

Chapter 2. Creating Personal Outcomes

If writing is indeed a public as well as a personal rhetorical act, one might wonder, what are the indicators of valued outcomes? The work on service-learning, however, shows how little attention we typically pay to public outcomes. In fact, as Paula Mathieu charges, institutional goals for constantly increasing student placement numbers lead universities to ignore (if not dismiss) community needs when they initiate and evaluate service-learning (Flower and Heath; Shah).

For some like Aaron Schutz and Ann Gere, these reports are an indictment of service-learning for its failure to raise students' cultural awareness and challenge their desire merely to help. And as Richard Bradley reminds us, "What gets measured gets done . . . If you can't see success, you can't reward it . . . If you can't recognize failure, you can't learn from it" (151). Not unlike the holistic claims and the search for a broad array of effects seen in the research on career education in the 1970s, on experiential education in the 1980s, and on service-learning in 1990s, the enduring finding seems to be that the specific things you teach, support, monitor, and measure are the ones students learn.

The ability to demonstrate public outcomes is especially important for programs tied to community development in which students can play a real role in public issues (Miller 107). And the non-profit community organizations with which we often work are regularly required to justify their funding from foundations in terms of outcomes. Yet as Teresa Redd's study of assessment in service learning showed, there can be "significant discrepancies in the teacher and client assessment stemming from different views of the rhetorical situation" (15). When we don't work to articulate the indicators we are working toward, teachers, partners and clients can disagree on what constitutes an effective public performance. So the next two chapters will use four case studies to explore four distinctive kinds of outcomes:

1. Building Everyday Life Tools
2. Constructing New Understandings and Open Questions
3. Altering Institutional Practice
4. Naming the Change You Want to See

Each case will move from a brief description of the activity system to a more detailed discussion of different conceptual and methodological tools educators can use to track outcomes, followed by a final discussion of what my collaborators and I in fact observed using these tools.

Case I: Building Everyday Life Tools

In a review of the research on service-learning, Robert Serow concludes, "The literature on program impact in particular seems to consist disproportionately of

studies grounded in a single approach—namely, the statistical analysis of responses to surveys of short-term attitude change” (13). Moreover, the participants in these activities may hold contradictory goals. Faculty may be working toward goals of political empowerment framed as a “movement toward certain highly egalitarian political and economic objectives” (17). However, the students in Serow’s extensive interviews appear more concerned with gaining personal empowerment and feelings of self-efficacy from helping (17). Serow sums up his broad overview of research and evaluation on service-learning by naming four desired outcomes. In addition to the traditional academic goals of “competence” and “understanding,” students see service in terms of “participation” and “relationships,” which they consider ends in themselves. And in qualitative and quantitative studies alike, the value of service-oriented community experience is typically measured by its ability to produce student reported gains in self-understanding, self-confidence, self-esteem, and, to a lesser extent, self-efficacy. These are desirable. However, little is said about the ability of service-learning to support democratic or deliberative action, transformed understanding, or social impact. In our first case, the exigence motivating assessment at Pittsburgh’s Community Literacy Center was an upcoming foundation impact report and proposal for renewed funding.¹

The Case

The Community Literacy Center as sketched in the Introduction was a community/university collaboration inviting teenagers in its urban neighborhood to write newsletters and hold public Community Conversations about issues that shaped their lives—issues ranging from risk and respect to pathways to work, school suspension policies, handling police encounters, or teen stress. It also brought Carnegie Mellon students into an intercultural relationship with the teenagers—not as tutors but as mentors to support teenagers writing from the expertise of their own experience.

However, in 1990, when we coined the term “community literacy” for our effort, philanthropic foundations equated the term “literacy” with the low-level, low-impact programs of adult literacy. And writing seemed less significant (read: less fundable) than typical projects related to teenage social behavior and school retention. So our five-year follow-up study had to justify this rhetorically based engagement, essentially reframing a standard assessment and its methods. And we wanted to do it in terms of outcomes for the teenagers themselves.

Using a Critical Incident Lens

This critical incident method of assessment was not the norm for service programs as Serow had described them. Although this case illustrates a rather simple

1. The Community Literacy Center and this report are described in more detail in Flower’s *Community Literacy and the Rhetoric of Public Engagement*.

empirical method, what it attempts to capture is whether this educational, writing-based experience was still playing a role in the teenagers' lives a year after being in a six-week Community Literacy Center project. What, if anything, of their experience with literate empowerment would transfer to the markedly different activity systems of urban life and schools? The impact report, titled "Where Have We Come? What Have We Learned?," began by responding to the standard categories by which institutions measure effectiveness: school retention and grades, social behavior of youth (delinquency, pregnancy), jobs, and program participation (Flaxman and Orr).

For instance, it included figures on the unusually high level of school engagement by students who had participated with the CLC (88% attendance), supported by an assessment questionnaire in which seventy percent of what would be called "at-risk" students actually gave the *educational* activities at the CLC their highest ranking, a 5 on our scale of 1 to 5. These results were followed by empirical evidence of the program's public engagement and circulation, including its publications, contacts with local government and school administration, and especially one of the teen-led Community Conversations which (because the mayor attended) reached a TV news broadcast audience of nearly 4,000 Pittsburghers. Music to a funder's ears no doubt. But what about the teenagers themselves?

So our report tried to capture the teenagers' progress by tracking down 14 students who had participated in a CLC project a year prior to ask the question educational institutions rarely ask: Does this learning transfer to your life? To answer this question, we turned to structured critical incident interviews, designed to uncover more concrete accounts for something that really happened in place of an abstraction, generality, retrospective interpretation, or what the respondent thinks the researcher wants to hear (Flanagan). These interviews were conducted by Mrs. Baskins, the engaging African American co-director the students trusted, who initiated the interview by merely asking if they recalled any of the key problem-solving strategies we had taught through writing (e.g., strategies for analyzing problems, considering rival hypotheses (or *rivaling*), decision-making, collaboration, and community engagement). They then moved to the central open-ended critical incident interview question: *Can you describe any specific instances—actual events—in which you used what you learned at the CLC?*

The catch was, for their response to make it into the analysis, "yes" wasn't enough. The "critical incident" research method prompts people to bear down on a particular event or actual interaction with questions such as, "What happened next?" "What were you thinking?" "What did other people say?" We then counted as evidence only those comments that cited specific instances and examples describing how the teens had indeed *used* their CLC experience. The coded results indicated, somewhat to our surprise, that a year later, eighty percent of the teens (on average) were able to cite one or more codable instances of a specific

literate strategy transferring to their lives, distributed across a variety of contexts, even their life plans.²

Table 2.1 Number of Teenagers Describing the Transfer of a Specific Literate Strategy

In School	At Home	In Society	On Life Plans	CLC's Transfer Index
13 = 93%	12 = 86%	11 = 79%	9 = 64%	80%

What We Observed

Excerpts from the recorded comments themselves, including those noted here, suggest the nature of this “transfer” and the extent to which the teens choose to use these literate practices, transforming them into ways to *respond differently* to the world around them—ranging from parents, teachers, and friends to the pressures of urban stress and even violence. For example, students Daryl and Jason talked about using the strategies to navigate difficult situations with family and at school:

[On the Rivaling strategy]: “Before, when I had nowhere to go [for help], I couldn’t say nothin’ because nobody would listen. Before I wouldn’t rival nobody; I thought it in my head, but couldn’t talk.”—Daryl

[On the Story-Behind-the-Story strategy]: “When my brother & I didn’t have a place to live and nobody would take us, I tried to understand their side—my aunt didn’t have money; my dad had no room.”—Daryl

[On the Options and Outcomes Decision-Making strategy]: “After moving to a new neighborhood where white guys at school were overheard saying, ‘Niggers gonna come up here and take over,’ I could fight and get suspended, but I stop and think, if I don’t, they might get caught and I go on. My friend always be fighting white kids. I tell him ‘just chill, be cool.’—Jason

Although the impact report included the usual sorts of data collected on these teens, perhaps the most valuable aspect of tracking this sort of transformation is the way it shifts the locus of agency away from the program to the young people. It translates the conventional indicators of success (in which empowerment is

2. The bottom row of the table shows the number of students reporting a critical incident in which they used that strategy. Although we initially asked the participants briefly to recall any strategies they learned merely to prompt their memories, the coding was based on the conceptual cues rather than explicitly using any name we gave the strategy. The name of a strategy in italics was added for clarity, not mentioned at the time.

equated with behavioral norms) into acts of personal decision-making, reflective understanding, and rhetorical action. Compared to the metaphor of transferring (what *we* taught), the outcomes the teenagers report are better described as the kind of constructive cognitive acts we see in writers as they build new, “negotiated meanings” (Flower, *Construction*).

In sum, critical incident interviews can serve a number of purposes (Flanagan). First, as an assessment tool, they can focus on the students’ own assessments of both the program’s usefulness and the value of the distinctive experience the project offered (in this case, using writing to try out new problem-solving strategies). The interviews document a critical outcome: giving students new thinking tools and agency that they could actually put to use in choices that mattered. As a result, the report itself worked as an argument to funders advocating the lasting impacts of community-focused literacy. Finally, we discovered that as these teenagers were engaging in the interview itself, they appeared to be achieving a new level of metacognitive understanding of their own options. Tracking achievement can do more than justify our own practices. As a reflective, pedagogical moment, the interviews helped these students see and articulate their own agency as both learners and social actors—to an appreciative listener. In short, the interviews documented that these students were indeed building everyday life tools that mattered.

Case 2. Constructing New Understanding and Open Questions

Much of what we learned at the Community Literacy Center transferred to a variety of educational practices designed to shape academic engagement for college students as well as teenagers. One of these outcomes was a course in which an extended difference-driven public dialogue was used to translate theoretical concepts and rhetorical issues into actions.

The Case

The setting for this case study is the Leadership, Dialogue, and Change course in which a key theory studied by graduate and undergraduate students was Ronald Heifetz’s model of “adaptive leadership” developed at Harvard’s Kennedy School of Government. In this paradigm, leaders are defined not by a charismatic appeal that creates “followers” but by the ability to draw a community into facing its tough “adaptive” challenges: the ones that may call for learning, re-evaluation, and even a change in practice. Heifetz’s work (which we studied in comparison with other models of social change, such as John Dewey and American Pragmatism, as well as the works of Martin Luther King, Jr., Cornel West, and Saul Alinsky) invited students to examine their own experience and their assumptions about what makes good leadership. Then they began to test theory against practice by organizing a Community Think Tank.

To gain insight into the students' personal takeaways, let me first sketch what the class was doing. To develop this particular Community Think Tank, the class took up the problems facing a little-recognized group on campus, first generation and/or working students as they navigated the culture and demands of a high-pressure, high price tag university. We choose to identify these people as "Independent students" to recognize both their situation and agency in the absence of support. In order to document these problems from multiple campus perspectives, the class conducted a series of "critical incident interviews" (Flanagan) to create a *Briefing Book* designed for participants based directly on the interviews and their research. (See Figure 2.1) They then used it to guide the subsequent set of roundtable problem-solving sessions with a cross-campus body of stakeholders. Drawing on some of the rhetorical strategies developed at the CLC, these Think Tanks used the *Briefing Book* as a prompt to help participants explore clearly different (sometimes outright conflicting) perspectives—giving special presence to the marginalized voices of Independent students in the *Briefing Book* and at the table. Over the course of several roundtables—in which administrators, counselors, and faculty worked face-to-face with a cross-section of students—the participants responded to and expanded competing representations of "the problem" as documented in the *Briefing Book*. As the group moved to proposing concrete Options for tackling these problems, they were asked to test their ideas by imagining possible alternative Outcomes. Having organized, moderated, and documented their Community Think Tank, the students then distributed and published their "Findings" on the Think Tank website.³

The outline in Figure 2.1 (from a related Think Tank) shows the structure of a *Briefing Book* sent to participants of a given Think Tank. Here my brief explanatory comments are added in [italics]. Its questions and quotations served as prompts for the discussion. It is included as a way to suggest the variety of literate acts this experience calls out.

The course gives us an example of socially engaged learning with a particularly strong emphasis on integrating theory, student research, and face-to-face collaboration across various kinds of differences. So, what was learned? In the present case, our insight into the sort of understanding individual students were developing is based on an end-of-the-semester, four-page written assignment discussing how they had applied what they had learned (i.e., taught themselves). These probing reflections reveal an adaptive, personally relevant constructive process in which it is easy to see how their learning was not limited to propositional knowledge or procedures, much less to simple transfer. In terms of David Greeno's et al. studies of situated cognition, these reflections turned out to describe an impact on students' "ability to interact with things and other people in a situation." The challenge is finding a way to display how Greeno's relational "knowing" (which will be different for every student) shows up in actual social experience (100).

3. For an overview of the Community Think Tank methods and published Findings, see www.cmu.edu/thinktank.

<p>Briefing Book on The Culture of Stress at College: Public Talk, Personal Experience and Responses</p> <p>Introduction: The Community Think Tank Process This Think Tank is designed to create a cross-cultural cross-hierarchy dialogue. . . .</p>	
<p>Part I. How People Talk about Stress The Problem Scenario: What's Going on Here? Professor X: Given this exam score, have you considered dropping . . . Josefina: That would make me part-time with no financial aid. . . . Professor: . . .</p>	<p><i>An issue arising in the students' research is presented in as a brief scenario with examples of responses received in the interviews.</i></p>
<p>The Story-Behind-the-Story What is Josefina thinking? Josefina: My parents will be so disappointed. . . . <i>Other responses follow from a Professor, Parents, Student Life Advisor.</i></p>	<p><i>Selected examples from the interviews serve as prompts for the group and ensure that some Independent students' versions get heard.</i></p>
<p>What Is the Problem Here?</p>	<p><i>Various interpretations from the interviews, included in the full Briefing Book as prompts for discussion included: Disappointing her family, a blow to identity, letting go of dreams, she is just an underprepared or first gen student, has no support network, exams don't reflect learning . . .</i></p>
<p>Options and Outcomes: Decision Point One: Confronting Disappointment Option 1. It's Okay to Mess-Up Educational research says: Mis-stepping can open a dialogue . . . Friends will tell her . . . Outcomes: If she says this to the Professor, he might disagree and think . . . Option 2. Experiment with Your Identity Students think: We feel so pressured to succeed from ourselves, profs. . . . A Student thinks, "It would be cool if there were an anonymous forum . . . The Spanish Student Organization says: You would feel at home here . . . Outcomes: ???</p>	<p><i>After the participants at the table add their differing perspectives on the problem (which will appear in the published Findings), they consider the Decision Points these have raised and turn to generating and testing some workable Options.</i></p>

Figure 2.1. The structure of a Briefing Book.

Using Activity Analysis and Its Social, Cultural, and Cognitive Lens

Using Yrjö Engeström's influential model of an activity system offers a valuable roadmap for exploring socially embedded action. Focused on the critical forces at work within a particular social, cultural, historical, and cognitive system, activity analysis can reveal how these forces are interacting, shaping, and reshaping the activity itself. Researchers have studied activity systems within many contexts: for example, a classroom with genre expectations (Russell), a professional internship (Brent), a middle school trying to redesign its practice (Sannino), a traffic court (Engeström, "Tensions"), and a healthcare clinic wanting to improve coordination (Engeström, "Developmental").

Analysis works from the perspective of an agent or Subject within a given Community who is facing what activity theorists call an Object (i.e., a task, a set of goals, or a problem space), plus its Outcome(s). Having identified our Object, including our goals and their outcomes, an activity analysis asks us to examine the influence of three other critical forces within this particular system: its "Rules" (such as institutional traditions); its "Division of Labor" (which might be collaborative or dictated by hierarchy, status, or power); and finally, the less obvious force of what Lev Vygotsky called "Mediational Means" (Wertsch). Mediational means range from material tools (e.g., a pen vs. a typewriter vs. a computer for composition) to intellectual tools (e.g., concepts and practices). For this analysis, I refer to these three shaping forces as "Rules, Roles, and Tools."

In Figure 2.2, Engeström's elaborated model of an activity system works as a heuristic to identify some of the forces at work in a particular activity—in this case, his own action of preparing a speech for an international congress on activity theory (ISCRAT) ("Activity" 31). Here the straight lines merely indicate an interaction between parts of the system. However, the jagged lines indicate two "Contradictions" within the activity. The first exists between "the very challenging issues activity theory is facing *and* the rather weak instruments of collaboration and discussion at our disposal" (32). In the second, disciplinary silos (formed in the Division of Labor) come into a conflicted interaction with the group's attempt to collaborate on key issues or build new tools (sought in the outcome). It is important to note that when Contradictions arise in the activity *system*, the elements in conflict, like those of disciplinary cohorts, are likely to also be serving a useful purpose for *someone somewhere in the system*.

In fact, the real payoff in analyzing an activity system comes in uncovering both those Contradictions within the activity and how people deal with them. For instance, students may face a Contradiction in an encounter with faculty or university administrators, as when students' impulse to use a Tool (such as the energetic, generative practice of offering rivals and counter stories of personal experience during class) comes in conflict with certain social Rules (such as certain norms of deference or the attribution of expert knowledge to a professor in this hierarchical connection). A desire to avoid Contradictions may also explain why

groups will turn a serious problem-posing deliberation into a mere “committee meeting” to avoid violating a Rule or convention of collegiality. For some students in the Leadership, Dialogue, and Change class, my request for a written reflection on ways they had put their experience to personal “use” contradicted their understanding of a graded “assignment” as a display of course knowledge, a course evaluation, or a summary of “what they liked” about the course. In contrast, from my point of view, assigning this reflective Tool was designed to help them articulate their learning as a path to metaknowledge and to give me insight as a teacher into the sort of knowledge they were constructing out of this experience.

When the Object of an activity is the creation of new knowledge, activity theory and American pragmatism locate the significance of that knowledge in its consequences. A written demonstration of what we have learned is, of course, a standard educational tool to both create and measure understanding. But in an engaged education, it is even more important to see new knowledge as itself a mediational tool which is evaluated not by its abstract rational structure or truth to nature but by its consequences for human activity. The value of knowledge is its transformational power (Engeström, “Innovative” 385). Moreover, as we will see in Chapter 3, the usefulness of Greeno’s interactive knowing may not be obvious in advance (as when one is facing a final exam). But it may be mobilized (in the face of unanticipated exigency) as a mediational tool with a material effect. Can we demonstrate that powerful outcome?

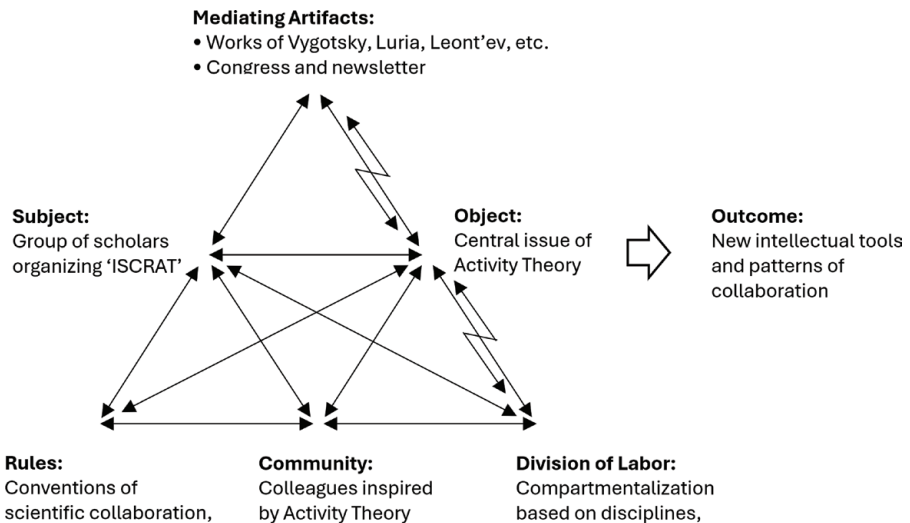


Figure 2.2. Engeström's elaborated model of an activity system. This figure is adapted from a figure that originally appeared in *Activity Theory and Individual and Social Transformation: Perspectives on Activity Theory*, edited by Yrjö Engeström et al., Cambridge UP, 1999, p 31. Reproduced with permission of The Licensor through PLSclear.

Consider our desire to issue a call for change, given our country's intercultural context, with its deep-rooted cultural conflicts and history of social injustice. Although we may possess a new understanding, presenting that knowledge as a theory or critique that claims it is a new Truth is unlikely to be a change maker. Genuinely transformational knowledge causes a change in the way people, their Tools, and their worlds interact—a change in everyday practice itself.

A challenging set of criteria for building transformational knowledge in everyday settings is emerging from Engeström's studies of courtrooms, medical clinics, and work teams. The process he describes begins with "individual subjects questioning the accepted practice" ("Innovative" 383) and ends when an "initial simple idea is transformed into a complex object, a new form of practice" (382). People do not achieve consensus, he argues, through the force of a general argument, but when the germ of an idea *ascends*, in an ironic turn of phrase, "from the abstract to the concrete" and emerges as a coherent, workable action (382, 401). In a remarkable statement, he concludes that the outcome of knowledge building is the "creation of artifacts, production of novel social patterns, and expansive transformation of activity contexts" ("Activity" 27).

These transformations are "expansive" because they draw people with rival perspectives into communication that lets them reconceptualize the ways they are organized and interacting around a shared concern (Engeström, "Innovative" 373). Within this multi-vocal event, transformation produces "a re-orchestration of those voices, of the different viewpoints and approaches of the various participants" ("Activity" 35). The significant strength of the lens of activity analysis, I would argue, lies in this richly specified set of potential outcomes.

The implications of these criteria for change become even clearer when Engeström applies them, as we saw, to a familiar activity—the theory-building activity of researchers. The acid test of a theory according to activity analysis is its creative productivity—its "practical validity and relevance in interventions that aim at the construction of new models of activity" ("Activity" 35). But this is successful research with an added twist. Those novel social artifacts and forms of practice this activity produces are most significant first when they are created "jointly with the local participants" (35). And secondly, when those creations support the "possibility of human agency and transformation of social structures from below" (29).

The activity lens can also reveal how a Tool, such as the CLC's rival hypothesis stance, can also be transformed when it moves from one activity system to another. This conceptual Tool emerged from a National Science Foundation research project on "literacy in science" in which we asked how the notion of "rival hypothesis thinking" was understood and taught in different disciplines, from philosophy and rhetoric to social and hard sciences (Flower et al. *Learning to Rival*). The initial case studies conducted on this question revealed that while faculty in biology and history described how rival hypothesis thinking was central to their own theory and research, it was modeled only indirectly in their lectures, and their TAs never taught or mentioned it—though one said she used it as a

benchmark to identify the “A” papers! So we designed a follow-up study with a group of (mostly under-prepared) entering college students to track the effect of directly teaching this interdisciplinary power tool. And it indeed produced some dramatic changes in the sophistication of arguments on a controversial topic and the ways in which they structured their writing (Flower et al. *Learning to Rival*).

At the university, this rival hypothesis move served primarily as a genre guide to critical essay writing. When we took it to the CLC, however, it was transformed into an important tool for collaborative planning, which let the mentors draw the teenage writers into rhetorical reflection by asking, “But what if someone else (e.g., your grandma, a gang member) said . . . ?” More significant was how the group itself transformed it into a tool for interpersonal interaction. If disagreement or argument is an honorable, standard MO in the academy, in the urban teenagers’ world it was the basis for a fight or a sign of “dissing” your friends. And when our writers came to the table, disagreement effectively closed down serious discussion. That is, until the day the teenagers made rival hypothesis thinking their own tool by renaming it “rivaling” and using the announcement, “I’m just rivaling,” to initiate energetic, no-threat group discussions. In effect, this transformed mediational tool allowed them to create a new, non-agonistic discourse for argument that allowed revealing conflicts to be drawn out and discussed.⁴

As this sketch suggests, an activity lens may reveal the way such influential and malleable mediational tools are being shaped by and in response to the system they inhabit. This was evident when other Community Think Tanks were convened around wider community problems (from the retention and training of low-wage nursing aids to the social price of revealing a learning disability in high school, to the culture of stress in college). Here the activity system’s community, represented by the group at the roundtable, might include nursing home CEOs and supervisors as well as nursing aids, or, in another case, school counselors, teachers, and teens with a learning disability, or, in yet another, college administrators, faculty, and first-generation and working students. Facing the demanding task of intercultural and cross-hierarchy deliberation, the institutional dimensions and power relations shaping these activity systems (i.e., Rules and Roles) suddenly became more prominent, calling on our “Discourse” tools to mediate the situation in new ways. This capital D Discourse, as James Gee describes it, provides not simply a vocabulary but a set of “*saying (writing)-doing-being-valuing-believing combinations*” that identifies the speaker as a member of a group (526).

Differences in status and Discourse, then, tend to authorize not only who speaks but who is listened to. Here in our Community Think Tanks, rivaling was positioned as one of the imaginative “language games” everyone was asked to try—and the roundtable moderators could use it as a laughing challenge to participants. Like

4. Interestingly, the research we used on decision making noted that the students rarely consider more than one option—however, it turns out that adults were not much better (Johnson 67).

the Briefing Books, this mediational Tool gave voice and standing to marginalized participants by refusing to privilege the Discourse of policy, giving equal standing to narrative and the wisdom of experience. And when speakers were prompted to directly rival themselves, they frequently produced the most insightful counterarguments. For example, the human resource manager dealing with discrimination against a new welfare-to-work employee would propose her own standard, a professional HR move (e.g., just tell them to come to me). But when asked to rival that option, she knew exactly how it would play out—and fail—in the activity system she knew so well (where experienced employees would get to her first). Meanwhile, in a classroom, rivaling *oneself* became a spur to critical thinking and invention that created usable “working knowledge” (Flower, “Intercultural Knowledge Building.

Another example of a mediational tool which offers a lens on learning outcomes, is the reflective writing many teachers use to support learning and transfer (Yancey, “Introduction”).⁵ In Rebecca Nowacek’s classroom study of transfer as “recontextualization,” reflection in the form of lively discussions helped students to “integrate” their learning across different classes. Written reflection can reveal not only interactions and conflict within a learner’s activity system but can reshape those interactions as well. For example, the cognitive process of writing is often

5. It is important to note that the notion of reflection, which will come up in other cases, is a bit of a merry-go-round. Pick the color of your horse and it will take you up and down through the disciplines. In writing, one of the most useful reviews of reflection in varied contexts is Kathleen Blake Yancy’s *A Rhetoric of Reflection*. Later when she expands reflective practice to assessment and digital portfolios in “It’s Tagmemics and the Sex Pistols,” she reminds us that “we have multiple definitions [of reflection]—ranging from metacognition, account of process, and self-assessment to synthesis, rhetorical explanation, and exploration” (268). For instance, the many guides to “critical reflection” in education ask writers to identify, question and assess their deeply held assumptions often with the intent to improve self-understanding or learning. But as it moves into community engagement, it also becomes a tool for cultural critique, to uncover social assumptions and practices that support oppression. Here an important distinction Gholdy Muhammad would make notes that *criticality* is more than just critical thinking. It is critical thinking about power, justice, equity, humanity, problem-solving, empowerment, marginalization and other criticality-related topics (84)

Some approaches to reflection outside our field have developed even more formal frameworks for analysis and training. In a relevant account of “experiential learning,” which David Kolb describes as a “continuing inquiry into the nature of experience and the process of learning from it” (xviii), Kolb compares the Lewinian model of “action research and laboratory training” with a more familiar Deweyan “model of learning.” In a relevant comparison, he notes how Lewin starts with observation while Dewey’s process begins with purpose (32-33). A related methodology from sociology called “critical reflection,” often draws on Jack Mezirow’s theory of high-level transformative learning, which is widely used in adult education and human resource development. It is interesting to note, in Henriette Lungren and Rob Poell’s detailed literature review of this model, they discovered “little agreement on how to operationalize reflection” (3).

riddled with conflict (especially in better writers) as writers try to negotiate incompatible or competing expectations, conventions, personal goals and so on, while depending on habitual but sometimes poorly adapted strategies. The educational challenge is giving them a look at or insight into this drama. In a study with college students, we had used the tool of a data-based reflective analysis to let students track their own extended processes of creating a final paper. The data they collected from self-interviews, collaborative planning sessions, notes, and drafts revealed a crowd of internal and external voices giving them directions, which in turn emerged from their competing representations of the task, context, and often their own shifting goals. In response to these new insights, the students were able to articulate a virtual kaleidoscope of their own working theories and habitual but sometimes limited strategies for dealing with dilemmas (Flower, “What Does Cognitive”). One obvious outcome here for students was the development of a new sort of metaknowledge about themselves as writers and the ability to make more conscious choices. For me, the teacher, this lens offered new insight into students’ “writing problems” and assumptions I could not have inferred. Using this form of written reflection has shaped both students’ writing and my teaching (Flower, *Construction* 290).

In the following case, we will use two tools, the theoretical lens of activity systems and the mediational tool of data-based reflection to demonstrate a way to glimpse some of the outcomes of an engaged course as they are located in activity systems beyond the classroom.

What We Observed

Over the course of the last 20 years, the Carnegie Mellon Community Think Tanks developed an expanded set of discourse practices and mediational tools.⁶ What the more recent Leadership, Dialogue, and Change course added to the set was a final four-page Personal Inquiry which asked students to “consolidate [your] best thinking on the rhetoric of leadership, dialogue, and change” and how it could be and was *actually being applied* to students’ own experience.

6. The projects and courses discussed throughout this book draw on a number of educational Tools—named practices that grew out of our research in cognitive rhetoric. These were then used and developed in CMU classes, at the Community Literacy Center and later in the Think Tanks. Ones mentioned here include Collaborative Planning (Flower, *Construction*, Flower, et. al. *Making Thinking Visible*) the Rival Hypothesis Stance or Rivaling (Flower, Long, Higgins), Problem Analysis, Stories-Behind-the-Story, Options and Outcomes (Flower, “Intercultural Knowledge,” *Community Literacy*).

In addition, some more theoretical notions (which were explicitly taught as expert actions, not just ideas) included Task Representation (Flower, et.al. *Reading-to-Write*), the Planner’s Blackboard, Transforming Writer-Based Prose (Flower, *Problem-Solving Strategies*), Metacognitive Awareness of Problems, and Generative Conflict (Flower, *Construction*; “Difference-Driven Inquiry,” “Hidden Frames”) and Intercultural Inquiry (Flower, *Community Literacy*).

This final reflection, focused on application became an essential part of the course, assigned as an inquiry on the principle that students remember what they have taught-to and articulated-for themselves, especially in writing. The analysis in Table 2.1 operates on the assumption that students' ability to embed course content in their own activity systems is a strong indicator of learning and of how it is represented in their own experience. The analysis in Table 2.1 used the lens of activity theory (its Rules, Roles, and Tools) and the tool of reflection to build a bottom-up coding scheme designed to capture some ways students had translated the course experience into socially embedded thinking within activity systems outside class. The categories (created from reading these papers) name a set of sites students referred to when they wrote about how their learning has been applied. Their areas of application ranged from interpreting their own performance to understanding concepts, treating genres as actions, and shaping personal goals. As you can see, most students worked in only some of these areas, but overall, the nature of their representations document some distinctive outcomes of socially engaged learning.

Table 2.1. Sites where learning is applied and turned into action.

	<i>Students</i>	1	2	3	4	5	6	7	8	9	10	11	
<i>The Application of Theory or Learning Discussed in Reference to a Student's:</i>	1	<i>Own performance/ actions situated in a community, a course, a role, academic system</i>		x	x	x	x	x	x	x	x	x	
	2	<i>Interactions with people, policies, (face to face, in role as leader)</i>		x	x	x	x	x		x	x	x	
	3	<i>Conflict/dilemma from these interactions</i>		x	x	x	x	x		x	x	x	
	4	<i>Course concepts (in actionable terms)</i>		x	x	x	x	x	x		x	x	
	5	<i>Course Concepts (defined in narrative)</i>		x	x		x	x		x		x	
	6	<i>Own experience</i>		x	x	x	x	x	x		x	x	x
	7	<i>New understanding of concept or action</i>		x	x	x	x	x				x	
	8	<i>Genre expectations/ writing practices</i>		x	x		x	x					x
	9	<i>Personal goals</i>		x	x	?	x				x		
	10	<i>Personal affect</i>		x	x		x					x	x

You will note that Student 1 in Table 2.1 is the exception that may help prove the rule. An excellent student, her paper was a fine review of ideas attributed to sources but applied to abstract, undeveloped examples. Student 2, on the other hand—an experienced African American college activist working on her MA—starts her reflection with an anecdote from her own experience two months earlier with a local action group trying to reduce gun violence in Pittsburgh’s inner city. However, she says, it was the Leadership, Dialogue, and Change course that “taught me how to *re-define* leadership as it relates to everyday people” and gave her insight into how they “could indeed make a tangible and provocative difference in their communities.” Comments such as these, for example, would be coded as a #4 (defining concepts) and a #1 (own performance).

More revealing, though, is her account of learning “how to enter a multiplicative discourse with claims that have existed before me.” The meaning of this assertion emerges in her account of an intellectual and experiential dilemma “in the move from reading and writing to action and writing . . . I felt a tension arise between my own ideological conceptions of problems and relating these abstractions to real, living audiences.” She compares walking into the action group “thinking I was well-versed in community and police relations [which, in comparison to most college students, she was] and later beginning our Think Tank interviews with Independent (first-generation working) students.” Here too, she entered the conversation “with my own assumptions on how interviewees would feel and which problems they would find most important. Being an ‘independent’ student myself, I assumed that I was in the know. I was wrong.”

In this account, we see Student 2 translating her new understanding into local, rhetorical action and into a practice of leadership that confronts conflict even as it challenges her own habits and assumptions. Her text also suggests the intention to carry this new understanding forward after this class. Invoking Cornel West, David Coogan, and Ronald Heifetz, she describes using Think Tank practices as mediational tools: first, in her own activist work with Black teens, to uncover “situated knowledge” about cops with 14-year-old Tyvontae, and secondly, to “manage difficult people” at her own Think Tank roundtable. She describes the discovery of “useful methods for navigating . . . the transition from ideology to action . . . creating conversations with real audiences that bridge the gap between learning from literature and learning from the experiential knowledge of everyday people.” An impressive outcome by any standard.

Perhaps it is not surprising to see this socially engaged student so consciously connecting her coursework to a social/cultural/cognitive activity system in which her learning is embedded. So it is useful to look at Student 3, whose equally self-conscious engagement with conflict takes the form of trying to design a guide for his teaching. As a first-year PhD student, Student 3 locates his personal inquiry, in fine academic manner, in “what I’ve observed to be a sort of generative dichotomy’ in the literature on leadership” from Emerson and Freire to Alinsky and hooks. The question is, should a leader be raising consciousness or moving

people to action? This intellectual dilemma is rather dramatically transformed, however, as he continues, “I struggled with trying to reconcile this dichotomy not only through reading our course materials, but especially as I was transitioning into a new leadership role as a first-year writing instructor this semester.”

He narrates an open-ended story of trying—and failing—to help a student who had already failed the first-year course before. Taking our work on dealing with setbacks directly into their one-on-one meetings, he discovered that this “promising idea” of laying the issues out was increasingly perturbing. He noticed that “somehow, simply naming these problems seemed to make things more intimidating for this student.” In retrospect (recalling the other class-derived practices of building a network of support and a plan for action), he envisions “one way that I could have potentially helped [the student] overcome this intimidation would be to suggest different types of strategies for action, rather than merely laying out what the current problems were.” For him, learning is transformed into the aspirations for his own teaching career: “It’s my ultimate hope that I can integrate this strategy into my own leadership praxis and teaching, as well—that I can strike the delicate balance of helping my students name the problems facing them without foreclosing the possibility of productive action and success.”

Asking students to reflect on the uses to which they have put their learning can give us insight into how they actively transformed what they were “taught” in order to enter a new Community and adapt to a new situation, or demands and conflicts in the Roles, Rules, or Tools of its activity system. Perhaps more importantly, it draws the writer into what appears to be an ongoing, open-ended path of inquiry into meaningful consequences. These action-focused reflections become useful tools for enlarging the learning agendas students set for themselves in subsequent courses.

Using the lens of activity theory to examine these data-driven reflections let me articulate how my students were transforming learning into practice. And it shows how engagement beyond the readings and classroom was pushing them into adapting old, constructing new, and testing out mediational tools. And they are doing so in challenging situations that vary from eliciting insider information from a teenager to managing “difficult people” to mentoring a failing student. At the same time, they are themselves reflectively, expansively confronting issues of status and power while digging into contradictions in their own social practice and thinking. The next educational step beyond this outcome, which I would call *constructing new understanding and open questions*, is to discuss such results with the students and find ways to put the evidence of this learning outcome into wider circulation.

Adapting Methods

Both these methods work in a wide variety of contexts. As the subtitle of John Flanagan’s 1954 article on “The Critical Incident Technique” puts it, it was “A

Technique for Investigating Problematic Activities from Multiple Perspectives.” (It first proved its worth in 1941 by discovering why 1,000 pilot candidates were failing the flight test. Turns out it was the design of the instrument panel.) In a little more recent example of how it could be used, nursing training has some institutionally defined goals around “caring” and for turning experience into working knowledge. However, these hard to track professional skills are essential to assessing the effectiveness of the training. And STEM courses (typically focused on *professional* methods and those outcomes) frequently assign teamwork projects—but rarely teach teamwork as a professional skill. In this case, Craig Moreau turned to tracking teamwork strategies and their outcomes in some high performing professional workplaces (Teams). Focused on “teams that innovate,” he not only discovered the powerful effect of “productive conflict” but built it into a classroom and online teaching guide, which he then tested in an experimental study—in which the power of productive conflict achieved statistical significance (Teaching). A fine example of integrating multiple methods.

Activity analysis would be an ideal tool for tracking students moving from a class or training program to a socially complex situation such as an internship, research project, or local organization. How much of that activity system, with its Rules, Roles, and Tools and how much of its Community and Goals are they as a Subject aware of and interacting with? Is there evidence of Engeström’s “expansive transformation”? To reap the benefit of this analysis, you might also create a space for the class or group to use these categories to code their own written reflections, in order to discuss what they made of this analysis for themselves.