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DEWEY'S EPISTEMOLOGY: AN ARGUMENT FOR WARRANTED ASSERTIONS, KNOWING, AND MEANINGFUL CLASSROOM PRACTICE

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In *Discipleship or Pilgrimage?: The Educator's Quest for Philosophy*, Tony Johnson criticizes philosophers of education for being, among other things, so infatuated with professional philosophy that they lose sight of the connections between philosophy and practical life.[1] The history Johnson outlines indicates that philosophy of education was officially "born" at the hotel Traymore in Atlantic City, New Jersey on February 24, 1935 (the founding of The John Dewey Society) or in 1941 with the founding of the Philosophy of Education Society (North American).[2] Regardless, Johnson's point is that in an effort to gain respectability as a learned society or guild, philosophers of education gave up social relevancy for academic respectability. In an effort to navigate the treacherous path between and among professionalism and social relevancy, this paper takes up an area of professional philosophy—epistemology—with the intention of reclaiming the integrative role John Dewey held for philosophy and classroom practice. That is, I wish to revive a particular epistemological view in order to bridge the professional field of epistemology with classroom practice.

As an area within professional philosophy, epistemology went through a variety of transformations in the twentieth century. From traditional accounts of knowledge favored by analytic philosophers to the relativists' outright rejection of epistemology as a valuable area of inquiry, epistemology was tossed around and sometimes tossed out of

[1] Tony W. Johnson, *Discipleship or Pilgrimage?: The Educator's Quest for Philosophy* (Albany: SUNY Press, 1995).
[2] Ibid., 1.

many investigations. Still, but not unproblematically, epistemology as a term continued to be used in discourse concerning pure knowledge, practical knowledge, social constructed knowledge, and the like. Aside from those professional philosophers who took up the area of epistemology as a primary focus of study,[3] epistemology seemed to both fall out of favor as a major area of focus for those interested in education and schooling and fall into favor as a buzzword to add an aura of respectability to various research articles and agendas.

The term "epistemology" has been widely sprinkled amid myriad articles, but as a primary focus of work in the area of education, the field is rarely evidenced. As regards Dewey and epistemology, there are limited examples from within the pages of this journal. Jeanne Connell's work comparing Dewey's epistemology to Rosenblatt's reader response theory is one instance and she provides insight regarding the concept transaction.[4] Joe R. Burnett explores Dewey's later thinking and connects Dewey's theory of inquiry to a theory of aesthetic and religious experience.[5] Phillip Eddy compares Dewey and Kolberg and identifies the role of formal structures in thought connected to epistemology.[6] Differently, Barry Duff argues that by investigating "event" in Dewey's later thinking, we can better understand what he claims is a wide misunderstanding of Dewey's notion of "experience."[7] Duff notes that "because Dewey rejects 'the ubiquity of all comprehensive cognitive experience' and does not identify the

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[3] See, for example, authors in compendiums like Linda Alcoff, ed., *Epistemology: The Big Questions* (Oxford: Blackwell, 1998); and Jonathan Dancy and Ernest Sosa, eds., *A Companion to Epistemology* (Oxford: Blackwell, 1993).
[4] Jeanne Connell, "Assessing the Influence of Dewey's Epistemology on Rosenblatt's Reader Response Theory," *Educational Theory* 46, 6 (Fall 1996): 395-413.
[5] Joe R. Burnett, "Dewey's Educational Thought in His Mature Philosophy," *Educational Theory* 38, 2 (Spring 1988): 203-211.
[6] Philip Eddy, "Kohlberg and Dewey," *Educational Theory* 38, 4 (Fall 1988): 405-413.
[7] Barry E. Duff, "'Event' in Dewey's Philosophy," *Educational Theory* 40, 4 (Fall 1990): 463-470.

real within the cognitive, the concept of knowledge does not have the importance in his philosophy that it has in others."[8] Still differently, and not explicitly epistemological, Craig Cunningham investigates Dewey's later conception of the self and explores features of unique potential relating, ultimately, to character education in schools.[9]

Perhaps closer to the point are Greg Seals' efforts at explaining Dewey's science of teaching and Barbara Stengel's work relating Dewey's concept of "method of intelligence" to schooling.[10] Seals proposes a frame of reference from which teaching and learning are seen "as a field of scientific endeavor in its own right."[11] Stengel, in comparing and questioning various texts' use of Dewey and what implications for teacher practice might obtain from understanding a "method intelligence," makes important suggestions for teacher knowledge and practice. Still, like those noted earlier, taking up the specific topic of Deweyan epistemology was not the primary focus of either essay. This is not, of course, a criticism of any of the theorists or their work. The point is simply to indicate that specific inquiry into Dewey's epistemology, per se, is rare in the pages of this journal. For philosophy of education, more broadly, I wonder whether the occasional forays into epistemology failed to become a primary focus because epistemology, generally, was (and is?) seen as suffering from a hypertrophied and myopic focus on traditional accounts of "pure" knowledge.

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[8] Ibid., 465n. Duff cites Dewey, *Experience and Nature* in *John Dewey, The Later Works, 1925-1953*. Volume 1: 1925, ed., Jo Ann Boydston (Carbondale: Southern Illinois University Press, 1981), 30.
[9] Craig Cunningham, "Unique Potential: A Metaphor for John Dewey's Later Conception of the Self," *Educational Theory* 44, 2 (Spring 1994): 211-224.
[10] Greg Seals, "Conceptualizing Teaching as Science: John Dewey in Dialogue with the National Research Council," *Educational* Theory 54, 1 (2004): 1-26; and Barbara S. Stengel, "Making Use of the Method of Intelligence," *Educational Theory* 51, 1 (Winter 2001): 109-125.
[11] Seals, 1.

Historical Considerations for Connecting and Clarifying Deweyan Epistemology

The relatively recent history of epistemology included and was dominated by Russell, Frege, Moore, and others committed to an analytic view of professional philosophy. Language, correspondence theories, independent reality, and foundationalism were major foci at the beginning of the twentieth century. James, Dewey, and other pragmatists, however, launched an attack on the analytic approach in the early 1900s and Dewey and Russell engaged in well-known debates about the nature of knowledge and the various requirements for one to be said to know anything at all.[12] Just prior to Russell, however, were other critics like new realists and critical realists. New realists William Montague and Ralph Barton Perry, who were students of the idealist Josiah Royce, mounted an effort to promote a non-Roycean pluralism that nonetheless held out hope for a doctrine of immediate perception and the independence of objects in epistemological inquiry. J.B. Pratt and other critical realists rejected the new realists' doctrine of immediate perception because they did not believe that perception was unmediated. They held, instead, that the mind *is* a mediating factory between physical objects, perception, and meaning.[13]

Dewey faced criticism from virtually all of these foregoing philosophers but continually rejected attacks on his naturalistic empiricism. He set out to clarify what he meant by truth, reality, and knowledge and was often writing in defense of his views. While he accepted some of the new realist claims (e.g., reality is not dependent on human consciousness), Dewey did not accept central points like the absolute independence of

[12] Tom Burke, *Dewey's New Logic: A Reply to Russell* (Chicago: The University of Chicago Press, 1994).
[13] See, for example, Bruce Kuklick, *Rise of American Philosophy: Cambridge, Massachusetts, 1860-1930* (New Haven: Yale University Press, 1977).

things from thoughts.[14] Instead, Dewey offered a theory that opposed both idealism and the variants of realism: he argued that knowledge and experience are not coextensive. Dewey also rejected defining perception (rank or base empiricism) as knowledge because of the problem of immediacy. Knowledge cannot be had in an instant. It takes time and is an achievement. Knowledge eventually comes; "it is the result of situated processes that were initiated to respond to specific problems."[15] Perception is not immediate either. Perceiving takes time and involves habits. Perceiving, as Dewey pointed out in his paper "The Reflect Arc Concept in Psychology," means data are screened, chosen, and refined.[16] Indeed, as Hildebrand points out, such activities as perceiving and knowing "always occur within the context of larger 'situations,' a nexus of ongoing processes and purposes."[17]

Dewey therefore rejected traditional accounts of epistemology. He did so, in part, because he saw traditional epistemology as a hollow area of inquiry given the primacy of the truth condition in the traditional syllogism (*S* knows that *p iff*: *p*, *S* believes that *p*, and *S* justifies that *p*). He saw the disconnected nature of the theories philosophers were putting forward. In separating out the contexts of perception and the knowing that results, Dewey was frustrated by new realist, critical realist, and idealist efforts at developing a theory of knowledge. I wonder whether his frustration is also felt in more current times. Contemporary neo-pragmatists like Rorty and Putnam, like Dewey, reject notions of correspondence and see correspondence theories of truth as being central to questions of epistemology that the enterprise of epistemology itself is called into

[14] See David L. Hildebrand, *Beyond Realism and Anti-Realism: John Dewey and the Neopragmatists* (Nashville: Vanderbilt University Press, 2003).
[15] Ibid., 24.
[16] John Dewey, "The Reflect Arc Concept in Psychoogy," in *The Early Works of John Dewey, 1882-1898*, ed., Jo Ann Boydson (Carbondale: Southern Illinois University Press, 1972), volume 5.
[17] Hildebrand, 24-25.

question.[18] One arguable result is that those interested in a pragmatic theory of knowledge find themselves continually mounting their defense in terms of traditional epistemology, contrasting though the terms may be. Another result seems to me to be a dearth of inquiry that bridges the work of professional philosophers studying epistemology with philosophers of education studying epistemology and linking it to classroom practice.

One consequence, then, appears to be that in the process of rejecting various major components of epistemology, the enterprise of inquiring into knowledge and knowing has largely been discredited or disregarded—at least to the degree that those in education are rarely if ever part of the larger conversation concerning epistemology (and those within epistemology are rarely if ever part of the larger conversation concerning education).[19] I wish to assert that epistemology can and should represent an area of inquiry that is relevant and useful for philosophy of education, especially as it develops classroom practices that foster inquiry. I specifically wish to revive Dewey's conception of warranted assertibility in an effort to show the value of fallibilist epistemology in practical and social teaching and learning contexts. By highlighting the distinctions

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[18] See, for example, Richard Rorty, *Consequences of Pragmatism: Essays, 1972-1980* (Minneapolis: University of Minnesota Press, 1982); Herman J. Saatkamp, ed., *Rorty and Pragmatism: The Philosopher Responds to His Critics* (Nashville: Vanderbilt University Press, 1995); Hilary Putnam, *Pragmatism: An Open Question* (Cambridge: Blackwell, 1995); and Hilary Putnam, *The Threefold Cord: Mind, Body, and World* (New York: Columbia University Press, 1999).

[19] There are exceptions, of course. Some philosophers of education engaging in epistemology proper include Israel Scheffler's classic work *Conditions of Knowledge: An Introduction to Epistemology and Education* (Chicago: Scott, Foresman, and Company, 1965). There are also examples of essays like Christine McCarthy, "When You Know It, and I Know It, What Is It We Know? Pragmatic Realism and the Epistemological Absolute," *Philosophy of Education*, ed. Frank Margonis (Urbana: Philosophy of Education Society, 1996); Barbara Thayer-Bacon, "Using the 'R' Word Again: Pragmatism as Qualified Relativism," *Philosophical Studies in Education* 33 (2003): 93-103; and Richard S. Prawat, "Dewey, Peirce, and the Learning Paradox," *American Educational Research Journal* 36, no. 1 (Spring 1999): 47-76. For a compendium of philosophers writing on education, see Amélie Oksenberg Rorty, *Philosophers on Education: New Historical Perspectives* (New York: Routledge, 1998). See, especially, Alvin I. Goldman, "Education and Social Epistemology," in *Philosophers of Education*, op. cit., 439-450.

between traditional epistemology (via Russell, Frege, etc.) and Dewey's conception of *knowing*, epistemology will be shown to have value insofar as it highlights a more useful, instrumentalist theory of knowing that is applicable to classroom practice.

Rejecting Traditional Epistemology: Developing a Theory of Inquiry

In *The Quest for Certainty*, Dewey argues for the overthrow of traditional epistemology.[20] He specifically rejects the "Spectator Theory of Knowledge," (STK) and argues, as some have taken it, against epistemology writ large.[21] I disagree with the conclusion that Dewey throws out epistemology as a whole. In setting STK aside, Dewey sets much of *traditional* epistemology aside, but he clearly does not argue against knowing or the known. He argues against the reliance on ontological and metaphysical ideals entailed by traditional accounts of "pure knowledge." In place of such a traditional account, Dewey crafts a new version of epistemology—one that has as a key element the notion of warranted assertibility.[22]

Warrented assertions replace justification in the traditional syllogism while at the same time imploding the syllogism itself. Where justification served a correspondence theory of truth in the traditional account of knowledge, warranted assertions merge truth and inquiry together in such a way that correspondence to an external world is no longer the point. The point, instead, is the interdependency of truths and the processes of

[20] John Dewey, *The Quest for Certainty: A Study of the Relation of Knowledge and Action.* in Jo Ann Boydson, ed., *John Dewey: The Later Works, 1925-1953*, Volume 4, 1929 (Carbondale: Southern Illinois University, 1988), 1-250. See, also, John Dewey and Arthur F. Bentley, *Knowing and the Known* (New York: Beacon Press, 1949).

[21] See, for example, Christopher Kulp, *The End of Epistemology: Dewey and His Current Allies on the Spectator Theory of Knowledge* (Westport, CT: Greenwood Press, 1992).

[22] See John Dewey, *Logic: The Theory of Inquiry* (New York: Henry Hold and Company, 1938).

inquiry: the temporal satisfaction of solved problems in a world that is not set apart from the knower's use(s) of the world or place(s) in that world. In this way, idealists and realists are misguided when they describe epistemology as way of determining knowledge.[23] "Knowledge" is not the focal point of epistemology for Dewey: "knowing" is. "Knowledge" represents the end of inquiry but, according to Dewey, it is also often supposed to have a meaning of its own—disconnected from inquiry. The result is that inquiry is subordinated to the fixed end called "knowledge."[24] By "knowing" Dewey means inquiry in a world that is not static. He means inquiry into things "lived" by people. He means experimenting with solving problems such that the action entailed in the solving of problems is inquiry itself and warranted in the assertions made about the solved problem when it is solved (where "solved" is understood as temporal and a portal to further inquiry). Accordingly, in the "living" of life, problems will be faced and solved—often in serendipitous ways—such that achieving "justified true belief" (as traditional epistemology expects) is not useful. As Dewey put it:

> [Warranted assertion] is preferred to the terms *belief* and *knowledge* [because] it is free from the ambiguity of these latter terms, and it involves reference to inquiry as that which warrants assertion. When knowledge is taken as a general abstract term related to inquiry in the abstract, it means "warranted assertibility." The use of a term that designates potentiality rather than an actuality involves recognition that all special conclusions of special inquiries are parts of enterprise that is continually renewed, or is a going concern.[25]

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[23] Hildebrand, 136*ff*.
[24] Dewey, *Logic*, 8.
[25] Ibid., 9. Emphasis in original.

At least two things follow from warranted assertions: 1) knowing is not sufficiently described as an abstract, semantic enterprise—rather it is an enterprise rooted in problems faced by people in context (Dewey is arguing for knowers as people who can defend their claims to knowledge [a form of epistemic responsibility]); and 2) that one *can* know, but fallibilistically so rather than foundationally so. Knowledge claims can exist for fallibilists like Dewey, in other words, but without commitment to universality and without commitment to linguistic correspondence to extra-linguistic "fact." This is so because, according to Dewey, there is no use or meaning that is derived *sans* living. Language is a tool to make sense of our experiences, but it derives its meaning and utility from our lives.

Our lives should be guided, on Dewey's view, by inquiry: "the controlled or directed transformation of an indeterminate situation into one that is so determinate in its constituent distinctions and relations as to convert the elements of the original situation into a unified whole."[26] Knowing comes about when inquiry leads to an understanding that goes beyond mere apprehension. One might "understand," i.e., "apprehend" the ideas of moose, chemical elements, or musical notes, but knowing requires having a sense of grounds (the "warrant") for asserting their existence.[27] This is a key point to which I will return later in discussing warranted assertions and classroom practice. Before then, however, consider how traditional notions like "truth" and "proposition" in the history of epistemology differ from elements within Dewey's theory of inquiry.

Logic, Truth, and the Confusion over Propositions and Judgements

[26] Ibid., 104-105.
[27] Ibid., 143.

Traditional epistemology arguably extends back at least to Plato, but the content or structural elements of syllogisms concerning knowledge found, say, in Plato's *Theaetetus*, only provide a starting point for understanding the development (or lack thereof) of traditional epistemology. I wish to stipulate that the zenith of traditional epistemology is found in the analytic philosophy of Russell, Frege, the early Wittgenstein, etc. With those philosophers, the point was to achieve correspondence between uttered claims and extra-linguistic fact. The truth condition in the traditional syllogism of epistemology, in other words, was the point. The belief and justification conditions served the truth condition. Said differently, and more broadly, epistemology served a correspondence theory of truth. This point is important because key terms used most prominently by Russell distort Dewey's epistemology. Specifically, as Burke notes, Russell misapplied the term *proposition* when considering Dewey's theory of logic and his entailing theory of knowledge.[28] Russell could not divorce propositions from a theory of truth, but Dewey's logic and epistemology relied on *judgements* and their warranted assertibility, not truth-focused propositions. As a result, Dewey rejected the metaphysics undergirding Plato, Russell, and others, even if sometimes in confusing ways.

For Russell, propositions were sentences. They were fodder for linguistic analysis. Accordingly, Dewey's notion of warranted assertibility—as Russell understood it—was an inadequate account of truth and was considered by Russell to be irrelevant to logic anyway.[29] The problem here is that warranted assertibility was not intended or

[28] Burke, op. cit.
[29] See Bertrand Russell, "Dewey's New *Logic*" in *The Philosophy of John Dewey*, ed., Paul A. Schilpp (New York: Tudor, 1939): 135-156; and Bertrand Russell, *An Inquiry into Meaning and Truth* (New York: George Allen & Unwin, 1940).

claimed by Dewey to be an account of truth where truth is understood in terms of traditional notions of correspondence. Where propositions are either confirmed or refuted, judgements are, on Dewey's view, said to be warrantably assertible or not. Where Russell elevated truth to the level of STK, Dewey saw truth and warranted assertions as connect, but not in the same way Russell did, or in the same way authors like Kulp and John Shook suggest.[30]

On Dewey's view, as Burke points out, "it is judgments, not propositions, which are warrantably assertible or not; and judgments are essentially rooted in concrete actions in the world insofar as the consequences of such actions serve to decide their warrantability."[31] This does not provide us with a theory of truth, but Dewey did not claim warranted assertibility as a theory of truth. Dewey argued, instead, that warranted assertibility (rather than truth) should be a primary consideration in a theory of inference. What is true and what is false are conclusions, not the necessary factors of inquiry. In *Knowing and the Known*, Dewey and Bentley put it this way:

> It is frequently said that no matter what form of inquiry one undertakes into life and mind one involves himself always in metaphysics and can never escape it. In contrast with this hoary adage, our position is that if one seeks with enough earnestness to identify his attitude of workmanship and the directions of his orientation, he can by-pass the metaphysics by the simple act of keeping

[30] See Christoper Kulp, *The End of Epistemology: John Dewey and His Current Allies on the Spectator Theory of Knowledge* (Westport, CT: Greenwood Press, 1992); and John Shook, *Dewey's Theory of Empirical Reality and Knowledge* (Nashville: Vanderbilt University Press, 2000).
[31] Burke, 238.

> observation and postulation hand-in-hand; *the varied "ultimates" of metaphysics become chips that lie where they fall.*[32]

As Burke notes, "The truth or falsity of a given judgment is characterized in terms of relations and correspondence among expectation and actual result of actions formulated in the course of the respective inquiry, but, strictly speaking, it is the assertion of the judgment which is true or not, not the information involved in ascertaining the judgment…."[33] To say all of this somewhat differently, the warranted assertibility of your judgment is "tangibly certifiable" through your concrete actions in the world. Educative experiences provide the opportunity for solving problems via warranted assertions. The truth of your assertion is basically a metaphysical ideal. Writes Dewey:

> Judgment may be identified as the settled outcome of inquiry. It is concerned with the concluding objects that emerge from inquiry in their status of being *conclusive*. Judgment in this sense is distinguished from *propositions*. The content of the latter is intermediate and representative and is carried by symbols; while judgment, as finally made, has *direct* existential import. The terms *affirmation* and *assertion* are employed in current speech interchangeably. But there is a difference…between the logical status of intermediate subject-matters that are taken for use in connection *with what they lead to as means*, and subject matter which has be prepared to final. I shall use *assertion* to designate the latter logical status and *affirmation* to name the former….However, the important

[32] Dewey and Bentley, 81. Emphasis added.
[33] Burke, 239.

> matter is not the words, but the logical properties characteristic of different subject-matters.[34]

Warranted assertibility, for Dewey, was part of a project to explain (1) what it means to say that a statement about how things are may or may not correspond to how things actually are, when at the same time, (2) it is not possible to step back and treat this correspondence as if it were a matter of comparing the statement against bare reality.[35] Burke puts it this way: "It is not as if we have some statement-independent handle on bare reality so that we can hold it up to compare against our statements, since it is the statements themselves and the processes that go into their making which are one's handle on bare reality."[36] What we have to do is make judgments in "real time" about consequences of actions in solving actual problems. Correspondence, then, becomes a metaphor for Dewey, allowing him to point out that while a "spectator" version of detachment is not completely wrong, neither does it describe nor explain how people actually use information from their lives to solves problems that they face. The relevance of the "spectator" is in the very detachment Dewey eschews. "Spectators" don't assert, they passively observe. "Spectators" are outside of experience—at least the kind of experience that is engaging of others.

For Dewey, the speculative enterprise of traditional epistemology suffered greatly at the hands of "correspondence" theories because, as he wrote in 1941, "wondering at how something in experience could be asserted to correspond to something by definition outside of experience [STK]…is what made me suspicious of the whole epistemological

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[34] Dewey, *Logic*, 120. Emphasis in original.
[35] Burke, 240. See, also, John Dewey, "Propositions, Warranted Assertibility, and Truth," *Journal of Philosophy* 38, 7 (1941): 169-186.
[36] Burke, 241.

industry."[37] Dewey, therefore, rejected STK and its detachments (the very thing that traditional accounts of correspondence endorse, e.g., Russell, Kulp, etc.) in order that we would have individual "knowers" "concretely and dynamically embedded in the world."[38] As a result, those "knowers" would have access to (mediated) knowledge, where knowledge is not understood in semantically detached terms. Semantic detachment is indicative of the very correspondence Dewey eschews. While it may appear that some of Dewey's views commit him to a form of idealism, the fact that Dewey concentrates so much attention on concrete situatedness means that no such entailment need obtain. He is, instead, an operationalist. He values inquiry that demonstrates a connection between expected consequences and actual consequences.

Knowing, Knowledge, and Intelligence: Epistemology Goes to School

Here it may be helpful to distinguish between a few key concepts in order to better understand the import of warranted assertibility and its relationship to classroom interaction. Knowing, knowledge, and intelligence are distinct for Dewey. Knowing is an inquiry (specific instances of applying oneself to solving problems), knowledge constitutes the stable outcomes of inquiry, and intelligence is the result of the development and accumulation of capabilities to act (i.e., inquire) in specific ways. That is, intelligent action is action constructed in the light of properly anticipated consequences. "Knowledge is the result of successful inquiry, whereas knowing consists in using one's intelligence in given inquiries. Intelligence is stabilized knowledge…which can be utilized in other inquiries, given the principle of continuity

[37] Dewey, "Propositions, Warranted Assertibility, and Truth," 183.
[38] Burke, 243.

and given the fact that judgments are not merely abstract decisions but constitute a kind of conduct (assertion)….Knowing is to intelligence roughly what asserting is to being disposed to assert."[39] Says Dewey:

> ...from the standpoint of empirical naturalism, the denotative reference of "mind" and "intelligence" is to funding of meanings and significances, a funding which is both a product of past inquiries or knowings and the means of enriching and controlling the subject-matters of subsequent experiences. The function of enrichment and control is exercised by incorporation of what was gained in past experience in attitudes and habits which, in their interaction with the environment, create the clearer, better ordered, "fuller" or richer materials of later experience—a process capable of indefinite continuance.[40]

What we have in this quite is Dewey's basic argument for classroom interaction. Organic and natural environments for learning impel knowing and the habits of intelligence. Detachment from natural environments for learning foster "spectating" and habits of routine. When one supports a quest a for "meanings and significances," one sides with inquiry via warranted assertions. That is, given Dewey's epistemology, classrooms should be places where students make knowledge claims at the very same time they are engaged in knowing (inquiry), since the means and ends are not separable for Dewey, and since the point of inquiry is not to college detached artifacts or pieces of the dead wood of the past. Active engagement *of the sort Dewey suggests*[41] means students attempt stability rather than certainty. They are not in the business of "discovering" the basic

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[39] Ibid., 256.
[40] John Dewey, "Experience, Knowledge, and Value: A Rejoinder," in *The Philosophy of John Dewey*, ed., Paul A. Schilpp (New York: Tudor, 1939), 520-521.
[41] Dewey's organic instrumentalism, not prescription or relativism.

beliefs on which traditional epistemology *qua* foundationalism relies. Rather, stability indicates functionality over universality.

Still, stability is not assured by Dewey either. In fact, much of the point of interacting "with the environment" is "creat[ing] the clearer, better ordered, 'fuller' or richer materials of later experience—a process capable of in indefinite continuance."[42]

> [I]ntelligence is more than just a store of habits and context-sensitive dispositions. Intelligence is habitual, but not all habit is intelligent. Experience guided by intelligent habit, rather than merely routine habit, is experience characterized by resourcefulness, inventiveness, ingenuity, tenacity, efficiency, and any such "pragmatic virtue" designed to anticipate not only the regularities and constancies of experience but also the inevitable uncertainties and indeterminacies."[43]

Epistemological fallibilists hold that knowledge claims can be valid, even if the veracity of the knowledge claim is not universal. Dewey, as a fallibilist, hones in on stability and the never-ending search for meaning as a way to indicate the limits of foundationalism (via correspondence theories of truth) and he replaces correspondence and foundationalism with the warrantability of assertions and fallibilism.

Ultimately, then, how valuable might warranted assertibility be for classroom interaction? What would go on in classrooms that would be different from what currently goes on in most school spheres? What might it look like? One way to address these questions is to envision new roles for teachers and students. Following the notion of warranted assertibility, both teachers and students would become fallible knowers who must defend their claims to knowledge, where knowledge represents a temporal

[42] Dewey, "Experience, Knowledge, and Value," op. cit.
[43] Burke, 256-257.

suspension point in the process of making judgments (Dewey's theory of inquiry and his theory of logic). In so doing, both teachers and students realize the limitations of universal, foundational, "comfort zones," and demonstrate the kind of continual thinking and re-thinking required of those who face change in their lives and who, as a result of said change, must continually defend their claims to knowledge. The "moose," "chemical elements," and "musical notes" examples from the beginning of this essay illustrate that identifying the ideas only represents narrative and the "comfort zones" of traditional epistemology (and traditional curriculum and schooling). Even if "correctly identified," the point of warranted assertibility is to determine meaning and connection with other ideas that are or represent real problems to solve. In what possible ways might moose and musical notes connect? What links are there to chemical elements and what do any and all of the particulars actually mean? What contexts are required for understanding and what problems are within those contexts that would provide students opportunities for inquiry (proving that moose, music, and chemistry are of interest in the first place)?

In characterizing the problem Dewey had with "intellectualists" and professional philosophers, Hildebrand notes the following: "Sidetracked from the problematic and lived situation that instigated inquiry in the first place, philosophers institutionalize their practice…into an ontology with eternal permanence."[44] Teachers are rarely different from this characterization. They, too, institutionalize their practice, even if hegemonically so. This point raises at least two issues: A) the superstructure and metanarrative of schooling; and B) the specific responsibility of teachers in a given situation.

[44] Hidebrand, 64,

For the first point, one could argue that schools are structured to support a version of traditional epistemology. If schools are not truly foundationalist, insofar as they expect students to amass "pure" knowledge via STK, then they are reliabilist insofar as they require only correct answers without justification. While much more time could be spent on distinguishing the variations of epistemology within schools, one point seems clear: it is rare that teacher provide emergent contexts for the development of inquiry and knowing in the Deweyan sense. In terms of the superstructure of schools, this only makes sense. Order, discipline, and time-on-task expectations do not support inquiry that is varied, serendipitous, and transactional. Save the unique examples within some schools, the reality in most schools is that traditional expectations have been so deeply entrenched prior to teachers and student actually entering the hallways, that the task of changing schools is often seen as impossible. Epistemologically, if a parallel could be made here, it is as though STK and the entailing correspondence theory of truth is the given and the taken for granted in schools.

For the second point from above, when prospective teachers enter their course work as education majors (or for certification), it is not without ideas and experiences that inform what they want to do and how they want to do it, it simply is with virtually no change whatsoever in the culture from which they came. They were reared as spectators (and often spectate in their college classes, too) and even when some students profess to wanting to "engage" their students in "active" learning, it still usually ends up being a souped-up version of traditional schooling—or as Dewey puts it *Experience and Education*, using "devices of art to cover up obviously brutal features."[45] Fear of losing a job, fear of being reprimanded, and fear of standing out as "different" are common

[45] John Dewey, *Experience and Education* (New York: Collier Books, 1938), 19.

excuses teachers give for not challenging an established school structure they understand to be problematic. It is in this sense that I wish to force the revolutionary point that teachers, *regardless of the superstructure*, have epistemological (and other) responsibilities to their students. At the risk of being perceived as another in a long line of people who blame teachers, I nonetheless believe that teachers are in positions of power they may not even understand. What is actually being asserted here is that teachers already have space and control over what goes on in their classrooms. Beyond the power that could be actualized from teacher shortages nationwide, add the possibility that teachers broaden their understanding of pedagogy by engaging in epistemological discourse, and change becomes imaginable. There is, of course, no guarantee that teachers who enter such epistemological discourse will value Dewey's notion of warranted assertibility over, say, the "certainty" often attached to foundationalism. Still, by actually championing the intellectual and practical possibilities of the very teachers I risked blaming a moment ago, I am urging a movement of teachers to claim school spaces for themselves and their students in ways that are grounded in Deweyan epistemology.

To envision classroom practices that specifically endorse warranted assertions would mean that students *and* teachers would no longer search for or operate under the assumption of "the truth" in Platonic, Kantian, or "No Child Left Behind" terms. Instead, students/teachers would make assertions connected to solving their problems (both immediate and connected to as-yet-unknown areas) that are gauged (i.e., judged) within the bounds of human experience. This not only represents an epistemological shift, it shifts power away from the traditional quest for certainty and places power with the

contexts of student/teacher living—one not divorced from social realities beyond school, and also not divorced from parent and social interaction. In short, traditional epistemology and an entailing power structure that supports it may be largely to blame for the general lack of inquiry found within U.S. classrooms. Students as testable objects themselves, and whose role it is to gather discreet bits of data and information (knowledge?), are repeatedly subjected to a classroom sphere where the only evidence of relation is between teacher- and curriculum-imposed artifacts and superimposed goals. As has been alluded to, even good teachers are burdened by the perversion of correspondence seen most schools. Never mind that the tests that are claimed to be "objective" and "neutral" are subjectively constructed—all the tests, the standards, the mission statements, the learning objectives. It makes little difference. Because the presentation of that reality is repeated as "the real world" or "the way it is," its unassailability is arguably the very feature privileged by STK in traditional epistemology. It seems as though the "view from nowhere" is precisely the view most educators and educational policy makers repeatedly expect. It is no wonder, then, that most public school classrooms continue to be stultifying arenas for external indoctrination.

Dewey's epistemology, however, is an offering. It is a possible "out." It represents one way students and teachers might develop relations in less contrived ways that what currently goes on in most schools. By shifting roles of teachers and students so that both groups are inquirers into problems they face, certitude goes out the window as the expectation for certitude is challenged. In place of certainty (the entailing result of STK and correspondence theories of truth) is stability and it comes into being when the

engagement between teachers and students (and students and students, parents and students, etc.) supports inquiry leading to warranted assertions.