John Dewey's Pragmatism:
Implications for Reflection in Service-Learning

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This essay examines the relationship of philosophical pragmatism to the practice of reflection in service-learning. Service-learning theory and practice often elides over or ignores entirely the principles of inquiry as developed by Dewey. The exercise of reflective thought requires that educators create a situation of discomfort for learners, and mandates that students examine the warrants of settled belief (i.e., assumptions). A brief historical overview of the major strains of American pragmatism is presented, followed by a summative review of important treatments of reflection in service-learning. The elements of inquiry in Dewey are then analyzed and their implications for service-learning considered.

No figure in the literature of service-learning and civic engagement is so widely cited as John Dewey; no thinker is more commonly misconstrued. This essay argues that a better understanding of the philosophical project of John Dewey will improve our use of reflection in service-learning. Despite, or perhaps because of, Eyler and Giles' (1994) and Saltmarsh's (1996) foundational arguments that Dewey's theories of cognition provide a sound basis for the practice of service-learning, it is our contention that the full implications of Dewey's thought for service-learning have not been well understood, much less explored. Dewey's name, and the notion of reflection that accompanies it, can easily acquire a fetishistic quality that prevents the robust application of his philosophy to the practice of service-learning and community engagement.

Understanding Dewey as a pragmatist entails evaluating many of our ideas about service-learning and particularly the role of reflection in it. There are four principal concepts in the philosophical tradition of pragmatism that bear on the practice of reflection in service-learning. First, thought and learning begin in uncertainty—in situations that are ambiguous or dubious. Second, the outcomes of thought are habits of action that appease doubt. Third, the actions that resolve doubt also result in habits of mind that direct subsequent thought. And fourth, knowledge itself is productive: it results in behaviors and beliefs that have observable consequences on our own lives and on the mental as well as social lives of others.

Reflection as a way of learning necessarily entails an instrumental mode of interrogation of existing schema of thought. It does not lead to new knowledge without first causing us to interrogate the strengths and weaknesses of our present intellectual habits. Reflection arises as a result of a perplexing situation and as such one of its dominant characteristics is that it is disconcerting. As Dewey framed it in *How We Think* (1910), reflective thought is both "eulogistic and emphatic" (p. 4). Reflection is where old thoughts are either put to rest or rehabilitated and where a certain quality of indicativeness in our experience—a sense that what we encounter in uncertain moments of existence implies more than bare perception—allows us to examine what is both sound and unsound in our current knowledge.

This means that reflection is something very like an intellectual turning point in our lives, and it deserves to be treated with that quality of seriousness. What we ask students to do in reflection is not reorder existing cognitive categories, but to determine whether or not a new, disruptive experience can be assimilated into present frameworks, or if, more radically, one set of ideas must be put to rest so that new ones can, albeit provisionally, take their place. The implications are, as this essay will attempt to show, that reflection can never be a blunt tool of active learning. As situational as inquiry itself, reflection must emerge from the specific experience that gives rise to it and, if new learning is to result, lead to a re-evaluation of assumptions (i.e., warrants of belief) and result in an instrumental claim that can be applied in later circumstances.

Because this argument may seem counterintuitive, especially in light of the decades-long, though notably self-reported, success of service-learning in asking students to rethink their experience through reflection, we will endeavor to be explicit in how our ideas fit into the framework of the field. We begin by

offering a necessarily truncated summary of the historical context of John Dewey and his brand of pragmatism. We explore how Dewey's pragmatic ideas, what he called an "instrumental" approach to meaning (1903, p. 15), constitute responses to previous pragmatists. Next, we examine how the notion of reflection is typically construed in the service-learning literature. We will not attempt to be exhaustive in this review, but representative, summarizing early and formative considerations of reflection as well as more recent treatments of it. Finally, we explore the implications of Dewey's philosophy as it relates to learning and reflection upon thought.

Dewey and the Historical Context of Pragmatism

Pragmatism is arguably America's distinctive contribution to philosophy (Ayer, 1968; Moore, 1961; Thayer, 1968). It developed in the mid- to late-nineteenth century and continued to exercise an influence well into the late twentieth century through the quite different applications of it by W.V. Quine (1992), self-described as an epistemological naturalist, and Richard Rorty (1991), who is often thought of as a kind of postmodern pragmatist. Pragmatism, then, like other philosophical labels, is a contested notion and more easily defined negatively or ostensibly than taxonomically.

Louis Menand (2001) identifies the origins of pragmatism in an attitude of skepticism toward absolutist ideologies that arose out of the carnage of the Civil War. Pragmatism is also, however, a response to what philosophers term spectator theories of truth and meaning: the notion that in learning we are passive receptors of sensory stimuli that, as Locke had it, inscribe themselves on the individual. Pragmatism, by contrast, asserts that the individual is preeminently active in the construction of his or her world, and that the meaning we derive in our lives is the outcome of a complex relationship between received ideas and present experience.

The upshot, agreed upon by every pragmatist thinker from Charles Sanders Peirce to Richard Rorty, is that knowledge is radically contingent as well as incremental in operation. We know what we know in highly particular ways, which might be extended as sets of general laws, but which are themselves always provisional, subject to revision and even erasure. Moreover, what we believe we know about the world is achieved only in a series of fits and starts, where ideas are considered, evaluated, exposed to public review and revision, and applied. Understanding both these aspects of pragmatism is fundamental to the effective practice of reflection. For reflection to be meaningful, it must explicitly identify the troubling nature of the specific situation that impels it. It must also be recursive as well as reflexive—systematically looping back onto original considerations of the situation that inspired the moment of reflection, and shaping those ideas in response to possible solutions.

Although Peirce is recognized as the founder of American pragmatism, the term itself was not employed in writing until 1898, when William James, in a speech delivered at Berkeley entitled "Philosophical Conceptions and Practical Results," claimed that he first heard Peirce enunciate the principles of "practicalism—or pragmatism, as he called it" at Cambridge in the 1870s (James, 1898, p. 290). Generally, the foundational text of American pragmatic thought is considered to be an 1878 essay by Peirce, "How to Make Our Ideas Clear." There, Peirce argues that "the whole function of thought is to produce habits of action" (Peirce, 1878, p. 292). To say "what a thing means" is tantamount to saying "what habits it involves" (p. 292).

For Peirce, knowledge amounts to a symbolic discourse—a semiotics of communication—that functions smoothly until we encounter a situation that cannot be accommodated within our current mental framework. Thought occurs only when we are irritated by doubt and ends only when we achieve a newly transient stasis in which we are satisfied with our world (p. 289). There are two points here worth reiterating that have crucial implications for the practice of service-learning. First, doubt about an experience is the motive agent of thought about that experience. Without a problem to be solved, thought does not ensue. Second, our mundane experience is habitual, arising out of previous thought. Like water seeking its own level, we pursue the satisfaction of inertia, a state that is interrupted only when doubt about the efficacy of present ways of behaving arise.

Peirce calls this untroubled state of affairs belief, but belief to Peirce is no unsatisfactory replacement for certainty. It is all we are vouchsafed in life. Belief is nothing more, but also nothing less, than the smooth functioning of habitual action untroubled by thought. When we are forced to confront doubt, that is, when we are compelled to think, the claims we make in order to reach a resolution of the unsatisfactory situation are always subject to some empirical verification, a standard to which William James will not hew closely, but Dewey will. "Our idea of anything," Peirce says, "*is* our idea of its sensible effects" (1878, p. 293, italics in original). For example, if we assert that a diamond is hard, we merely make the claim that we can put a diamond to the test and show that it is resistant to scratching by other substances. There is, therefore, "absolutely no difference between a hard thing and a soft thing so long as they

are not brought to the test" (p. 294). The effect of this emphasis on verification is twofold. First, it means that statements that cannot be practically tested, replicated by impartial participants, are only imaginary. Second, it suggests that our thought has implications for what we will or should actively do. Pragmatic truth, in this sense, is performative, not simply intellectual. Because "belief is a rule for action, the application of which involves further doubt and further thought, at the same time that it is a stopping-place, it is also a new starting-place for thought" (p. 291). For the conduct of reflection in service-learning, this means that assertions that are developed to resolve ambiguous or uncertain situations require public evaluation or implementation, as well as a concomitant deliberation of what additional doubts our newly practical claims might instigate.

James would popularize and develop many aspects of pragmatism that were only suggested in Peirce. While it is perhaps difficult to do James's massive corpus justice in a few brief paragraphs, there is little doubt that Peirce disputed James's own idea of pragmatism. In fact, so dismayed was Peirce by James's adaptation of his original, that he begged in 1905 "to announce the birth of the word 'pragmaticism,' which is ugly enough to be safe from kidnappers" (pp. 165-66).

Described by Peirce as a difference in "point of view" (p. 165), James in effect psychologized pragmatism. He put a primacy on the individual and the felt quality of subjective experience that had the effect of largely—though not exclusively—interiorizing the production of meaning. In place of a Peircean preference for verification, James substitutes the experiential consequences of a claim upon any single individual or group of individuals. By so doing, James creates a fairly different version of pragmatism than that propounded by Peirce, but arguably the Jamesian formulation has been more robust, at least in service-learning. Ultimately, to James, pragmatism is more a way of life than a principle of clear communication. As he puts it in *Pragmatism: A New Name for Some Old Ways of Thinking* (1908), the purpose of any philosophy, and the promise of pragmatism, is "to find out what definite difference it will make to you and me at definite instants of our life" (p. 50). Another way of understanding the difference between Peirce and James is to recognize that Peirce's commitment to verification leads to a common discourse upon which all involved in a dubious situation can agree, while James's concentration on subjective experience leads to radically pluralistic notions of truth.

This outlook explains how James can typologize religious belief without putting it to any experiment other than personal efficacy, and why in *Principles of Psychology* he opines that we construct theories of experience not only because they function in practice, but also because they are interesting on their own account. Theories appeal not only to sense, but to our "aesthetic, emotional, and active needs" (1950, vol. 2, p. 312). In this way, the truth of a sentence is governed not by a sense datum, as Locke supposed, nor by a rational axiom, as Descartes believed, but by the internal logic of the speaker's own experiential grammar: a statement is true in its felt entirety, not just in its sensible parts (1950, vol. 1, pp. 263, 275).

The disagreement with Peirce is worth highlighting: in James, truth is a simple matter of experiential outcomes; in Peirce it is discursive shorthand for the sensible effects of a claim that resolves doubt. For James, famously, an idea is true to the exact extent that it serves to get us into satisfactory relation with other parts of our experience. An "idea upon which we can ride" (1908, p. 58), for however brief a time, is a not only a good but a true idea for that time. So long as an idea stitches together the fabric of our existence and works successfully to simplify mental and emotional labor, then it is a satisfactory "instrument" of truth (p. 58).

James identifies this concept of instrumentality with Dewey and his early colleague at Chicago, F. C. S. Schiller (1908), but the Jamesian instrument operates, for lack of a better word, haphazardly. In Dewey, instrumentalism is a predictive and ultimately scientific manner of approaching dubious matters of experience. In James, instrumentalism is shorthand for that which is individually effective. From this vantage point, much of what we consider reflection in service-learning owes more to James than to Dewey. Commonly, we ask students not to make plain, and offer for criticism, the prevailing assumptions behind their beliefs and the naturalistic bases of these ideas, but rather to account for their own subjective points of view. Our tendency in developing reflection assignments is to ask students to compose narratives concerning their experiences, rather than to examine their cherished ideas, explain why those work or fail to work in a given situation, and suggest and implement new hypotheses.

It is, however, fair to say that Dewey draws from both Peircean and Jamesian wells in his own pragmatism. Throughout his writings, Dewey remains, much like Peirce, committed to naturalistic demonstrations of claims that compel assent. At the same time, his instrumentalism comprehends the experiential nature of learning and knowledge that is so crucial in James's writings. Dewey, more in the manner of James, does not gloss over the subjective aspects of uncertainty; rather, he integrates these parts of life into a larger theory of knowledge. What he calls the "existential matrix" (1938) of thought comprehends

the biological, psychological, and cultural background of experience, on which other discourses—scientific, logical, and social—are overlaid. Together all of these serve to resolve doubt and advance learning, both individually and collectively.

Reflective Thought and the Theory of Inquiry

There are two significant works that detail Dewey's theory of cognition. Only one of these has received frequent attention among practitioners of service-learning, though the second is arguably more important. *How We Think* (1910) explains the relationship of "reflective thought" to education (p. 2), which likely explains the preference shown to it by service-learning practitioners. The much later *Logic, the Theory of Inquiry* (1938), however, accounts for how inquiry—a synonym for reflective thought—is situated within networks of symbolic discourse: realms of instrumentality that include not only logic, but also art, literature, history, and politics. There are manifold continuities between the two works, but the differences between them are not immaterial. Dewey is at pains in the Preface to *Logic* to demonstrate the distinction between the later and earlier work: his aim in 1938, in contrast to 1910, is to call attention to the "principle of the continuum of inquiry" (p. iii).

More forcefully and more fully than James, Dewey recognizes that biological and psychological frameworks are intimately connected to cultural and historical ones, and that all of these are employed in logical and scientific ways to make sense of our experience. When inquiry is understood as occurring on a continuum that extends across personal experience, history, logic and mathematics, science, policy, and every other realm of our being, the consequence for service-learning is that reflective thought does not occur in reference to any single governing ideal. Concepts of justice, rightness, and other value claims, as well as claims to logical or scientific necessity, are only parts of other interpretive frameworks, each aspect of which has, at some point, served some instrumental purpose. Thus, any attempt to resolve doubt involves "a process of progressive and cumulative re-organization of antecedent conditions" (1938, p. 246), of identifying where and how one shift in thinking leads to other adjustments. A student in a nonprofit management service-learning class who is troubled by poorly trained volunteers working in community organizations is concerned with manifold matters that have to do with, among other things, how organizations function, how societies manage need, how individuals invest themselves in non-professional work, and numerous other items. Part of reflective thought entails identifying where the thinker enters into the doubtful situation, and what the effects of that precise entry point entail.

The whole purpose of inquiry, what service-learning practitioners call reflection, is to determine exactly *how* and *where* our guiding schema shift as a result of experiences that pose problems of knowledge, and what changes are required to reach a newly settled state of affairs. This means more specifically identifying what it is about a problem that we find problematic and what actions the specific situation demands that we take. The aim is not simply to arrange new facts of experience as a concatenation of reports, as the student who is part of the class in non-profit management, might, for instance, say that she learned as a result of her service work how difficult it is to solicit volunteers, how hard it is to train them, and the problems that arise when volunteers participate in non-profit work for various motives. Rather, the aim is to consider how facts are "arranged…with reference to the facts on which they depend for proof" (1910, p. 39), and the pragmatic consequences of a new arrangement. In the example above, if reflection is to be purposeful, the student would need to examine more precisely how her observations relate one to another. This might be done by asking the student to consider how specific organizations function as models of larger social mores or values and to explore some of the institutional consequences of these prevailing norms. Alternatively, the student might be encouraged to contrast how people invest themselves in professional and non-professional roles. In either case, asking students to make explicit the connections between their individual experiences in a service-learning setting and the larger superstructure of their understanding of the world will aid them in clarifying the problematic situation. Absent a studied consideration of how one presumed fact depends upon another, there is "only a substitution of one subjective unwarranted belief for another unwarranted one" (1938, p. 246). In other words, if we do not ask a student engaged in reflection to identify the way in which a problematic situation fits within some overarching framework, propose an action to address the situation, and demonstrate the reasoning that leads to a planned action, then he or she might have created a compelling narrative but cannot be said in any pragmatic sense to have learned. The student can demonstrate a fecund imagination in his or her reflection, but without a studied analysis of how warrants of belief and the consequences of these are linked one to another, reflection is no more than "an efflorescence of feeling; the enhancement of a mood or sentiment is their aim; congruity of emotion, their binding tie" (Dewey, 1910, p. 4).

Part of examining why a situation troubles us entails proposing possible reasons for our discomfort. What permits fruitful consideration of alterna-

tive explanations is the working of inference, a crucial component of Dewey's thought. Inference, Dewey thinks, arises from a simple evolutionary need to account for the world around us. In a very real sense it is the entire purpose of a Deweyan education to improve this natural ability to seek suggestions or identify inferences among the facts of our world. Suggestion, though, does not work by roughly conjoining one suggestion to another, as, to use Dewey's example, a cloud reminds us of a face: rather, it is that there is some demonstrable evidence that links one thing to another. The act of reflection "implies that something is believed in (or disbelieved in), not on its own direct account, but through something else which stands as witness, evidence, proof, voucher, warrant; that is, as ground of belief" (1910, p. 8). Understood in this sense, the function by which we are led to consider "how far one [thing] may be regarded as warrant for belief in the other is…the central factor in all reflective…thinking" (p. 8). If this is so, then a core aim of reflection must be to ask students to show the means by which they accept one claim as signifying another: how they come to believe that one statement about the world, i.e., the warrant, leads to other related conclusions. If a student in the nonprofit management class thinks that the purpose of nonprofits is to serve as an eventual replacement for governmental programs, then he or she will reach very different conclusions about a problem than the student who believes that nonprofit organizations should supplement but not substitute for the work of governmental programs.

This process starts with properly framing a matter for reflection. As already stated, if a student does not begin convinced that a situation deserves consideration, then reflection is pro forma: "to see that a situation needs inquiry is the initial step in inquiry" (Dewey, 1938, p. 107). At the same time, it is our responsibility as instructors to help students recognize in their reflections that no problem is completely indeterminate (p. 109). Every problem begins as a "forked road situation" (1910, p. 11), or any situation in which the constituent events "do not hang together" (1938, p. 105), and reflection begins with students when we help them analyze what—precisely—it is about the situation that seems incoherent. Students are easily troubled in the conduct of service-learning, but if we don't push the process of inquiry and aid them in determining where their cognitive dissonance lies, then we short-circuit reflection before it begins. Moreover, if we don't expect our students to at least tentatively pose solutions to their own discomfort, then we fail to help them see reflection through to its only end. It is the need for a solution to some ambiguity that is "the steadying and guiding factor in the entire process of reflection"

(1910, p. 11). Without such a demand, reflection is mere idle daydreaming.

Not only must such reflection occur in a specific context, it mandates the temporary deferral of judgment. If the first suggested explanation that springs to mind is accepted, uncritical thinking is the result (Dewey, 1910, p. 13). Reflective thought means judgment delayed, a suspense that can be as painful as the disquiet that first instigates reflection. During this period of uncertainty, thought occurs in two directions. As we attempt to resolve the situation that causes doubt, we work both backward and forward, asking ourselves two questions, sometimes in tandem, but often simultaneously. There is a retrospective question: "What are the bases, or warrants, by which I hold a belief as a guide to action?" And an inferential one: "How does one signified observation entail another, unobserved conclusion?" The first question is primarily inductive: What discrete bits of evidence have led to me accept (either now or in the past) that A relates to B? For instance, in a service-learning class in literature, where students participate in an after-school program with at-risk youth, it might be that one service-learning student believes that the youths' engagement with literature will be improved by turning reading into a game; another service-learning student in the same class might hold that development of study skills is needed. While one effective answer might well be a combination of these approaches, both students in reflection would need to examine why they suggest the proposed course of action that they do and make plain the warrant by which they pose the suggestion they do. The second question is generally deductive: If C signifies D, then E follows. In the same class, one of these same students might develop her reflection by posing that if a lack of engagement with one specific subject of study, such as literature, indicates a lack of engagement with a larger class of academic subjects, such as those in the liberal arts, then the question becomes how to promote a particular type of thinking, rather than a specific content area. No instance of thought, Dewey argues, is complete without such bidirectional movement (pp. 79-80), which must continue until a coherent experience is substituted for the conflicting one (p. 83), in this case until a determination of the obstacles to learning literature is made, and a provisional experiment made to overcome those barriers.

This oscillating movement toward a new state of belief, and concomitant action, is the goal toward which reflective thought or inquiry tends. Every situation requires some consolidation of meaning such that, if this consolidating account were left out, what remained would be literal nonsense (Dewey, 1910, p. 87). Ideas bestow on brute experience a quality of meaning-making that epitomizes Dewey's instrumen-

talism. Ideas that we develop in reflection are tools in that they are not only used to explore and resolve dubious situations, through inference and testing, but also, as in Peirce, ways by which we "instigate and direct further thought" (Dewey, 1938, p. 112).

Such instruments are also community property. Any community, however, is as fallible as the individuals that comprise it. At their worst, "social conditions tend to instigate and confirm wrong habits of thinking by authority, by conscious instruction, and by the even more insidious half-conscious influences of language, imitation, sympathy, and suggestion" (Dewey, 1910, p. 25). Still, because the whole end of education in a democratic society is to instill skills of reflective thought that will then be examined in the ideological marketplace and altered when they are demonstrated to insufficiently account for any situation that the community faces together, Dewey believes that democratic societies are less prone to be seduced by idols of authority, nationalism, emotion, and suggestion than other forms of government. The process that is followed collectively, though, is also that followed individually: doubt that compels consideration of warrants, accompanied by hypotheses put into action in order to prove every link in a chain of reasoning, followed by the transient satisfaction of a workable belief.

Reflection and the Literature of Service-Learning

If there is one thing that a review of the literature on service-learning demonstrates, it is that practitioners have only imperfectly assimilated Dewey's pragmatism into their own cognitive schema. More recent attempts to take Dewey seriously have resulted in promising theories of instructional design, but generally the pragmatism that underwrites Dewey's thought is poorly considered and its implications almost entirely ignored. Any attempt to catalogue every time Dewey is cited in the literature would be futile, and in the end not very helpful. It is, however, instructive to examine some early and foundational considerations of Dewey, and then to see how the concept of reflection has been more recently applied.

Though Kolb, with his construction of the experiential learning cycle (1984), might be rightly said to have laid the Deweyan foundation for service-learning, an essay by Dwight Giles and Janet Eyler is arguably more influential for the way in which it theorized service-learning. In "The Theoretical Roots of Service-Learning in John Dewey" (1994), Giles and Eyler endeavored to establish a means by which practitioners of service-learning might respond to critics who saw little rigor in the practice. Though they allude to the fact that pedagogy and epistemology are

entwined in Dewey, much of their article instead concentrates on the way in which Dewey provides a model for project design. They point toward the role of uncertainty in the act of inquiry, but in the end do little more than summarize his phases of reflective thought. They do not analyze how suggestion, consideration, hypothesizing, reasoning, and testing relate together and to the situation that compels reflective thought, when it is these relationships that are necessary conditions to all that succeeds from an instance of thinking. Giles and Eyler intermediately conclude that experiential education is defined by the degree to which a project generates interest and curiosity in the learner, and while this is true enough as far as it goes for Dewey, it ignores the existential struggle that accompanies any learning in Dewey.

Similarly, Giles and Eyler's construction of Dewey's social philosophy reduces, it might be argued, to little more than a naïve communitarianism. Community is surely "the locus for the practice of democracy" in Dewey (Giles & Eyler, 1994, p. 81), but it is important to see how in Dewey corporate instruments arise out of manifold individual experiences. This means that there is always an ad hoc quality to Dewey's social philosophy that often sits uncomfortably with policy. If every act of cognition is instrumental and contingent, then any corporate application of such thought must be provisional and subject to ready change.

Saltmarsh (1996) echoes Giles and Eyler (1994) in his own treatment of reflection. In Saltmarsh's view, however, reflection is most meaningful when it specifically facilitates movement toward a "fundamental justice orientation," whether this movement takes the shape, as Dewey preferred, of "mediation and gradualism" (1996, p. 20), or of a more thorough-going collective political action, as some of Dewey's critics such as Cornel West (1989) have suggested should happen. This conclusion slights the fact that Deweyan reflection does not occur in reference to a priori values, even the noblest ones, but within the context of specifically troubling situations. Deweyan reflection is a measured analysis of how we interact with the world around us along with the instrumental ideas that lead us to do so. If these situations and their attendant ideas are matters of social inquiry, then, as we will see below, the situation demands further analysis on both local and socio-cultural terms, but neither of these is a foregone conclusion of a troubling experience. It could be that the student participating in a service-learning project with a local youth center is facing situations that are more distinctly logical, historical, or even physical than social in fact. These determinations must be made, as Dewey recognized, in conversation with others involved in the situation. In this regard,

Dewey's emphasis on voluntary association (1916) among all participants in troubling social situations lends itself more to participatory community engagement than does an insistence on a metaphysical commitment to equality and justice.

Saltmarsh charts a path that later practitioners will follow, as a result of which Dewey is considered primarily as a moral philosopher. Hatcher (1997) is perhaps the best example of these: she captures the essential optimism of Dewey's moral thought, but her analysis similarly slights the connection of the process of inquiry to the development of a moral society. It is true, for instance, that in Dewey's thought the process of education promotes "humane conditions" (1997, p. 24), but this is not a moral principle of education in Dewey. Rather, these conditions are simply the result of "cooperative human pursuits" (Dewey, 1916, p. 115) that arise first and foremost from critical inquiry, an inquiry that originates in a perplexed experience and whose crux is reflection. This relation is evident in the preface to *Democracy and Education* (1916), where Dewey states that this text "connects the growth of democracy with the development of the experimental method in the sciences" (p. v). Democracy thrives, in Dewey, only when an exact method of questioning observation is applied, and "good habits of thinking" are brought to bear on specific problems (p. 179, 184). If the reflection that we ask students to do does not promote effective pragmatic inquiry, then the democratic action they promote will lack the robustness that follows from instrumental conclusions that have been subjected to rigorous interrogation and discussion.

As with Giles and Eyler (1994) and Ash and Clayton (2009), Hatcher promisingly recognizes the need for educators to construct a "state of doubt and perplexity" (1997, p. 25), but she does not develop this thought. The ambiguity that confronts us in an uncertain experience demands that we pitilessly analyze our previous conceptions and assess both the warrants that underwrite old habits as well as pragmatically test the hypotheticals that might allow the production of new theory.

Rogers (2001) also remarks that the ubiquity of the language of reflection in service-learning might lead a casual observer to think that the concept is well understood, but it is not. Rogers' essay, however, is a meta-analysis of the common elements in the various ways in which reflection is constructed. He usefully recognizes that all theories of reflection suggest that learning begins with a state of discomfiture (p. 50), but only proffers the caution that educators should be aware of how students, Bartleby-like, would 'prefer not' to engage in reflection. Rogers outlines several practical ways that educators can promote reflective practice, but these models could all benefit from a design that purposefully links the reflective moment to the opportunity for learning.

Ash and Clayton (2009) intend to provide this design framework, and the model of reflection they pose is, if subsequent citations are any indication, surely one of the most successful approaches to reflection taken in the decades-long history of service-learning. Ash and Clayton aim at the development of a process that will encourage metacognitive development in students and so "improve the quality of thought and of action and the relationship between them" (p. 27). They argue for an integrated approach to assessment and reflection that, first, generates learning through carefully designed prompts, deepens learning through formative assessment, and documents learning in summative assessment (p. 39). Their DEAL model (p. 41), in which students *describe* their learning experiences, *examine* those experiences in relation to learning objectives, and *articulate learning*, including goals for future action, is adaptable and promotes verification of a tentative conclusion that can then be evaluated against other experiences. The result is a process-oriented model of reflection that can be employed when students reflect upon civic learning, academic content, or personal growth. Ash and Clayton's model also has the virtue of leading from a present experience to planned future action, a crucial step in Dewey's phases of thought (Dewey, 1910). At the same time, Ash and Clayton's emphasis on the description of an experience can allow the instructor to abdicate her responsibility in pragmatic learning to pose problems that compel students to face discomfort and encounter doubt. Similarly, their emphasis on articulated learning can easily lead to vapid recitation of what the student believes an instructor wants to hear about their experience, rather than formulation of a propositional claim that can then be publically considered.

Summarily, while theoreticians of service-learning have explicitly valued Dewey's concept of reflection, there has been very little emphasis or evident understanding on how reflection fits into his larger philosophical project. If pragmatism is a theory of meaning-making, as it certainly is in Peirce, James, and Dewey, then reflection in service-learning must advance the ways in which we understand our world, and not just report our sympathy with others or satisfy the set expectations of instructors. If reflection is to be an aspect of pragmatic thought, then it must begin in discomfort, continue in an analysis of why we believe what we do, occur in both inductive and deductive directions, and, posit claims that are subject to verification and examination. Without these components, reflection in service-learning lacks the direction and formative experiential aim that are so essential in pragmatism.

Implications for Reflection

One of the key findings of our literature review is that practitioners often do not detail their own reflection assignments. Instead, writing about reflection occurs as a discussion of models for the conduct of reflection, or the types of reflection tools utilized, such as journaling, class discussion, and narrative essays. There is lamentably little treatment of how these tools relate to the conduct of pragmatic thought.

It is, first of all, necessary to recall that reflection begins in disturbance. Many of us who practice service-learning may sympathetically resist causing our students discomfort. It is, however, crucial for us to remember that ultimately the student's existential response to his or her experience matters only when their discomfort impedes learning. On their own, perplexity, uncertainty, suspense, and even a certain emotional pain are prods to thought, and it is our role as educators not to be caretakers, but provocateurs, not therapists, but critical facilitators of learning.

If we are to take Dewey's pragmatism seriously, then reflection begins not with a student merely relating a description of the disquiet that follows upon an experience. The challenge for educators is to begin by posing a problematic situation, encountered in experience. This is surely no easy task, which likely accounts for the fact that although this necessity is sometimes recognized these cursory observations are not developed in the literature of service-learning. Service-learning practitioners might usefully draw here from the pedagogical toolkit developed in problem-based learning (Whitfield, 1999). Though problem-based learning is often used in such a way as to suggest that there is only one "right" answer to a doubtful situation—a conclusion that most pragmatists would dispute—it almost always is better when instructors pose specific problems for students rather than leaving them to wallow in a morass of undifferentiated anxiety as a result of their service-learning coursework. For instance, if students in an environmental science class are studying the effects of fertilizers on watersheds, they will better be able to analyze the problem in full if they are presented with the conflict that farmers face between maximizing crop yield and the preservation of ecosystems. Knowing that they are entering into a longstanding problem, and its rough contours, will better prepare students for the discussions that they will have with community members and among themselves as they explore ramifications and possible solutions.

Equally important in reflection is to ask a student, when they are confronted with a perplexing situation, to explain what they find relevant in it, and what not. This can pose difficulty for instructors because what students identify as relevant may not always be what instructors deem significant. Often students will default to communicating their state of discomfort. However, identifying what is pragmatically significant, that is, what is consequential in a problematic situation, is a key part of Deweyan pragmatism (1910). This is where different forms of inquiry can be key to helping a student delve into the significant issues at hand. An instructor might ask why certain parts of the whole are claimed as important and why others are ignored. Such queries aim at teaching students to perceive the aspects of a situation that have a practical bearing on the other parts. For instance, if students in an art class are asked to create works of art for a religious group of which they have no experience, students might easily rely upon stereotypes or vague, impressionistic notions of the community organization. In this case, it is the duty of the instructor to help students "discriminate what is observed from what is inferred" (1910, p. 87). The purpose of this stage of reflective thought is to "eliminate or exclude *those* inferences as to which experience has shown that there is the greatest liability to error" (p. 87; emphasis in original). Thus, the purpose in this situation is to help students examine what inferences can be drawn about an aesthetic from a given religious belief. An instructor might begin by asking students to brainstorm what they think they know about the religion they are working with. Once this list is created, an instructor can then ask the students to describe where they learned these presumed facts and open a discussion about whether these are indeed verifiable claims about the religious group, or if they are inferences drawn from previously existing ideas. This work will allow the students to see what they do and do not understand about the religious group with whom they will be working, and guide them in further research in order to work effectively with their community partner.

Whether following upon such initial reflections or coincident with them, students also need to explore the reasoning behind a proposed course of action or entailed in a situation in which they are placed. This is where the dual movement of reflective thought comes into play: the reflective student should examine how accrued evidences lead to intermediate conclusions, and how those are logically linked together. What leads to the holding of a particular belief? Are these my unique experiences, or are they corroborated by others', and, if so, to what extent? How do I know? What categorical conclusions can I draw if these beliefs are deemed reliable? In the example above, a student might conclude that, due to the emphasis on Talmudic interpretations of Torah, representational art would be ignored in Judaism. While this is true in certain branches of Judaism, this is not a uniformly held belief. Thus, the instructor has the opportunity to

encourage her student to further reflect upon and examine the tenets of a specific Jewish group.

The outcome is that students will make and explore claims that can then be subject to verification. Here is where reflection becomes a corporate or communal exercise. Within a class, or in conversation with a community partner, students can test their propositions against one another and against the ideologies of the group with whom they are working. If the students in an art class propose that an installation of a stained glass window depicting the binding of Isaac will encourage considerations of divine justice, they can verify this proposition by polling the local religious community and by corresponding with other Jewish community leaders.

In essence, the students have entered upon what Dewey calls social inquiry (1938). The conduct of social inquiry often leads to the greatest frustration for students in service-learning classes because of the apparent intractability and unpredictably of social problems. This quality of complexity does not, however, absolve us of the responsibility of conducting reflection in a measured and meaningful—in both senses of that word, meaning-making and testable—way. Embracing that quality of contingency means conducting inquiry at its most sophisticated, but for students to operate at that level, they must begin—and end—with reflection that arises from specific problematic situations and that is conducted in full view of a skeptical world. The private and personal reactions of students to their experiences, however fully described, will not do. It is not just enough to ask students how they feel in a given situation. Reflection on social problems requires that students examine—and work through—the stages of reflective thought at both local and systemic levels.

Students in a public administration service-learning class might be asked to examine the problem of homelessness in a particular area. Students would need to understand in this case both the local history of the problem and the provisional solutions, as well as the regional and national debates that surround this issue. To fully examine this issue, students would need to explore economic, social, political, and historical questions. Are shelters a simple outgrowth of the invisible hand of capitalism or proof of fractures in an economic superstructure? This exact question, it should be noted, is raised by Dewey in his chapter on "Social Inquiry" in *Logic* (1938, pp. 503-04). These are not abstract questions for Dewey or for our students: rather, certain types of inquiry expressly aim at "the reconstitution of the very existential material which they are ultimately about" (p. 492). The example he provides is historical judgment, which aims to alter our own comprehension of a dubious historical situation. Students who think

about the history of economic deprivation only in political terms will forever alter their understanding of this subject when they examine the cultural roots of this issue.

Reconstituting the existential matrix of inquiry means changing how we think about situations in very fundamental ways. Students examining problems of social inquiry cannot afford to think of these problems in a simple or simplistic manner. The judgment we bring to bear must be intellectual, not strictly or even primarily moral. This does not mean that moral evaluation is excluded, but that moral judgments emerge from hypotheses about the situation and their demonstrable verification. In fact, Dewey concludes that social ills commonly "spring from the fact that the values employed are not determined in and by the process of inquiry: for it is assumed that certain ends have an inherent value so unquestionable that they regulate and validate the means employed, instead of ends being determined on the basis of existing conditions as obstacles-resources" (1938, p. 503). The public administration students examining problems of homelessness could easily conclude that the situation will be easily resolved by providing shelter for the local homeless population. Studied reflection upon social problems requires interrogating many of our easily held notions that there is a distinct end toward which any situation of social inquiry tends. The ends of a perplexing social situation are an outcome of democratic action, examination of resources and obstacles, and aims agreed upon by all involved, but they also are necessarily posed as possibilities that arise out of conceptions concerning society that are open to interrogation—absent this sort of interrogation, social possibility veers off into dogma—conservative or progressive, radical or reactionary.

Conclusion

The history of service-learning has been based in the development of models which oversimplify the processes of pragmatic reflection and only cursorily nod toward the fundamental principles Dewey proposes. As a theory of the construction of meaning, pragmatic thought recognizes that there is a constant and complex interchange between subjective feeling and objective demonstration. The contribution of Dewey to the history of pragmatism is to analyze this interchange as a series of stages in which a difficulty is defined, a solution suggested, the reasons for this solution elaborated, and the solution, most importantly, tested in action.

If such rigor seems to leech reflection of its vitality, it might be useful to recall the pragmatic purpose of reflective thought. Reflection is a means of achieving

a state of temporary satisfaction at best, and a process of honing mental acuity. Its promises are both conditional and bracing. Like life itself, the practice of reflection can be difficult, as well as rewarding, for teacher and student alike.

Note

¹ The authors acknowledge that some of the examples used in this article were inspired by situations that have arisen in courses taught by our colleagues at Appalachian State University.

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