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From Propositions to Practice: Pedagogy for Life as Process

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If a visitor from another continent were to ask, "Where would I find the best source of knowledge in your country?:" we might well be inclined to direct them to a university library. After all, in our major centers of learning the library serves as the central repository of what we view as knowledge. And as scholars or scientists, our contributions to knowledge are measured in terms of our inscriptions in the journals and books of these libraries. In effect, we have come to believe that knowledge lies somewhere within the complex configuration of propositions –descriptions, explanations, logics, principles, laws, formulas, and related forms of representation. Such a belief enters into our practices of education. Propositional knowledge centrally figures in lectures and power-points, classroom discussions, and the questions posed in student examinations. We want the emerging generations of students to know about the distance to the moon, the movement of the tides, the number of continents, the importance of Shakespeare, the ideas of Plato, the effects of Pavlovian conditioning, and so on.

To be sure, we might ask why the source of knowledge is not to be found in the activities of people in various walks of life – in doctors' offices, executive board rooms, children's nurseries, machine shops, playing fields, and the like? In part, the answer would be that many these groups are either *applying* knowledge that might otherwise be found in libraries (e.g. medicine), or are *generating* knowledge (e.g. scientific laboratories). In the case of playing fields – and here we could include theaters, orchestras, dance studios and the like – the answer is that these activities do not represent knowledge, but physical skills. When it comes to education, the chief task is to impart to students the best of what can be articulated. Students are thus positioned to apply such knowledge to their own lives, or to join the cadres of those who produce knowledge.

At least within the Western tradition, the greatest honor is accorded to those who create propositions that approach universality. We value most those propositions that are sufficiently general that they will approximate the truth regardless of time and culture. The law of gravitation, the theory of evolution, and the laws of thermodynamics are illustrative. In this sense, we tend to place greater value on propositions in physics, chemistry, biology, and mathematics, over propositions about cultural life in a mountain village or predictions of the weather in Vienna. Propositions about ethics, politics, or spiritual life scarcely stand as knowledge at all. Because such propositions are under continuous debate – both historically and culturally – they are typically viewed as matters of opinion. In effect, our educational systems in general are chiefly devoted to imparting timeless knowledge, largely carried in propositional form. Students are primarily evaluated in terms of their mastery of the propositions. And because one can be correct or incorrect regarding such matters, and comparisons are useful for multiple purposes, evaluation is often realized in numerical form and standardized examinations.

Many of the problems stemming from what I am calling propositional education

are well known and often discussed. In part, the problems are pedagogical. Propositional knowledge lends itself to the presentation of propositions, whether in terms of organized lectures, power-point demonstrations, or demands for sheer memorization. Students serve as passive receptacles or robotic repeaters. Boredom and passive resistance are common. Students are not invited into a conversation; they are simply asked to be listeners. Nor are the materials typically relevant to their lives. Metaphorically, students are required to learn the languages that other cultures employ in carrying out their lives. The result is often that students – even at universities - can see little point in learning outside the fact they will be examined.

There are also problems with the efficacy of education centered on propositional knowing. Research has long demonstrated the rapid and almost total absence of retention of knowledge over time. Nor is it clear how mastery of various bodies of knowledge is linked to subsequent professional life. It is not at all transparent how courses in calculus, Greek civilization, or the history of China, are essential for entering professions of management, medicine, marketing, clothing design, or becoming a stock broker. It's as if an array of random subjects has been designated as "knowledge," within one sector, while an equally random array of "professions" has emerged within another. The relation between the two is virtually indeterminate. Professionally relevant knowledge is typically reserved for post-graduate studies – in schools of medicine, law, dentistry, clinical psychology, management, and so on.

The twin problems of relevance and efficacy are intensified by the rapid changes taking place in cultural life. On the one hand, there is the rapid accumulation and expansion of what can be viewed as propositional knowledge. It is no simply that the number of professional contributions to knowledge has dramatically increased over the decades, but with the availability of the internet, the number of knowledge claims has increased exponentially. This latter expansion has also reduced much that we have defined as basic knowledge to a secondary status. Students today are far less interested in basic physics, chemistry, mathematics, philosophy, and the like than such topics as environmental studies, peace and conflict, film studies, gender studies, and communication technology. Further, with the development of computers and microchip technologies, there are sweeping changes in professional life. Organizations that were once local, now move into the global sphere, face to face business is replaced by on-line transactions, continuous innovation in technology demands continuous changes in such professions as medicine, architecture, and law. Simultaneously, a new entrepreneurial spirit has emerged, and with it a plethora of new professions. How effective, then, is our traditional educational system in preparing students for a world that cannot even be envisioned?

In the present offering I wish to challenge the traditional conception of knowledge as embodied in propositional representations. After exploring major shortcomings I shall introduce what I believe to be a far more promising alternative. This socially based alternative replaces the emphasis on *knowledge as given* to *knowledge in the making*. Such an orientation takes on special importance in terms of contemporary world conditions. To challenge the conception of propositional knowledge is also to raise significant questions regarding allied practices and aims of education. Thus, in the final section I will touch on a range of practices more congenial with a socially based vision of knowledge and its utility.

The Social Creation of Knowledge

For the vast share of the 20th century, the abiding concept of knowledge rested on a set of philosophic assumptions, typically identified as empiricist or positivist. There are many variations and tensions

among various philosophers and scientists regarding the foundational premises. However, somewhere toward the center of this tradition, it is said to be the primary task of the knowledge maker to carefully and dispassionately observe the world, to develop hypotheses about its functioning, and to test the hypotheses against subsequent observations. Those propositions acquiring support from repeated tests, and withstanding attempts to falsify, are considered candidates for constructing more general theory. Evidence based theory thus constitutes an entry into the domain of knowledge.[1] Theories may compete with each other for acknowledgement as knowledge, but with continuous empirical research, those theories more adequate to nature will win out. We move the progressively toward a condition in which theory is equivalent to truth. Objective truth stands outside fluctuations in opinion, cultural proclivities, religious faith, moral values, and political ideology.

There are four noteworthy aspects of this orientation. First, it is highly *individualist*. The epistemology is that of the single observer experiencing an objectively given nature.
It is a tradition that champions the individualist view of heroism – from Galileo and Darwin to Einstein and Feynman. Second it is based on a *representationalist* view of language. That is, it more or less presumes that language functions pictorially. On this account, truth is ultimately carried in terms of propositions that have been corrected and improved over time through observation. Third, the vision is inherently *conservative*. On the one hand it more or less presumes a fixed natural world. It is a world that remains sufficiently stable that continuous re-visiting will enable corrections and elaborations of the theoretical network of propositions. It is also conservative in terms of its aim to "fix the truth," essentially to provide the single best – universal and trans-historical – account of what is the case. And finally, this traditional view is value-free. Values (passions, ideologies, moralities) potentially interfere in the process of establishing empirically based knowledge. This also means that discussion of values is principally outside the realm of knowledge making. Dialogues for which empirical evidence does not play a pivotal role are essentially subjective, and in terms of creating knowledge, a waste of resources. This absence of affect include any account of why or for what purposes one might employ the search for knowledge.

Within the past several decades, however, an alternative to the empiricist tradition has emerged, one that challenges virtually all these suppositions. Expanded accounts of this transformation may be found elsewhere,[2] and indeed, the initial chapter of the present volume provides a sufficient enough account that I can move here to contrast its suppositions with the four characteristics just described. In the present context, we view this transformation in terms of social construction. At the outset, the constructionist account replaces the individualist orientation to knowledge with a *relational* view. In this case, it is proposed, the world itself makes no demands of the individual in terms of how it is understood. It is because the individual participates in relational process that he or she begins to understand the world in terms of atoms, chemicals, nervous systems, mental illness, economies, and so on. The

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[1] Mathematics does not qualify, on this account, as a body of knowledge. However, the case is often put forward that systems of mathematics are "discovered," thus placing mathematics in the empiricist camp. On this account, the view that mathematicians are primarily developing "logical tools" – as opposed to discovering foundational truths – is a threat. The distinction between mathematics and statistics enables mathematics to remain a basic subject matter.

[2] See for example, Gergen (1994), Dickens & Fontana, 1994, Hollinger (1994).

scientist studies the world from some perspective, and this perspective is a child of relational process. The representationalist orientation is replaced by a *pragmatic* view of communication. Words themselves do not furnish pictures or maps of an independent reality; one cannot compare an array of propositions to the world to assess their accuracy. Rather, words (and other communicative actions, including gestures, graphs, charts, and so on) are used by participants in the relational process to create, adjust, and sustain their forms of life together.

A constructionist orientation replaces the conservative leaning of the empiricist orientation with a *contextual* vision. Rather than seeking irrefutable propositions, the constructionist understands and appreciates the possibilities of multiple understandings, depending on time, culture, and circumstance. The greater the number of perspectives that can be assembled in a situation, the greater the range of possible actions. Multiplicity and pragmatic potential are allied. Further, in the case of the social sciences, constructionists understand that patterns of social life are held together only by negotiated agreements among people. To presume a stable social world, in which researchers can return to examine the adequacy of their propositions is perilous. Knowledge making should not be cumulative, but continuous. Finally, where traditional knowledge making attempts to avoid issues of values, morals, and politics, a constructionist orientation sees these as central.

Elsewhere I have characterized constructionism as a *reflective pragmatism*.[3] That is, knowledge should not be equated with Truth, but with utility. However, utility must be judged in terms of values – useful to whom, and for what purposes. What values are being served by an inquiry, and whose values are they? We cannot separate knowledge from passion.

If we now understand that what we term knowledge is derived from relational process, pragmatic in its aims, embedded within cultural and historical context, and wedded to values, we must begin to ask significant questions about educational practice. Should these practices not embody these very same concerns? Should we not replace the traditional concern with the "individual minds" of students with investments in relational process? Should we not lay the concept of Truth aside in favor of focusing on pragmatic utility? Can we come to appreciate the need for multiple perspectives, linked to culture and circumstance; can we shift from a static to a dynamic view of knowledge and culture? And can we replace the antiseptic orientation to knowledge with passionate pursuit? It is to just such goals that we now turn.

Knowledge as Relational Praxis

To appreciate the educational goals just outlined, it will first be helpful to expand on the social processes from which propositional knowledge emerges. Here we come to appreciate both the utility and shortcomings of propositional knowledge claims. As demonstrated in early works by Fleck (1979) and Kuhn (1962), what we call scientific knowledge typically emerges within communities that share certain assumptions, values, vocabularies, research practices, and research instruments about which they agree. Following Kuhn, one often refers to this agglomerate as a *paradigm*. We find in the work of multiple scholars in the history of science, the social studies of science, and science and technology studies detailed accounts of the conversations, negotiations, manipulations, and cultural influences out of

[3] Gergen (2014).

which knowledgeable propositions emerge.[4] Most important to note in these accounts is that the propositions constituting "established knowledge" are the *outcomes of the process*. They represent ultimate formalizations of the discourse developed by the community in carrying out its various activities. Following Wittgenstein (1952) they are samples of a discourse that have acquired their meaning in the ongoing relations among scientists and the materials with which they work, along with the physical and cultural environment in which they function. To the extent that the discourse functions as a picture or mirror, it does so only within this context of usage. The study of aggression, for example, is only objective for those who are willing to label certain observations as aggression. This objectification is tied to – and owes its meaning to - a specific relational process.

From this standpoint, we see that what traditional education largely provides is an array of abstractions stripped of their context of usage. They have no truth value save that existing within those communities committed to a given paradigm. Their utility outside these contexts of usage is moot. Abstract propositions in themselves do not carry with them rules from which one can derive a set of observations or actions. Radically put, to teach that "the world is round" is only true or useful within specific contexts of usage. Outside this context, the proposition will not only be empty of content, but will not itself invite any particular course of action. In effect, if the human population were extinct, and creatures from another planet were to find our libraries intact, even with encryption the propositions filling these books would not in themselves permit easy application.

It is not simply that the vast share of propositional knowledge is relatively empty in itself. More significantly, outside the confines of professional schools, the process by which these propositions are generated is generally absent from educational curricula. As I am proposing, propositions do not themselves constitute knowledge. *The words that fill our books and journals are not themselves knowledge, but the secretions of a vital process that otherwise remains invisible. Knowledge in this sense is not to be found in a set of inert passages on a page, but within an active, relational process*. We might appropriately replace the term *knowledge* with *knowledging*. The philosopher Gilbert Ryle drew a distinction between "knowing how" and "knowing that".[5] "Knowing that" is essentially propositional knowledge of the kind described, while "knowing how" is typically equated with forms physical activity that bring about a desired end. Western educational institutions generally honor the former, while remaining suspicious of the latter. Only reluctantly, and minimally, do universities grant academic credit for skills in athletics, music, art or dance. Yet, from the present standpoint, *knowing that* is essentially a byproduct of *knowing how*. When "knowing that" is cut away from the community of practice, it is robbed of pragmatic value. The propositions are simply constituents of a relational process that serves as the font of knowing. Most important, *we should not equate knowledge with stabilized propositions, but with ongoing relational process.*

There is some precedent for this reconceptualization. In a certain sense, this is to extend Aristotelian concept of knowledge through *praxis*. Aristotle distinguished between the pursuit of knowledge through *theoria* – articulated or propositional truth – and through praxis. The latter is knowledge achieved through the process of striving toward a goal. As I am proposing here, the capacity to articulate theory is itself a practical accomplishment, or the outcome of praxis. Also relevant is the

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[4] See, for example, Latour and Woogar (1979), Poovey (1998), Daston (2010), Knor Cetina (1999).

[5] Ryle (1949)

Socratic concept of e*pisteme*, or knowledge embedded in the active accomplishment of a goal, with *techne* representing the craft-like ability to make or perform. In contemporary educational circles the distinction is represented in the contrast between *declarative* and *procedural* knowledge, where the latter is implicit, unformalized, and realized through accomplishment. As often proposed, procedural knowledge is often acquired unconsciously. One might even argue that such knowledge cannot be translated into propositions. One learns how to speak though conversations, but is not therefore capable of revealing the relevant grammatical rules. Any account of such actions would necessarily be an abstract formalization, for which the skilled particulars would be lacking.[6]

As I am proposing, the chief vehicle for generating usable knowledge is through what may be viewed as a process of relational praxis. The process is relational in the sense that it derives from action within specific contexts, and acquires its significance as knowledge through social interchange.[7] Education dedicated to imparting propositional knowledge not only leaves students with little that is useful outside this context, but fails to immerse them in those relational processes essential for effective engagement in ongoing life. Mastery of content should give way to mastery of process. Let us consider this conclusion in light of contemporary world conditions.

The Challenge of Change

In a fully stable world there are ways in which propositional knowledge can be useful. If the objects of knowledge are relatively fixed, and the communal assumptions and values univocal, the resulting propositions may have certain utility. The mastery of the content may enable students to enter the society with a serviceable discourse. The student will know how to communicate in effective ways, and to rapidly gain some sense of how this talk functions within the community. However, during the preceding century, we have accepted into our ways of life a stunning array of technologies, including the radio, mass transportation, mass publishing, jet transportation, television, the internet, and the cell phone. By all accounts, the impact of such technologies on patterns of cultural life is enormous.[8] The implications for education are significant.

It was once said that there is nothing more revolutionary than a road. With new roads into a community come strangers who bear new ideas, values, and ways of life. But now, in the time required to read this sentence aloud, 80 million email messages will have been launched into the world. In the last year alone it is estimated that 8 trillion text messages were sent via cell phones. And this is to say nothing of the internet, newspapers, television, radio, books, and so on. All these technologies essentially contribute to creating, sustaining, or subverting forms of understanding or belief. Every word or

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[6] To illustrate, in a recent attempt to impart useful knowledge about dialogic practice, a colleague and I (Hersted and Gergen, 2013) found it impossible to generate propositions from which derivations could be made to the vicissitudes of ongoing dialogue. Rather, it was necessary to furnish case material that could sensitize one to possibilities, and enable relevant reflection.

[7] This is also to challenge the view that knowledge resides in the head, a view more or less championed by cognitive and constructivist views. It is to provide an answer to Wittgenstein's (1992) question, " Would it be correct to say, I sit down because I know this is a chair; I reach for something because I know that this is a book,…What is to be gained by this?" (p. 46e)

[8] See for example Berman (1988), Eitzen and Zinn (2011), Bauman (2011).

deed can enter multiple spheres of interpretation - twitter, face-book, the blogosphere, television and radio talk shows, and more. Everywhere in motion are meanings being shaped and reshaped on virtually every issue of importance to our lives - government, education, religion, family, work, leisure, the economy, love, appearance, and so on. In today's world the circulation of meaning - in volume, speed, and number of participants - approaches staggering proportions.

The utility of propositional knowledge is simultaneously diminished. At the outset, the objects of knowledge continue to shift. As values, opinions, and events unfold across time, so do foci of study. Consider the parade of fluttering concerns: Communism, atomic energy, space exploration, cancer, the AIDs epidemic, computer design, obesity, Alzheimer's, immigration, global warming, social networks, post traumatic stress, Ebola…Enthusiasms rapidly develop, conditions change, and interest dissipates. For what kind of knowledge should education thus prepare the student? There is also the multiplication of perspectives. This means, for one, that the so-called "objects of knowledge" are not the same objects across communities. Global warming is not so much a fact in nature for large numbers of conservatives, as it is a liberal ruse; what is obese in one culture is a sign of either beauty or prosperity in another. More importantly, as perspectives multiply, so do conceptions of reality and rationality increase, but as well the range of possible actions. Thus, to solidify and canonize "what is known" is to reduce the potentials for action. For whose perspective should education thus prepare the student?

An education concerned with inert, context-stripped content is largely irrelevant to a world in flux. Required are skills in the continuous relational praxis.

Pedagogies of Practice-Based Knowledge

What does this mean for educational practices and policies? This is a question of enormous proportion, and deserving of broadest discussion.[9] As a preliminary to such discussion, I shall confine myself here to briefly touching on several avenues of departure. Because forward-looking educators have already set out in these directions, they offer special promise.

Collaborative Classrooms

I have placed special emphasis on processes of collaboration, largely because it is out of relational process that human meaning is born, that values and rationalities are formed. It is collaborative process, then, that should be a foundation of educational practice.[10] It is no longer the individual student that should center our concern, but participation in the relational process from which knowledge emerges. In this context initiatives in collaborative learning are especially promising.[11] Collaborative activities are now available across all age levels and curricula. At the university level, the work of English Professor Kenneth Brufee (1993) is illustrative. In his English classes, Brufee establishes *consensus groups*. These groups are challenged to answer various questions about a text, and to do it in their own terms. They are also invited to challenge the opinions of various authorities in the field. However, the

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[9] A more extended discussion may be found in Gergen (2009).

[10] See also initiatives in cooperative learning (Millis, 2010).

[11] See, for example, Hardin-Smith, (1992).

groups must reach a consensus that they are willing to share with other groups. This means that the group must learn how to deal with internal disagreements – sometimes extreme – in generating an opinion. They must learn how to live together in a world of conflicting realities. Closely related are movements toward dialogically based teaching (Wells,1999). Such practices have become increasingly useful as classes become increasingly multi-cultural. They can provide an opportunity for full democratic participation. Ideally they also give students an opportunity for a wide range of expressions – from what they think about a subject to personal experiences, opinions, humor and so on. In this way students' lives are brought into productive contact with each other.

Learning in Action

As Confucius wrote in the fifth century BC, "I see and I remember, I do and I understand." This view is also echoed in John Dewey's (1938) trail-blazing theories of education, and is especially relevant to the proposals set forth in this paper. Most relevant here is Dewey's emphasis on the learning experience within specific contexts of action. As just proposed, one of the most important features of this context is the matrix of social relations in which learning takes place. It is within these relations that the learning experience acquires its value, its goals, and a vocabulary with which it can be communicated to others. In effect, experiential learning is at one with relational or collaborative praxis. Most importantly, learning by doing places the learning experience itself as the subject matter. That is, the primary educational outcome is the mastering of the process itself. It is the skill in learning within the ongoing and ever shifting landscape of demands that is essential. For example, skills in knowing how to focus attention, employ trial and error, innovate, and integrate information are potentially useful resources across a broad terrain of challenges.

Pursuits in *experiential based learning* have continued to develop in both theoretical sophistication and the range of relevant practices (see for example, Wurdinger and Carlson, 2010; Loretto, 2011). Interest also expands globally.[12] The movement is often allied, as well, with *project based learning*. In project based learning students are often engaged in generating the goals, and these goals will often have value for them (for example, helping the community to recycle, advocating new bike paths, reducing bullying). Collaborative process is often integral to the practice. Closely related to these endeavors is the work of *activity theory* scholars and teachers. Drawing from early Russian work, activity theory places a strong emphasis on working with tools – for example, computer technologies, and ambient discursive resources - to solve problems (see, for example, Engestrom, 1992; Lave, 1993). The recent flowering of *action research* and *arts based learning* in higher education adds additional dimension to these various efforts.

Schools Without Borders

It's not only that the sites of knowledge making can rapidly emerge at any time and place throughout the world. With existing communication technologies, cyber-sites can instantaneously develop, linking the like-minded across cultural borders. Regardless of whether the interests are technological, ideologi-

[12] See, for example, the Association for Experiential Education (www.aee.org)

cal, artistic, pleasureful, sportive, and so on, there are people from around the world seeking together to achieve some end. They will learn – or not - through relational praxis. In this context we must view the structured containers in which education traditionally takes place as impediments to education. To the extent that they define the perimeters within which learning occurs, they insulate students from participating in the larger global flows of meaning making that will only continue in their expansion and significance. To be sure, educators have made great strides in opening the schoolhouse doors. Programs in work-based learning, service learning, and studying abroad, along with apprenticeships, externships, practica, and field trips, increasingly populate the educational scene.

Of course, the increasing developments in computer based learning, and on-line degree programs lend themselves to thinking in terms of education without borders. So far, however, most such educational programs favor propositional pedagogy. It's the content that counts. More promising are computer classrooms in which students may congregate and collaborate. Increasingly educators are relying on computer technology to enable students to carry out dialogue, share files, and work on projects together – effectively realizing the goals of collaboration and action learning just discussed. Through such practices as building websites to linking classrooms across cultures, these initiatives are slowly enabling classrooms to "go global."

Transforming Evaluation

When relational process is given priority, evaluating individual student performance is thrown into question. Here it is first important to realize that measures of student performance are not accurate pictures of the student, but constructions. They are ways of characterizing the student from a particular standpoint. In this sense, *evaluations of students tell us less about the students than they do the standpoint of the evaluator*. In this light we may ask: who is doing the evaluating, and for what purposes? In whose interests are these evaluations, and who is – or is not – included in the discussion about these purposes. What stands as "objective assessment" for one may be "prejudice in action" for another. There is longstanding debate on these issues, and substantial critiques of traditional evaluation practices. Most significant for present purposes is the way in which evaluation generates alienated relationships – between teachers and students, among students, and between students and their families. In effect, the very relational processes central to praxis-based knowledge are undermined. [13]

From the present standpoint, a high priority must be placed on developing alternatives to traditional evaluation practices. There are broad moves in this direction, particularly in higher education. Forward-looking universities are offering more opportunities for ungraded credit, and replacing examinations with dossier based evaluation. I have also been struck by the potentials of *dialogic evaluation* (Ryan & DeStefano, 2000; Schwandt, 2005). Such practices tend to emphasize egalitarian dialogue, equality and justice, multi-cultural intelligences, dialogic learning, and qualitative analysis as opposed to quantification. Closely related, I am drawn to practices of *appreciative evaluation* (Preskill & Catsambas, 2006). Such practices are lodged within a social constructionist premise that we create our realities through dialogue. Thus, dialogues that center on *problem*s – for example, the poor performance of students, teachers, or school systems – solidify the reality of the problems. And when fortified, this reality will lead to mutual blame, alienation, distrust, disrespect, lowered motivation, and more. The

[13] For a more extended discussion of this critique, see Gergen and Dixon-Roman, 2014.

appreciative approach centers discussion on valued actions or performances, that is, what may be prized by the participants.

Alternatives to national testing practices are also needed. Here I am impressed by the work of David Fetterman (2004, 2007) and his colleagues on empowerment evaluation. Here the attempt is to shift the site of evaluation from the distant assessors to the local participants. Rather than the impersonal assessment of students and teachers, the attempt is to enable the local community to become self-directing, to deliberate on its activities, set goals for itself, and take necessary actions. Outside testing procedures are not eliminated. Rather, standardized tests can provide information helpful in judging local progress. Rather than dictating policy, test scores become adjuncts to local school development.

In Conclusion

I am advocating here a fundamental shift in our conception of knowledge, its utility, and its acquisition. It is a shift from knowledge as carried by fixed representations of the world to knowledge as embedded in ongoing, relational practice. Knowledge in this sense is not located in any place – in individual minds, books, or computer files – or in any temporal location. Knowledge is continuously realized in the active process of making, or what I am calling here, relational praxis. Such a view is linked to an emerging and widely shared vision of knowledge as socially constructed, and the attendant shift from truth seeking to pragmatic utility. It is also a view that seems maximally congenial with the increasingly rapid tempo of global life, and its demands and opportunities for adjustment and innovation. In this light I have touched on some of what I consider more promising pedagogical initiatives. Further dialogue is essential.

It is important that one does not conclude from this offering that I am in any way opposed to propositional knowledge. The questions primarily concern the conditions of its utility, and the significance of what is marginalized through this romance. When propositions (in their various forms) are stripped from their contexts of usage, their educational value is diminished and their pedagogical potency impoverished. Within the context of efforts to achieve value-invested goals, propositional discourse can be vital. However, for educational purposes, let us place the emphasis on "the efforts, and not the outcomes. The argument here may be clarified in confronting what may strike many readers as a pervasive, but suppressed, irony in this account.

I have been consistently critical of the propositional account of knowledge, while simultaneously offering to the reader an array of propositions. I have relied on the representationalist tradition to offer an account of the contemporary state of affairs. Further, I have tried to fortify many of my proposals with reference to other propositional accounts of the world. It would seem that either I am wrong about the weaknesses of propositional knowledge, or my account is self-defeating. Yet, such a critique would be to equate propositional knowledge with language as relational action. In no way am I attempting to fix the truth of my proposals; they are offered as entries into an ongoing conversation with other educators. The words will hopefully find pragmatic utility in the working contexts that we share. At the same time, because there are – and will be - multiple perspectives at stake in this conversation, and multiple contexts of potential application, it is a dialogue without end. My special hope is that we should create useful but transient knowledge together in the process.

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