wertsch (1991) and Wells (1994) and scholars from other disciplines like feminism (Code, 2006) and ethnomethodology (Garfinkel, 1967) can help see concept development in the context of contradictory motives of activity settings (Wertsch, 1991).

A student’s conceptualization of teacher education as a source of metanoia or loathing is the result of recurrent stimulation within social contexts (Wertsch, 1991). Wertsch and Smagorinsky have argued that motives in activity settings steer the development of concepts (of teaching, in this case) toward abstractions that teacher educators might reject (Smagorinsky & O’Donnell-Allen, 2000). It is widely known, for instance, that classroom control and good teaching are often confused (Willower, Eidell, & Hoy, 1967; Packard 1988); Vygotskian inquiry seeks to locate the tools that mediate the development of management-oriented concepts of teaching. Lortie’s (1975) term appears to afford or make easier a deficit approach to teacher education additionally reinforced by structures that can similarly become tools for thinking: Syllabi, reading lists, credentialing programs, evaluations, and so forth afford and constrain teacher educators’ understanding of what they do.

Under many circumstances the value of epistemological diversity may be obvious. For instance, I do not have one particular conceptual endpoint in mind for my children’s understanding of star; they need to know many concepts pertaining to stars, and I expect epistemologically diverse knowledge about the stars with foster just this kind of flexible understanding. I expect knowledge they share with astronauts, photographers, and others to provide the flexibility ascribed to conceptual thinking (Vygotsky, 1987). Service-learning pedagogy promotes opportunities for students to incorporate their own goals and understanding of social problems and participate in planning ways to address them. These conditions favor the production of rich stimuli, but how can teachers access them? For instance, service-learning can
set up students to pursue relevant goals for which forms of literacy, practical and social skills, and conceptual knowledge may become necessary (Vygotsky 1987), but students’ performances of competence undermine the epistemological diversity of feedback available for a teacher.

Performances of competence in social contexts nonetheless provide useful means of measuring the development of Vygotskian (1987) concepts (among students and teachers), because actions such as describing writing expectations for the course may index his ways of knowing about his writing pedagogy. For instance, when Dylan said in 2009, “You will not be turning in formal essays or any of that crap for this class,” I surmised that his writing instruction and attitude toward student writing focused on writing as a school activity, and that he intended to distinguish his course from the usual academic enterprise. The first case study I showed Dylan was of a student who conceptualized the class as “highly theoretical” and “academic” in spite of Dylan’s magical belief in academic writing as a determiner of theoretical versus experiential learning (Boggs, 2011).

To aid in constructing augmented feedback loops for teachers wishing to improve outcomes of student learning through experience and critical reflection in a service-learning course, I employed the following research questions: How did an early career, radical geography instructor of a service-learning course understand teaching over a three year period? How did students’ views of “typical academic activities” such as writing at the end of the study view contrast with views expressed in earlier iterations? How did his teaching and talk about teaching change as he incorporated new forms of feedback about his teaching?

**Methodology**

The data reported here form a case study of one of three teachers who convene the Urban Food Collective (UFC), a service-learning course for upper level Geography undergraduates and graduate students as well as non-majors. Offered seven times since Spring 2008. My study began on the third iteration, which I dub UFC I. Now in its fifth iteration, I have collected between five and twelve case studies each semester, and Dylan (a pseudonym) is the first UFC instructor whose teaching I have studied
more than once—after providing multiple forms of feedback about student learning though the case studies, presentations, and informal interviews.

Rather than taking for granted the benefits of teacher concept development, the looped nature of my research probes student learning for evidence that later students’ exhibit understanding not seen earlier. What students appear to have learned in the course acts a mirror through which the teacher may assess their teaching and understanding of teaching—with subsequent loops iterating the process and providing a fresh mirror to stimulate teacher reflection. While students’ conceptual learning may not directly and immediately have a corresponding influence on teacher performance, this arrangement affords examination of weaknesses in the reflective processes as supported by schools and academic research.

**Context of the Investigation**

**Urban food collective course.** The Urban Food Collective is a radical human geography class dedicated to raising awareness of food insecurity, food politics, and possibilities for local and systemic change. It is a service-learning class, community service and charitable action are the targets of the first weeks’ acerbic readings about structural poverty and the limitations of a charity model. The edgy content and nontraditional, service-learning format set the course for a difficult life history in the Department of Geography and the University. Riding a wave of interest at many levels in sustainability and local food, the three rotating course instructors have been very successful in legitimizing the course by appealing to trends in agriculture toward sustainable food production and to the supposed complementarity of experiential or service-learning and formal education.

The mission of the course is expressed in its motto: “Direct learning through direct action.” Direct action, an activist term rooted in anarchism, denotes community based grassroots efforts to confront social problems on the scale at which they are experienced, rather than through government channels, for instance. Class time in the first half of the semester is spent reading and discussing articles and book chapters selected to prepare UFC members to assess, organize, and act around a particular community need they identify.
The Teacher. Dylan’s initial reluctance to be *evaluated* in my study helped establish affinity as the basis of my project. He and his colleagues could employ my analyses of student learning as a source of reflective stimuli as they chose and ignore them without penalty. Thus, my research became a source of possible and provisional tools for reflection on teaching.

Dylan explained that the importance of UFC to him was the opportunity to achieve “alignment” in his life as a scholar activist. Dylan and other UFC instructors pointed to corresponding opportunities for students to bring together critical geography learning and action to address social problems. All of Dylan’s courses, but especially UFC, “align” his scholarly reading, teaching, and social action. “It makes sense when reflecting on the day,” he explained, “to have taught . . . and to have been speaking with someone about starting a market garden. It puts together all these contract stipulations to do this and this with my time. It brings it all together.”

Dylan attributed his understanding of and desire for alignment to William Bunge, a radical geographer he admired. Although Bunge has been sidelined in the academy for extreme stances of solidarity with urban poor communities (see Bunge, 1973), Dylan believed Bunge’s approach synthesized multiple imperatives of service, publication, activism, and teaching. Describing Bunge’s local approach to geography, Dylan said,

> It’s the idea of doing research and where you live. There’s more that he’s written. I’m going to Syracuse next week to be on a panel about him and the reissuing of that book. He used to lead *expeditions*. I used to study that language, read his notion of the exploration and expedition.

Comparing his teaching of the UFC with earlier research on surviving members of the Black Panther Party, Dylan said, “I’m a good radical geographer, interested in the politics of my age: I can’t join the Black Panthers nor would I. But I’m seeing this experiment [i.e., UFC] as a way to project on my own community like Bunge [(1973)].”

The University Context. Complementary support for the UFC course from the Office of Service-Learning, Geography Department faculty, and the College of Agriculture have drastically changed the status of the UFC within the department and university over the course of my study. The
course has recently been made the capstone course in a new USDA-funded interdisciplinary initiative bringing together the college of agriculture and the geography department.

Data Collection

Creating the ‘augmented reality’ in which teachers may examine their practice through multi-voiced accounts of student concept development requires data organized to fit teachers’ goals. I collected three levels of data in which I expected to find evidence of Dylan’s reflective practice as augmented by the case studies: talking about teaching, changes observed in his teaching, and changes in his teaching suggested by alternative patterns in classroom discourse.

Informal interviews covered a wide range of topics and purposes. I used them to investigate connections Dylan made within and across the domains of academic and activist experience. Observation of teaching consisted, in UFC I, of field notes, interviews, and selected small group audiorecordings. In UFC IV, approximately one year later, I made transcripts of what Dylan and his students said in class in addition to introductory and exit interviews.

Data Analysis

The first phase of data analysis focused on Dylan’s ways of teaching and talking about teaching. Data from interviews and observations fell into five categories that he used on a regular basis to explain teaching ideas, class activities, and problems that arose: academic readings, action, the course in the department and community, day-to-day facilitation, and literacy practices. Conspicuously absent are discourses of planning, assessment, student ability, achievement or failure, and content knowledge. Each category represented areas in which my guidance was most likely to find traction and for which changes in his speech could be used as indexes of concept-based planning, facilitation, and self-assessment. The next step involved a comparison between his concept development and patterns in student discourse putatively mediated by changes in teaching.

Findings

Although reflection-mediated changes in teaching empirically justified my theoretical preference for Dylan’s teacher-language, the ways he applied reflective thinking to his teaching drew attention to the
manner in which Dylan acted out learning. New ways of acting out teaching may point to an evolving sense of which actions constitute effective teaching. Dylan adapted his instruction in order to create more sophisticated impressions in certain areas. The changes within the categories suggest some jerking, or overcorrecting, and some major strides toward more sophisticated performances of teaching.

For brevity’s sake, I focus on literacy practices in the findings section. I introduce the concept of manner of application in which stimuli entered Dylan’s teaching: Transference refers to a jump across categories; negation refers to a reversal of practice; and fine tuning refers to microscopic adjustments.

Academic Readings

The very first thing Dylan asked me as we prepared to co-teach the most recent edition of UFC V was “Do you want to put any readings to the syllabus?” The assigned readings category appeared to attract reflective stimuli that might have been applied to others. To Dylan, a big part of teaching is perfecting a list of course readings. Co-teaching implies co-constructing a list of required texts that will guide students throughout the semester. Other problems can be resolved, in Dylan’s view by improving the readings. Dylan’s narratives of experience in and out of the classroom drew heavily on “hagiographic” interviews of black anarchists and written accounts of anti-hunger activism and popular education. Accounts depict teaching within a scholarly voyage through possibilities for anti-hunger activism:

I’m tacking back and forth—it’s experimental: what forms work and which ones don’t. But [there’s] also a recognition that these groups [of activists] have been so bloody different. The alignment of readings I wanted to use and the characteristics of the people involved. That book [from UFC I, Hunger: A Modern History (Vernon, 2007)]. It didn’t mesh at all. My recognizing that is an example of the experimental nature. Going for better alignment. Like today, I looked at the syllabus, figured we needed to meet in class, today’s reading is my favorite. It doesn’t deal with food, but deals with issues most important to UFC.

Discursively, the choice of readings serves as an example of the experimental nature of his development of the course, and it shows how reflective stimuli can ‘jump’: Dylan transferred learning about the central
concept of the course (i.e., consensus-based organizing) to an evaluation of assigned readings past and present.

A case study of a UFC I student (Boggs, 2011) triangulates Dylan’s focus on assigned readings as an important feature of his understanding of teaching. The analysis of gaps between assigned readings and the “issues most important to UFC” corresponds to a the crushing description of the course in one case study as “very theoretical and discussion-based.” Dylan reported Elspeth’s disappointing remarks as motivation for changing the set of required readings, locating the problem at the level of assigned readings. In Dylan’s transferred reflection, unproductive misalignment between readings and action in a course produced the student’s recollection that “had less to do with garden aspect than I had thought it would, and it had more to do with the readings that we talked about.” Dylan reframed the apparent overemphasis on readings as a motivation for selecting readings more closely aligned with the course’s focus.

**Literacy Practices**

I identified two phases in Dylan’s UFC instruction with respect to writing instruction. Dylan relied on preconceptual experimentation to achieve alignment between between writing and the desired characteristics of the idiosetting: consensus, mutual aid, and direct action. He used trial and error to find ways of distinguishing the course from dominant, disciplining ideologies implicit in notions of “schooling.” The prior phase was characterized by the ascription to writing of fixed meanings *dictated* by the setting, as evidenced both by Dylan’s use of academic writing assignments to legitimize the course and also by his elimination of writing that he believed was crowding out action.

Literacy practices I identified in UFC I and IV were reading, discussing, and taking notes on assigned texts; making individual entries in reflective journals; collaboratively composing texts for publication; emailing about upcoming action; and collaboratively using whiteboards and a computer with projector for organizing, composing texts, and brainstorming. Although the selection of readings remained firmly within Dylan’s purview, he thought changes in the content of required readings improved that aspect of the course and took pressure off him to regiment large-group discussion. Formal large
group discussions remained the centerpiece of the first eight to ten class meetings in both UFC I and IV, and formal discussion tools were used the majority of the time in both courses.

Dylan maintained the journaling requirement unchanged, but he warned students that previous students had not put sufficient effort into the journals to meet the requirement of disciplined reflection. Dylan reported no improvement in UFC IV journal entries, however. In a second phase, Dylan’s students employed existing skills as communicators to solve new problems through collaborative writing. Applying a conceptual understanding of the contingent meaning of writing, Dylan sought street credibility for the course by encouraging the development of group goals for activism for which writing would be a powerful tool. The chain of stimuli primarily responsible for the more sophisticated approach include the case studies, readings in pragmatic philosophy, and ownership of a popular educational idea that Dylan and his students might “make the road by walking” (Horton & Freire, 1990). Recognizing the contextual meaning of writing as a cultural tool enabled Dylan to direct students’ reflection on course activities in ways that were previously impossible both practically and in terms of his pedagogical approach. In the prior phase, Dylan had no way of knowing how attitudes toward “typical academic activities” were shaping students’ learning in the course.

Personal accounts and discursive patterns in UFC I and UFC IV data suggest that students experienced two very different courses when it comes to writing. In the first course descriptions Dylan wrote, students received assigned readings and turned in academic reflection papers. Dylan complained that, despite “emphasis on the experiential side,” academic writing always dominated students concerns. Dylan therefore eliminated all academic writing assignments the first time he taught UFC on his own. The move demonstrates both transferring and negating applications in response to reflective stimuli. The elimination of formal writing assignments was an example of transference in that he responded to students’ anemic interest in action by modifying the role of normally privileged literacy practices. The move was also negative in that the adjustment meant a complete reversal of an accepted approach to student reflection.
Nonacademic collaborative writing in UFC I consisted of a food zine. Dylan presented the project as a means of communicating relevant food issues to a wide local audience, an idea that appealed to the students in the course, but no one found the process or product very rewarding. Prepping the next class, UFC IV, Dylan reported past zine projects as partial failures in that crucial activist information—how the zines are affecting the local audience—had never been collected. In UFC I, students felt rushed and confused as they worked in an unfamiliar genre on unfamiliar topics for an officially unknown audience. One student remarked,

When he assigned it, the push was basically “People are expecting a zine. This is what we want; this is what it’s looked like in the past.” For us who’d never been in the class before, never done a zine, it was very like end-product-oriented work.

In UFC IV, although Dylan suggested the zine as a possibility, new forms of collaborative writing emerged that involved students in markedly different ways. For Aria (a pseudonym), the experience of collaborative writing in UFC I positioned her as her classmates’ “nagging babysitter,” where the rigid but unfamiliar zine format created an opposition between projects like the zine which involved mainly “editing and formatting” and projects requiring “writing and critical thinking—drawing connections” like the collaborative writing project in UFC II taught by a different instructor. Aria rejected my characterization of later collaborative writing as really writing at all, saying “The writing part was only a very small part of that process,” unlike the creation of the zine. She emphasized “background work, like reading other people’s research and using that for ideas” to explain why it shouldn’t be considered a writing project like the zine. In her critique of UFC I writing by comparison with what she did in UFC II under a different UFC instructor, Aria provided a prescient definition of consensus-based collaborative writing that Dylan fostered in UFC IV: “Interpreting together was the main thing. People seeing how they worked on a project like that, people deciding how they worked.”

Group and individual goals grounded the UFC IV collaborative writing effort. Thomas (a pseudonym) “didn’t like it all that well. It’s not the way I work.” He explained, “One, I hate writing. Two, it was so much [input from different sources] that my mind could not handle it.” Reporting this
frustration to the group, he added, “But the end product was way better than I could have independently written. Better than any of us. So I gained a lot of respect for the process when I read the final product.”

Dylan’s facilitation of the writing of newspaper articles as follow-up action to more typical UFC initiatives constituted the first example of writing instruction per se in his UFC teaching. Through personal anecdotes of experience as a member of an activist writing collective, Dylan supported students’ development of new reasons to write. One student said that what he liked best about the class was that it went beyond “typical academic activities: lectures, notes, reading, and writing,” an attitude that very much corresponds to Dylan’s negation, in UFC I, of the original writing requirement. In UFC IV, however, “consciousness-raising,” descriptions of popular education, “breakout groups” based on personal affinity, and continual challenges to “understand the political goal of the document” represent significant changes in Dylan’s practice and an additional dialectic step in the “experimental” process of teaching UFC.

The most vocal critic of UFC IV collaborative writing said, “Even though I couldn’t handle it, I say, ‘Wow, that really worked.’” However, Dylan’s reflection on the project suggests a conceptual turn in the experimental process: He reported concern that “the consensus process kind of broke down toward the end,” explaining that “certain personalities tended to dominate” by virtue of their “extensive experience.” Dylan’s development of a collectivist, activist writing pedagogy moved through negation to concept-based “fine tuning.” In response to comments such as “Collaborative writing is something I had wanted to do for a while. It was difficult, for sure, but I’d like to do more of it,” Dylan probed for interest in continuing the writing collective after the end of the semester. One student added, “I’ve been doing a lot of reflecting over the last couple of days. [Writing in the collective] was a cool way to end the semester. I’ve been encouraged cause I feel like in a lot of ways, we are ‘being the change that we want to see.’ Like prefigurational politics.” Interestingly, Dylan at last revisited journaling as he planned for UFC V, crafting the requirement to support epistemologically diverse conversations.
Discussion

Intentional dialogue about Dylan’s goals helped me identify means of distinguishing between conceptual and aconceptual pedagogical experimentation such as through different meanings of the word “alignment.” In one case study, a student’s writing, class participation, and her course evaluation—the typical reflective means available to Dylan—told a drastically different story than interviews, observation, and discourse analysis. That students perform was no surprise; that they might develop concepts of activism hobbled by institutional ideology in UFC was anathema. This case raises the questions of whether and how educational research should accommodate specific teachers’ narratives of experience. Turning the methodological question of the case study on its head, the rise of on-the-job training may necessitate research on-demand, tailor-made for individuals.

Dylan’s rediscovery of popular education through dialogues between his hero Myles Horton and Paolo Freire serve as a poignant illustration of possibilities engendered by reworking typical power inequalities in teacher education. It is interesting that Dylan did not attempt to recreate for his students the conditions of reading discovery he’d experienced. The aconceptual approach to required readings contrasts markedly with powerful movement toward conceptual thinking apparent in Dylan’s writing pedagogy.

Dylan drew on a model (i.e, Bill Bunge, 1973, and local radical geography) for his own teaching. Without doubt, Dylan possesses a conceptual understanding of many aspects of the word alignment and its application to his teaching. Changes in the epistemological diversity of that understanding of alignment helped him move past nominally progressive approaches to see aspects of the hidden curriculum in his instruction. Moving from an autonomous view of writing to a theory of writing-as-action resulted from a combination of several types of reflection: (a) Dylan applied his concept of alignment to his own scholarly writing in order to discover that to write is to act locally and politically; (b) he reconsidered the legitimacy of academic performances in writing, in light of the course mission and possibly also in light of his reflection on the process of legitimizing the course; (c) he read many journals
and discussed with students why the project was regarded as such a drag; and (d) he questioned what products were appropriate for students in a short term activism service-learning course.

The professional and personal relationship that developed between Dylan and me was nonhierarchically in the sense that I could not expect my position as an educational researcher to legitimize inquiry into implicit and explicit theoretical orientations in my counterpart’s teaching. That arrangement meant that a long time elapsed before I had much to offer the teacher I intended to help. It was not that Dylan was exemplary. I imagine my own student teachers feeling giddy as they observed his shortcomings as a teacher: in classroom management, professionalism, planning, and assessment. As I mentally juxtapose the practicing teacher discovering teacher education in his own language with preservice teachers grappling with the poverty of their apprenticeships of observation, I can see how so many regard teacher education as a dry swim, a dry run.

The case study suggests no turnkey alternative, but it points to the importance of those optimal conditions Vygotsky (1978) mentioned, when acquiring a skill is really necessary for something that an actual person wishes to achieve. It draws my attention to another Vygotskian notion, that learning language takes place in cultural context. If that’s true, then this study points to the need to educate teachers at the intersection of their language and the language of the school worlds in which they seek legitimacy. The reputation of colleges of education for being ideologically at odds with schools is a considerable barrier to effective teaching, much less teacher activism. But the problem may rest not so much in the ideological schisms themselves but in the presumptuousness of deficit-model teaching of teachers.

The manner of inflection, for instance, did not always indicate conceptual sophistication; instead, the analytical category raises the issue of the ethics and effectiveness of mass-producing teachers. Research on the knowledge economy (see Boggs, 2010) addresses the economic value of epistemological homogenization or networked mathesis. An important question to consider is the role of the Vygotskian concept in an economy based on commodified knowledge. Vygotsky (2004) seemed to be able to play
both sides, arguing explicitly that Soviet schools were capable of producing a “new biological type” yet implicitly that diverse knowledge pathways (literary for instance) were transcendentally important (p. 342).

The poet Khalil Gibran’s (1970) sentiments on teaching echo Vygotsky’s belief that conceptual understanding can only be taught indirectly: “If he [sic] is indeed wise he does not bid you enter the house of his wisdom, but rather leads you to the threshold of your own mind” (p. 56). Gibran notes the presumptuousness and ineffectiveness of a deficit approach by juxtaposing presumptuous hospitality with the necessity of learning in one’s “own house.”
References


CHAPTER 5

CONCLUDING REMARKS: 21ST CENTURY LITERACIES, KNOWLEDGE ECONOMY, AND STRUGGLE

*Truth and understanding are not such wares as to be monopolized and traded in by tickets and statutes and standards. We must not think to make a staple commodity of all the knowledge in the land, to mark and licence it like our broadcloth and our woolpacks. What is it but a servitude like that imposed by the Philistines, not to be allowed the sharpening of our own axes and coulters, but we must repair from all quarters to twenty licensing forges? (Milton, 2006, para. 51)*

These lines from Milton's public letter against censorship offer insight into the issue of 21st century educational reform. It is useful to envision, as Milton did, the long history of literacy-related oppression whenever the literacies of the future become topics for discussion and debate. What does censorship have to do with “holistic” (P21, 2011, para. 1) and democratic 21st century education? The apparent interest in holism disguises the social and cultural changes expected in the full realization of the knowledge economy (Carette, 2007). Proponents spin their goal that students “Use digital technologies, communication/networking tools and social networks. . . to successfully function in a knowledge economy” as part of the holistic message, but if the knowledge economy exists, it is anything but holistic.

Human bodies, for example, get short shrift in the policy guide published by The Partnership for 21st Century Skills (2008), and the notion of holism is appropriately dropped. “Information” and “knowledge” appear a combined forty-eight times, however. “Practical” occurs only once, and the only mention of “physical” is in a telling endorsement in a book published by the World Bank: “Investments in the health, knowledge, and skills of the people—human capital—are as important as investments in the more visible, physical capital of the country” (World Bank, 2008, p. 37).
Somewhat hidden from view in the literature of 21st century education movements is the notion of the knowledge economy. The term appears in the list of P21 (2008) references, but is euphemistically described as the “new economy” (p. 7, 8, 10, 19), the “global economy” (p. 6, 12, 14, 16, 19), and the “service economy” (p. 4, 5, 10) throughout the document, never mentioning the knowledge economy in the main text. The thrust of the policy document’s argument is that service sector jobs are the global playing field: They are no longer low-skill jobs on the margins of an Industrial juggernaut, but make up the fastest growing job sector both nationally and globally. The idea is that increasing global competition from highly skilled workers willing to accept low wages should motivate educational reform in the US., in order “to triumph in the global skills race” (p. 3).

Milton’s thoughts about censorship are relevant not simply because he mocks the notion of commodifying knowledge, but because he believes that at the end of the day censorship is a losing proposition. Proponents of 21st century literacies and skills do not see the knowledge economy as a kind of censorship, but the regulation of human knowledge is an inevitable result of the use of networked communicative tools and infrastructure. Just as the tools we use to communicate mediate what we are able to say, the connectivity of the knowledge economy assigns value to knowledge based on its ability to be networked, shared, and converted into capital (Boggs, 2010). The response is woven into the crisis narratives of the movement through the notion of alignment, information sharing, connectivity, and collaboration. The content of the quotation above frames the sculpting of knowledge as an economic issue: “Creating an aligned, 21st century public education system that prepares students, workers and citizens to triumph in the global skills race is the central economic competitiveness issue for the next decade” (P21, 2008, p. 3). “Every aspect of our education system,” the argument goes, “must be aligned to prepare citizens with the 21st century skills they need to compete” (p. 3).

**Reordering Knowledge by Assigning Market Value**

Not surprisingly, I have not yet come across a proponent of 21st century literacies that really explains what changes in human knowledge are necessary to support the massive growth of the global economy. However, critics, myself included, have been willing to connect the dots (Boggs, 2010;
Carette, 2007). The alignment of knowledge pretends to favor competitiveness of the United States as a ‘good guy,’ but the real goal is profit. If Americans can prosper as the world economy changes, so much the better, but the world economy is changing, and global capital will find adequate labor supply somewhere. Knowledge that may be readily exchanged through interactive tools, which uninhibited by geographical distance, has comparatively greater value than knowledge that can only be exchanged in face-to-face encounters. Or, perhaps more to the point, the conversion of non-networked knowledge to the formats legible in the knowledge economy equals the commodification of that knowledge.

Although this description may seem dire, the backdrop for Milton’s critique of the regulation of knowledge through the censorship of printed books was the Spanish Inquisition (and papal inquisitions throughout Europe and the New World). Yet Milton argues throughout the Areopagitica that effective censorship, besides being unwise, is logistically impossible and economically unfeasible.

But on his way to making those courageously optimistic arguments (the like of which almost cost him his life), he considered the possibility of monetary commodification of knowledge (by the state) through licensing. In so doing he offers an interesting and quite modern counterpoint to Foucault’s dire warnings about surveillance, which subsequent scholars have used as a basis for critiques of the knowledge economy (see Carrette, 2007), in which global economic, rather than national and political, entities reorder knowledge for exchange by eliminating human, national, or disciplinary barriers. Foucault’s (1975) vision of a transition in socio-political state power from control over places and land to direct regulation of human bodies through discourses (Kendrick, 1987) is the groundwork from which Carette (2007) and others project a subsequent development of the regulation of human knowledge by transnational corporations (such as P21’s sponsors and collaborators, listed in P21, 2008, p. 19).

In the knowledge economy, 21st century literacies afford the reshaping of knowledge for global capital exchange through massive changes in available connectivity infrastructure such as cellular, satellite, and Internet substructures and multimedia software superstructures. Oppression in the knowledge economy consists in the reformatting and networking of knowledge via mediating technological tools and economic opportunities, which enclose human knowledge and interaction for the
benefit and use of corporations whose investment funded those technologies. In other words, if the world is connected via private, literate, for-profit enterprises, knowledge that is not easily ‘keyed-in’ and shared with others rapidly loses value. Schools that take up the banner of 21st century literacies or sign on the alignment imperative of the P21 unwittingly promote the commodification of human knowledge at the expense of informal economies, intergenerational knowledge, and some aspects of embodiment. In addition to inequality of access to requisite hardware and software, electricity and physical nourishment, a knowledge economy, and, consequently, 21st century educational movements may be oppressive because the new moulds they provides for human knowledge fundamentally undermine human agency.

This issue of undermined agency has practical consequences for contemporary debates about the use of popular culture in the classroom and the role of experiential education in formal schooling. Advocates of the incorporation of pop culture in the classroom take one of two positions: Schools should shoulder the responsibility of raising critical awareness of the ideological and economic DNA of media messages or, students already exercise significant agency in their interaction with popular culture that can be useful for school achievement. The knowledge economy argument is that digital natives’ ways of knowing are always-already subjects (Althusser, 1971), and non-networked perspectives (such as elder knowledge, local tradition, or other ways of knowing that exist outside the knowledge economy) that might form the basis of a critical perspective are structurally excluded.

**Research on Collaboration in the Knowledge Economy**

I find a troubling tension in 21st century education literature in privileged status of collaboration. From a knowledge economy perspective, collaboration is what human knowledge does for the benefit of those with capital, and the rhetoric of collaboration expresses the social goal of the knowledge economy just as alignment rhetoric expresses the purpose of schooling. On the other hand descriptions of collaboration in the literature incorporate creativity, innovation, conflict resolution, ethical awareness, increasingly democratic and lateral organization of workplaces in the knowledge economy. In one sense, collaborations sounds like networked knowledge extracted from laborers; in another, it sounds like freedom to innovate, to solve real problems, and to enjoy one another in the process.
One of Milton’s most famous arguments from the Areopagitica offers a useful approach to the complexity of commodification-via-collaboration. He says that what stands to be restricted, regulated, or excluded, whether by economic, technological, or political means (i.e., evil vs good, in Milton’s case, and non-commodified vs commodified knowledge) is not easily separated from its opposite. In defense of 21st century literacies, despite the risks of increased participation in the knowledge economy, commodified and non-commodified knowledge, “as two twins cleaving together, leapt forth into the world” (Milton, 2006, para. 25)). As Milton argued with good and evil, rejecting censorship, I positioned my doctoral research to ask how people respond to the affordances of commodified knowledge, how democratization of academic knowledge (through the admission of non-academic and interdisciplinary texts) shaped possibilities for struggle against global capital, and how teacher’s design instruction that is both relevant (i.e., formatted according to the knowledge economy) and critical (i.e., suggesting possible paths for using shared knowledge to promote local sovereignty).

I found, as I listened to participants who chose to publish articles together in a local newspaper as part of their struggle against local hunger, that distinctions between the local and the global are approximate and contingent, that locally relevant buzz could not be separated, either in terms of the mediating technological tools or the communicative resources employed. I found that collaborative and negotiated interactions prized by 21st century literacies proponents also aligned with anarchist and non-market oriented goal of mutual aid and nurtured lasting commitments to direct action outside the reach of the formal food production system and the school. I found that students and teachers drew inspiration through their use of 21st century literacies for interactions that could only take place outside the knowledge economy. In adapting ethnography of communication to student-led, activism oriented work, I found that the listening recommended by the method served pedagogical purposes as well, framing supervisors’ responsibilities in terms of nurturing opportunities for nonsupervisory assistance. Such facilitation involved prompting students to equip one another with disciplinary tools and involve one another in extra-disciplinary interests that participants felt were relevant to collaborative decision making.
In studying the teacher of the course, finally, I explored possibilities for intentional, yet indirect and non-coercive, in-service teacher education in a Vygotskian (1987) vein. I found that the teacher developed resources for critical pedagogical reflection within the domain of his academic and activist interests. Given current trends in secondary education of value-added teacher compensation, this finding points to the need for further research into non-coercive development of concepts of teaching. Findings suggest that the development of a conceptual approach to the teaching of writing dramatically altered participants’ experiences with and perceptions of writing in the course. The combination of nonsupervisory assistance and the act of publishing collaboratively written articles raises questions about the presumptive role of the teacher as final judge. Proponents of 21st century literacies hint at the changing role of the teacher in problem-oriented multi-disciplinary learning, but my research puts a finer edge on the problem of teaching writing. Milton’s (2006) complaint against the power relation to which the (collaborating) author is often subjected illustrates the potential clash between purposive writing and traditional ways of evaluating writing:

When a man [sic] writes to the world, he summons up all his reason and deliberation to assist him; he searches, meditats, is industrious, and likely consults and conferrs with his judicious friends; after all which done he takes himself to be inform'd in what he writes, as well as any that writ before him; if in this the most consummat act of his fidelity and ripenesse, no years, no industry, no former proof of his abilities can bring him to that state of maturity, as not to be still mistrusted and suspected, unless he carry all his considerat diligence, all his midnight watchings, and expence of Palladian oyl, to the hasty view of an unleasur'd licencer, perhaps much his younger, perhaps far his inferior in judgement, perhaps one who never knew the labour of book-writing, and if he be not repulst, or slighted, must appear in Print like a punie with his guardian, and his censors hand on the back of his title to be his bayl and surety, that he is no idiot, or seducer, it cannot be but a dishonour and derogation to the author, to the book, to the priviledge and dignity of Learning. (para. 46)
I feel fortunate for the opportunity to sharpen my axes and coulters through doctoral studies while simultaneously engaging in local struggles for food security as an educational concern. Along the way, colleagues have questioned the unconventional interdisciplinarity of my interests, pointing to admittedly counterintuitive disciplinary rifts separating English education, agriculture, and access to food. Much as I scorn an interdisciplinarity born out of the commodification of human knowledge for exchange in a global market, I tend to side with Milton.

The arguments against censorship and licensing in 17th century England offer a useful backdrop for considering how to resist the knowledge economy while responding to the multiple positive outcomes that it affords. Perhaps critics of the knowledge economy grant too much credit to Foucault’s (1975) dire warnings about censorship through networked mathesis (Carette, 2007). Milton’s gritty but optimistic theory grew out of the fires of Spanish, French, Portuguese, and New World Inquisitions: Censorship doesn’t work. Among many aspect of Milton’s criticism of the notion of thought control through text control, I find it especially interesting that Milton predicted the economic and logistical infeasibility of such regulation.

This argument represents the core of Milton’s liberalism and summarizes one teacher’s motivation to remove his hand from his students’ backs. Recalling my argument earlier, the teacher’s choices align with 21st century literacies education, affording considerable opportunities for student agency and raising questions about the mediation of that agency by the knowledge economy.

Why it Can be Hard to Discuss Economics in Education

The role of economics in education is a divisive issue, in part because of the political baggage associated with theories of the relation between the two cultural domains. A less obvious difficulty is the result of traditions of territoriality in academic disciplines. Luria’s (1976) integrated, sociocultural educational research with Vygotsky and others in what is now Uzbekistan in the 1930s sparked many copycat studies in the late 1960s, following Mike Cole’s discovery of the data and unpublished findings. Luria’s recognized that changes in how people fed themselves, taught each other, and learned together could not be isolated from one another. Sylvia Scribner’s (Scribner & Cole, 1977) Psychology of
Literacy co-opted and undermined Luria’s (1976) effort to combine clinical experimental methods with awareness of interdependence among social systems, and the book helped define and constrain the sociocultural study of literacy-mediated learning in schools for decades. Luria’s weakness, Scribner explains, is that he confused the effects of changing economic life with the effects of schooling. It is possible that Scribner wanted to distance herself from the overtly Marxist thrust of Luria’s design, by denying the relevance of economic forces in schooling, as if they were separate domains.

For Scribner (Scribner & Cole, 1977), and for American sociocultural scholars in the tradition she shared with Mike Cole (1998) and others (e.g., Gonzalez, Moll, & Amanti, 2005), the goal of studying literacy-mediated learning was to understand how to improve schooling through understanding of (some and not other aspects) of sociocultural context. Luria, by contrast, saw schooling as one among many social institutions that were responding to economic changes in the region.

I argue that it is difficult to talk about economics and schooling partly because of the political divisiveness of economic and social theories, and partly because sociocultural researchers based in the United States handled the issue of economic exploitation quite gingerly. It follows that the emergence of the knowledge economy and its permeation of formal schooling through reform movements like 21st century skills and literacies leads to logjams for educational researchers: We are eager to see multiple literacies, student-led learning, multimedia composition, and the breakdown of the division between school and out-of-school literacies validated, but wary of economic forces capable of such a sea change away from atomistic, standardized, canned curricula.

Looking Ahead

The 21st century literacies movement attracts me as an educational research area because of the widespread belief among both proponents and critics of the movement that schooling and other social institutions are transitioning in response to global economic changes. Without denying the contradictions and oppression that follows from commodification and monetization of human resources such as knowledge, I am excited about possibilities for struggle that may arise as economic imperatives for education become more explicit. 21st century literacies afford multiple positive outcomes, including
opportunities to address underlying causes of poverty and resistance to the reordering of human knowledge.

In looking at students learning advanced human geography, I found that student-led discussions provided a rich context for nonsupervisory assistance and inter penetration of school and nonschool worlds that conceivably supersedes what teachers ‘bring into the classroom’ by virtue of validity of the buzz to which students responded. That students chose to write as a means of social action does not ‘prove’ that appropriate combinations of classroom organization and task structure result in fulfillment of Vygotsky’s (1978) necessary-for-something condition for optimal literacy development.

There are other possible explanations for the emergence of writing in the course, such as participants’ cynicism regarding other forms of action they fancied before grappling with the obstacles to collaborative community-based action in a university-based course. The meaning of their choice is somewhat beside the point, however, in the context of 21st century literacies education. From a literacies perspective, the point of their deciding is the multiple positive literacy-oriented outcomes that followed from it: They developed communicative resources together that bridged social contexts; they used those resources to respond to and support nonschool action; and they strategically communicated disciplinary and non-discipline specific knowledge beyond the school context. In addition, students crossed disciplinary boundaries and those established by social institutions (e.g., the school, institutional food service industry, and their families), collaboratively negotiating alternative academic orientation “out in the community,” as one participant remarked, developing a non-monetized food reclamation program, and breaking with long-established family traditions of using money in exchange for food (i.e., refraining from dumpster diving to meet food needs).

The notion of multiple positive outcomes inheres in its ability to enter into politically and economically polarized worlds. In a democratic context defined by majority rule, the battle over school reform has become highly politicized; one side argues for equal access for all students while another argues for the need to remain competitive. With the recognition that such a politics inevitably results in the suppression of the minority position, my research explores alternative ways of seeing 21st century
literacies—as a learning context. While it may well be that the proficiencies themselves are being
determined by global capital, a multiple positive outcomes view asks what benefits accrue to communities
when students are encouraged to interact in particular ways.

In the case of 21st century literacies, even as proposed directly by multinational corporations such
should be preferr'd before many times as much the forcible hindrance of evill-doing” (para.40). In order
to struggle effectively against injustice, in any case, it is necessary to know what is unjust. Malleable,
collaborative web-based tools do not only commodify and enclose human interaction, nor is the enclosure
of knowledge the sort of complaint upon which to found a revolution. 21st century literacies surely afford
other things as well, even if they have not yet been fully discovered. Literacies are not like the highly
valuable but narrowly useful looms hacked apart by the Luddites during the Napoleonic Wars. Much time
has been wasted grumbling about changes occurring at scales remote from local concerns, and human
effort that could be spent to alleviate incongruities of hunger, critical awareness, and inaction is
swallowed up in feelings of helplessness.
References


