

# Social Construction and Pedagogical Practice

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Practices of education are typically linked to an assumptive network, that is, a set of preliminary beliefs about the nature of human beings, their capacities, and their relationship with the world and each other. In the case of education, perhaps the pivotal concept is that of knowledge itself. How, then, do we define or conceptualize knowledge such that educational processes are desirable or demanded; what is knowledge such that certain educational practices are favored over others? Clearly disparate concepts of knowledge will lend themselves to differing views of the educational process. If we believed, along with certain romanticists, that "the heart has its reason," we might replace books and lectures with intense encounters of both interpersonal and spiritual variety. Should we believe, along with the Ilongot of Northern Luzon, that knowledge is to be gained in the throes of anger or in the hunting of heads, then formal training in schools might be replaced by battle experience. Beliefs about knowledge, then, inform, justify and sustain our practices of education.

Given this concern with grounding assumptions, we wish first to sketch two major conceptions of knowledge dear to the Western tradition, conceptions that continue today to inform the vast share of the educational practices in which we participate. As we shall then propose, these closely related systems of belief are deeply problematic, both in terms of their epistemological and ideological commitments. We shall then outline an alternative to these views, namely one issuing from a social constructionist standpoint. While not attempting to destroy the traditional views, social constructionism offers a significant alternative. In doing so it also offers a new way of understanding existing educational practices and opens the door to new ranges of possibility.

## **Knowledge: Exogenic and Endogenic Traditions**

Although there are many ways of dissecting our historical traditions, it is most helpful here to single out two significant and longstanding tendencies. Specifically we may distinguish between views of knowledge that are primarily exogenic (or world centered) in character as opposed to those which are endogenic (or mind centered). The exogenic tradition in educational thought can be traced to empiricist philosophies of knowledge (from Locke to logical positivism), while the endogenic tradition largely owes its intelligibility to the rationalist tradition (From Descartes and Kant through Fodor and the AI movement).<sup>[1]</sup> Both orientations embrace a mind/world dualism in which the existence of an external world (typically a material reality) is set against the existence of a psychological world (cognitive, subjective, symbolic). From the exogenic standpoint, however, knowledge is achieved when the inner states of the individual reflect or accurately represent (or serve as a mirror of) the existing states of the external world. Exogenic thinkers often place a strong emphasis on keen observation in the acquisition of knowledge, and tend to view

emotion and personal values as potential hazards to the neutral or "evenly hovering attention" required for accurate recording of the world as it is. Further, the exogenecist is also likely to stress the importance of knowledge in the individual's ability to adapt to or succeed within a complex environment. We must possess an "internal map" of nature, as it is held, if we are successfully to find our way in the world. For the exogenecists, then, the world is a primary given, and the mind operates best when reflecting it accurately.

The endogenic tradition is similar to the exogenic in its dualist foundations, and its emphasis on value neutrality. Yet, whereas the endogenic tradition treats careful observation of the world as the key to acquiring knowledge, the endogenecist places the chief emphasis on the powers of individual reason. Where the exogenic educator is likely to focus on the arrangement of environmental inputs necessary to build up an accurate representation, the endogenic educator lays chief emphasis on the human being's intrinsic capacities for insight, logic, or conceptual development. In this sense the exogenic theorist is likely to view the external or material world as a given, and conjecture about how nature becomes accurately represented in the mind, while the endogenic thinker is likely to view the mental world as self-evident, and raise questions concerning the way in which the mind operates so as to function adequately in nature.<sup>[2]</sup> In debates on the influence of nurture vs. nature (environmentalism vs. nativism) the exogenecist will favor the effects of nature on the individual; infinite and continuous molding of the individual mind may be possible. In contrast, the endogenecist will call attention to the inherent or natural capacities and development of the individual mind. Limits to learning may be traced to the developmental stage of the cognitive system.

As suggested, each of these orientations to knowledge also serves to justify or rationalize certain forms of educational practice. By and large the exogenic orientation to knowledge is subject or curriculum centered. From the exogenic perspective the student is largely viewed as a *tabula rasa* upon which the educational process should inscribe the essential features of the world. More concretely, the perspective favors an emphasis on the student's direct observation or the experiential enrichment of experience - the collection of samples or specimens, participant observation, laboratory experiments, field trips, and so on. Exposure to books and lectures is also favored by the exogenic perspective, as it is through these means that the individual can acquire vast amounts of information not otherwise available to direct observation. The exogenic view is favorable to examination procedures in which the primary emphasis is placed on assessing levels of individual knowledge. Devices such as multiple choice questions, standardized tests, and statistical normalization may all assist in determining in precisely what degree "the slate has been filled."

In contrast, the endogenic perspective is child-centered. Endogenic curricula place the major emphasis on the rational capacities of the individual. It is not so much the amount of information in one's mind that is important, as the way one deliberates about it. Thus a strong emphasis may be placed on mathematics, philosophy, and

foreign languages, for example, all subjects that are said to enhance one's capacities for thought. Class discussion is favored over lectures, as it is through active engagement that cognitive skills are most fully potentiated. Essay exams and term papers are favored over standardized tests, as rational analysis is not only better trained through these means but evaluation should ideally be tuned to quality rather than quantity. To be sure, there have been attempts to unite the two traditions. Piaget's (1954) theorizing is exemplary, as he posits two opposing processes of cognitive development, cognitive *accommodation* to real world objects (homage to the exogenic tradition), and cognitive *assimilation* of the world to cognitive structures (sustaining the endogenic tradition.) We shall have more to say about such integrations in a later treatment of social constructivism.

### **The Demise of Knowledge as Individual Possession**

Although present day educational policy and pedagogy is rendered rational largely through these longstanding conceptions of knowledge, it appears that the traditions are rapidly becoming unravelled. In part, this unravelling is invited by the fact that the traditions have always existed on shaky ground. From within these two perspectives, philosophers have never been able to solve the fundamental question of epistemology - how the mind comes into knowledge of a world external to it. Indeed, the fuel for each perspective is largely derived from the flaws inhering in its opposing number. Unable to resolve such problems, philosophers in the present century have largely abandoned dualist metaphysics in favor of the logical analysis of propositions. And, as Richard Rorty (1979) has argued, the problem of knowledge as a relationship between mind and world cannot be solved because it is ill conceived from the beginning. If we commence with a distinction between what is *outside* and *inside* the mind of the individual, we create an inherently intractable problem in determining how the former is accurately represented in the latter.

Such debates have thus rendered both exogenic and endogenic conceptions of knowledge vulnerable to the more recent fusillade of critiques variously labelled post-empiricist, post-foundational, post-Enlightenment, post-structural, and postmodern. To recapitulate these arguments would require us to explore the excoriating attacks of 1960's intellectuals on the moral vacuity of traditions that view knowledge as value neutral. We should have to include here the critiques of feminists, Asians, blacks and Hispanics of those who would obliterate all other voices in the name of transcendent objectivity (the exogenicists) or rationality (the endogenicists). We should explore as well the work of Foucault (1979, 1980) on knowledge claims as integers in the disciplining (disempowerment) of the individual. It would also be essential to consider the work of historians of science (such as Kuhn and Feyerabend), and sociologists of knowledge (for example, Latour, Knorr-Cetina and Barnes) who have helped to underscore the importance of historical and social context in determining what becomes accepted as valid knowledge. The work of literary theorists (such as Derrida and DeMan), semioticians (Barthes, Eco), and rhetoricians (Simons, McClosky) would also receive attention, in their demonstration of the extent to which knowledge claims gain their force neither from observation nor

rationality but from literary technique. This is scarcely the place for a full account of these critiques; abundant resources are available elsewhere. It is simply to say that within this intellectual context, both exogenic and endogenic conceptions of knowledge have lost virtually all currency.

Yet, there is one argument emerging from these more recent dialogues that does require further attention. Both exogenic and endogenic traditions locate knowledge within the minds of single individuals. It is the individual who observes and thinks, and who is challenged to acquire knowledge. It is only by virtue of the individual's possession of knowledge, it is held, that he or she can survive or thrive in a complex world. The shaky grounds for such beliefs are but one reason for hesitation. Perhaps more importantly we must inquire into the effects on cultural life to suppose that this is so? If we declare knowledge to be essential to survival, and to reside in the heads of separate individuals, what forms of cultural practice are invited; what groups are privileged; what traditions or potentials are suppressed or obliterated?

Framed in this way there is reason for resistance. Essentially such a conception of knowledge allies itself with an ideology of *self-contained* or *possessive individualism*. To view knowledge as the possession of single minds is consistent with other propositions holding individuals to be the possessors of their own motives, emotions, or fundamental essences. Within this tradition, people are invited to see themselves as the center of their actions - as lone choosers, searchers, finders - confronted with the challenges of survival and success. As critics argue, such beliefs not only favor a narcissistic or "me-first" disposition toward life, but cast others (along with the physical environment) into a secondary or instrumental role. Persons and environments are viewed primarily in terms of what they can do for oneself. Further, because of the sense of fundamental isolation ("me alone") bred by this orientation, human relationships are viewed as artificial contrivances, virtually set against the natural state of independence. Most importantly, as the peoples of the globe become increasingly interdependent, and as they gain the capabilities for mutual annihilation (either through arms or pollution), the ideology of self-contained individualism poses a threat to human well-being. Under these conditions it is no longer useful to think of me vs. you, us vs. them. We are not then speaking of abstract and arcane philosophy, but of a system of beliefs that in certain respects may be inimical to global well-being.

## **The Social Construction of Knowledge**

As these problems with the traditional views of knowledge have become evident, there has been increasing interest in possible successor projects. It is also precisely at this point that social constructionist dialogues acquire their contemporary significance. Much post-foundational critique has centered on restoring to culture that which had been declared natural, that is, replacing the assumption of truth verified by nature with truth as created in community. In terms of the above arguments, this is to view knowledge as a byproduct not of individual minds but of communal relationships. Or more generally we might say that *all meaningful propositions about*

*the real and the good have their origins in relationships.* This is to bring into sharp focus the site of knowledge generation: the ongoing process of coordinating action among persons. It is to foreground the moment-to-moment interchange between and among interlocutors, and locate meaning within the patterns of interdependency. Following Wittgenstein (1953), there is no private language (a moment prior to relationship in which the individual formulates meaning); rather language (and other actions) gain their intelligibility in their social use, as they are coordinated with the actions of others. Individuals in isolation do not thereby cease to be intelligible; however, this is to trace the intelligibility of their private actions to a preceding immersion in relationship. Individuals may carry out actions traditionally indexed as “thought,” or “feeling;” however, these actions may properly be viewed as forms of relationship carried out on the site of the individual.

In preparation for our later discussion of educational practice, more must be said about the significance of relationship. One useful way of putting things is to say that an actor never comes into meaning save through the supplementary actions of another. Whatever is said or written has no intrinsic meaning; it carries no univocal message in itself. Nor is the meaning of a series of words or actions determined solely by the recipient (listener or reader). Rather, an individual’s actions (both linguistic and otherwise) operate as indicators of possible relational sequences; they invite certain lines of action as opposed to others. In responding with one or another line of action, the recipient bestows on the initial action one potential form of meaning as opposed to many other possibilities. Thus, the comment, “Chuck, I think you will find this interesting,” invites or makes possible the reaction, “OK, I’ll take a look,” which reaction grants the comment meaning as an invitation to share information. However, the equally plausible reaction, “Yeah (eyes rolling), I bet” positions the utterance in a different way, generating a different sense of its meaning.

On this account lectures and books have no meaning until students grant them this privilege. Further, neither lectures nor books can determine the meaning which will be assigned to them. They merely open a variety of alternatives from which different students are likely to select differentially. Through feedback and evaluation, the teacher may narrow the range of alternatives - moving students toward “approved” sequences. However, feedback and evaluation stand in the same position as lectures and books - subject to a multiplicity of supplements over which they have no determinative control.<sup>[3]</sup> With these orienting suppositions in place, we are positioned to explore several significant corollaries:

**Indeterminacy.** Intelligibility is never complete. Any established meaning stands open to infinite re-signification. There is no single point at which the process of generating intelligibility is consummated. There is no fixing of the word, as it were, such that we can insure what it is a lecture or text will mean - even if the student masters the appropriate supplements within the local scenarios of the school. As time and conversations proceed, the “true and the beautiful” of today’s class can be revisioned as “trite” or “ideologically suspect,” and today’s subject of scorn can turn fascinating. To be sure, we often treat intelligibility as a *fait accompli*. “That is the

correct answer,” “I understand you perfectly,” and “His writing is so clear,” are ways of signaling the full achievement of meaning. Yet, these are only frozen moments in a continuing conversation, which realizations may at any time be rescinded (“I thought you had the correct answer until I read further.”), and which themselves stand open to further signification by the speaker or others (“You say you understand me but I doubt it.”)

**Polyvocality.** As interlocutors enter new relationships and attempt to create intelligibility together, they will rely on preceding practices of making sense. And, because they have typically been party to multiple relationships, scattered over time and circumstance, so will they import into the present a substantial vocabulary of words and action. In effect, we enter each relationship as polyvocal - carrying with us numerous voices appropriated from the past. Any given sentence may thus represent a pastiche of past utterances, cobbled into coherence, and set afloat in an uncharted sea without fixed destination. At the same time, by dint of tradition or circumscribed history of interchange, meaning making in any given relationship will tend to reduce the range of usable resources. In French language courses, one's dependency on English will slowly vanish; courses in psychology will invite students to relinquish common discourses (ethnopsychologies) of the mind.

**Contextualization.** The relational generation of meaning employs much more than the words and actions of the interlocutors. Their coordinations will frequently employ objects of various kinds, and will always take place within specific material conditions. Thus, the discourse of baseball will be not only be interdependent with patterns of action, but to objects such as bats, gloves and balls. And these patterns of coordination will be facilitated and delimited by a playing field. Or with Wittgenstein (1953), our language games take place within *forms of life*. In this sense, each form of life may contribute to the resources imported by the individual into any new relationship. One doesn't enter merely as polyvocal, but as poly-potentiated in terms of capacities for insinuating objects or calling forth contexts with which to construct meaning in any given relationship. The richer the range of such capacities for coordination, the more flexible and effective persons may be as they enter the ceaseless challenge of the new and novel. More metaphorically, life may approximate a series of jazz concerts in which a continuous array of new partners and venues requires improvisation without end.

**Pragmatics.** The relational view developed here not only contrasts with the traditional view of language as an outer expression of an inward state, but also with the broadly shared assumption that language can serve as an accurate “picture” or “map” of the world (that is can “tell the truth.”) Rather, language chiefly functions as a constitutive feature of relationship. In the same way that lovers may require a vocabulary of emotion in order to create a scenario of romantic love, so does a laboratory team in neuroendocrinology require such terms as hypothalamus and amino acids to coordinate themselves around experimental procedures. In neither case, in love or neuroendocrinology, does the language picture or map a world outside itself; rather, the language functions as an essential element of doing love or

laboratory research (much like smiles and embraces in the former case, and essays and journals in the latter). From this perspective we are also able to glimpse the importance of assaying educational practices in terms of pragmatic implications. In what degree are various discourses of the academy embedded within or relevant to broader patterns of cultural action; what are the pragmatic potentials of the forms of life to which students are exposed in our schools? Before turning to specific issues of practice, however, it will be helpful to examine differences among competing characterizations of construction.

## **Varieties of Construction**

Constructionist ideas have long been constituents of scholarly debate, but they have taken many forms and been used in quite different ways. For example, in their classic work Burger and Luckmann (1966) use social constructionism to represent a particular form of social phenomenology, linked to a structural conception of society. While their concern with the social basis of knowledge structures remains robust in the present account of constructionism, the assumptive base has been radically altered. Neither phenomenology nor social structural views are congenial. Similarly, the term constructivism has been used by a number of different theorists, and the term figures in George Kelly's (1955) constructivism in ways that are not fully consistent with those of von Glasersfeld (1979) or Piaget (1954). Because views of construction have played an important role in more recent deliberations on pedagogy, it will prove useful to explore the differences between social constructionism as outlined above, and two alternative orientations: radical constructivism and social constructivism.

The radical constructivist of von Glasersfeld is strongly influenced by Piagetian theory, and has much in common with cognitive orientations to education in general. However, unlike cognitivists (who ironically remain wedded to an empiricist view of science), constructivists share with social constructionism strong misgivings with endogenic epistemology, and its strong emphasis on knowledge as an accurate reflection of the world. Each questions the view of knowledge as something "built up" within the mind through astute observation. And thus, each questions the authority traditionally accorded to those who claim truth beyond anyone's standpoint. However, beyond these affinities are also differences of substantial significance. For, as should be clear from the foregoing, radical constructivism does subscribe to a mind/world dualism and places its stake in cognitive (endogenic) process. In von Glasersfeld's (1989) terms, "Knowledge is not passively received either through the senses or by way of communication, but is actively built up by the cognising subject (p.83) Knowledge is not thus a reflection of the world as it is. Rather, as von Glasersfeld (1979) puts it, "We redefine 'knowledge' as pertaining to invariances in the living organism's experience rather than to entities, structures and events in an independently existing world. Correspondingly, we redefine 'perception.' It is not the reception or duplication of information that is coming in from outside, but rather the construction of invariances by means of which the organism can assimilate and

organize its experience (p. 40).

This account of knowledge is so fully interiorized that it begins to offer the constructivist a means of escaping the charge of dualism. That is, by staking the entire epistemology on an account of the interior, the "exterior" can be erased from concern and the theory can be viewed as monistic. Yet, to escape Scylla of dualism in this way confronts the theory with an equally perilous Charybdis, that of a self-defeating solipsism. For if each of us is simply locked into our own experience, constructing the world as we may, then all that we take to be "the world," all that we believe to be "other persons" are simply the products of our own design. I simply make up the idea that there is a world, and that there are others in it, and these others have minds. There is no account, then, of how we manage to get on in the world, or indeed, whether there is even a world which challenges our adaptive capacities.

This is an unfortunate cul de sac for an epistemologist, and von Glasersfeld scarcely wishes to remain there. Thus, to avoid the problem of solipsism, a pragmatic dimension is added to the theory. As von Glasersfeld (1989) writes, "The function of cognition is adaptive and serves the subject's organization of the experiential world (p. 83). Or again, "Radical constructivism is unahsamedly *instrumentalist*...The concept of adaptation intended here is the basic biological concept in the theory of evolution. It refers to the *fit* with the environment..." (p. 87) Yet, to sustain this position requires two admissions, first that there is a real world that is separate from one's experiences of it - thus reasserting the dualist assumption. Second, an endogenic account of knowledge is insufficient; it must be supplemented by an exogenic concern with the real world to which the individual adapts. Yet, the latter admission propels the theory once again into the spiral of problems outlined above. And more specifically, how can one determine what actions are adaptive except through a local mode of construing? Can one be mistaken in his/her assessments of what is adaptive? On what grounds could the radical constructivist argue such a position.

These problems are exacerbated when the constructivist attempts to account for communication. As von Glasersfeld posits, "the meaning of signals, signs, symbols and language cannot be anything but subjective." (p. 88) Yet, if faced with a range of experience from which one is to construct the meaning of others' actions, how could one go about determining that others' possessed subjectivities, that their actions were indeed attempting to communicate these subjectivities, that certain actions communicated subjectivities while others did not, or the linkages between the other's specific actions and a specific array of subjective states? In effect, the individual would be left roaming his/her own private and subjective world, hoping that just somehow, communication was occurring. The dim possibilities for anything approaching genuine communication are recognized by von Glasersfeld. As he surmises, "...at best we may come to the conclusion that our interpretation of their words and sentences seems compatible with the model of their thinking and acting that we have built up in the course of our interactions with them.(p.90) As a "best,"



one might wish for more.[\[4\]](#)

In certain respects, social constructionism finds a much closer ally in works that can profitably be termed *social constructivist*. By social constructivism we mean to delineate a body of work in which both cognitive processes and the social milieu are pivotal. Vygotskian formulations and other action theories are exemplary (Holzman, 1999; Kozulin, 1998). Social constructivism would also be represented in the educational work of cultural psychologists (Colte, 1998; Seeger et al. 1998; Wertsch and Toma, 1995), and is exemplified in much of the recent writing of Jerome Bruner (1996). Social constructionism is quite congenial with such inquiries in the importance placed on the social sphere. In a certain sense, both look at human knowledge or rationality as a byproduct of the socius. In both cases, the relationship precedes the individual. And, while the specific role of the teacher is different, both view the relationship between teacher and student as pivotal to the educational process.

In spite of these convergencies, however, for constructionists the social constructivist orientation remains all too tied to a dualist epistemology, and all the philosophical problems that it inherits. The epistemological riddles remain about how external and internal reality are connected. Further, in its ultimate concern with the student's cognitive enrichment the social constructivism carries with it strong vestiges of individualist ideology. These differences also make themselves manifest in the choice of domains which are elaborated by theorists and practitioners. The constructionist places the strong emphasis on the domain of the social, while simultaneously maintaining a critical reflexive posture towards his/her work. Constructionist writings will focus on discourse, dialogue, coordination, conjoint meaning making, discursive positioning, and the like (Bruffee, 1993; Walkerdine, 1997; Wortham, 1994). And, such work may often carry with it a concern with the kinds of politics sustained by such descriptions.

In contrast, the social constructivist largely sees the social as instrumental in developing the "mind of the student." It is thus the latter world that places a prominent role in description and explanation.[\[5\]](#) Thus, for example, Vygotsky is most centrally a psychologist. Although social process does play an important role in the theory, the nature of psychological process is the ultimate interest. While there is but sparse articulation of the social field, Vygotsky gives careful attention to specifically mental processes of abstraction, generalization, comparison, differentiation, volition, consciousness, maturation, association, attention, representation, judgment, sign mediated operations, and so on.[\[6\]](#) And, while there are important exceptions, such work is often couched in the empiricist rhetoric of value neutrality.

## **Educational Policy and Pedagogical Practice**

We have glimpsed several problems inherent in traditional conceptions of knowledge and have scanned the rudiments of a social constructionist alternative. The challenge

now remains of exploring the implications of the constructionist alternative for educational policies and practices. Before doing so three caveats are required. First, there is no attempt in what follows to abandon traditions of longstanding. As pointed out in previous chapters, constructionism makes no claims to being a first philosophy, a foundation upon which a new world may be erected. There is no attempt to replace all traditions in the name of truth, ethical principle, political vision or any other universal criterion. Rather, the hope is to augment and expand on existing resources in the service of planetary well-being. This point is closely related to another: there are no policies or pedagogies that cannot be understood through the lens of social constructionism. All traditional practices - for good or ill and with varied efficacy - serve to construct worlds of the real and the good. In effect, all make a certain contribution to the sea of intelligibility. The central question is whether the implications of a specifically constructionist consciousness cannot open new avenues of departure. As we explore the images, metaphors, and narratives embedded within social constructionist views of knowledge, can we enrich the spectrum of possibilities? As we shall see in what follows, many existing innovations are indeed congenial to a constructionist intelligibility. These affinities bear articulation. At the same time, one senses a horizon of potential that we are only beginning to appreciate. Let us then explore five domains of particular relevance:

### **From Hierarchy to Heterarchy**

Consistent with traditional views of knowledge as cumulative (exogenic) and universal (endogenic), educational institutions are built around what Freire (1985) calls a "nutritionist" model. The model is essentially hierarchical, with the ultimate authority residing in the communities of knowledge-production itself. Typically these are experts in the field, like scientists and scholars. These experts discover or reveal the truth that students will ultimately be taught—or "fed," in Freire's terms. Next within the hierarchy are educational experts such as curriculum designers, who package the knowledge into educational units. Following are administrators and bureaucrats who select among these units. Teachers enter at the end, as instruments to dispense the educational nutrients to the students. Students are expected merely to consume the knowledge.

Despite widespread criticism of this model, it continues to describe educational practice disturbingly well. Apple (1986) and others have documented the hierarchical processes through which educational content is produced and passed on to teachers. Mehan (1979) and others have shown how students remain generally passive, and expected merely to absorb the knowledge presented.

In several significant ways, social constructionists add dimension to such critique. At the outset, constructionists see all claims to knowledge as embedded within particular communities of meaning making. As a result, various bodies of knowledge will inevitably favor particular visions of the good, for example, continuous improvement in conditions (perfectibility), materialism over spiritualism, "reason" over "emotion," individualism over collectivism. In this sense a hierarchy of knowledge lends itself to

totalitarianism. Or in Foucault's terms (1979, 1980), the dissemination of knowledge expands relations of power in which the user ultimately serves as pawn. We shall have more to say on this subject in a later treatment of critical reflexivity.

On a more subtle level, the constructionist finds the hierarchical model wanting in its tendency to suppress the contextual and pragmatic conditions that give authoritative language its significance. From the constructionist standpoint, "knowledgeable propositions" gain their meaning within particular contexts of usage, and function as means of coordinating action within these contexts. Knowledge of chemistry, for example, serves to unite a community, to define and grant value to particular projects and identities, and to help in generating outcomes of importance to this community. Yet, in the hierarchical model, the knowledgeable propositions are stripped away from this context. Educators extract bodies of discourse (and a limited number of instantiations) from the professional disciplines, and pass these these extractions on to those beneath them in the hierarchy. The pragmatic function of these discourses within the communities themselves is lost. The discourses lose their significance, and students are often left with a promissory note that *somehow* their studies are useful and important. One may, then, learn the chemical tables, and perform abstracted laboratory experiments. But the vitality of the language, its practical significance, and its life-giving potentials in a relevant community of action are lost. The common epithet of "irrelevance" may often be well deserved.

Further, because the authoritative discourses are treated as sacrosanct - the products of "our best minds" - they tend to travel the hierarchy in monologic fashion. That is, they do not move from communities of administrators, to teachers, to students as invitations to conversational supplementation. The recipients may clarify, order, and package, but the authoritative discourses remain, insofar as possible, intact. In the same way, students typically learn to approach the knowledgeable discourses in this way. One may enter the realm, approximate some distant approximation of its ways, and then exit. The result is that the authoritative discourses are not easily appropriated in exterior realms of life. One cannot easily employ the argots of physics, economics, experimental psychology, or algebra in cultural life more generally because their meanings are so fully tied to a specific domain of academic usage. In this sense, the professional discourses operate paramorphically, not so much altering existing forms of conduct, as co-existing in relative isolation.

In addition to problems of power and decontextualization, constructionists point to the problematics of monologic vs. dialogic practices of meaning making. The recipient of a monologue - as in the case of authoritative knowledge - is denied a voice of his/her own. The endpoint to be achieved by monologic education is a student who has fully absorbed that which has been presented - or in effect, becomes a simulacra of the authority. Whatever talents, insights, or specialized education the individual possesses is denied entry into the conversation. And with the denial of voice comes an obliteration of identity and an invitation to lethargy. It is in this vein that Wise (1979) has described how academics and governments impose curricula and methods on schools that largely silence the teacher. Apple (1993) elaborated this

analysis in discussing how the standardized curricula imposed on teachers deskill them. Because teachers are treated as technicians, and asked merely to implement prefabricated plans, they lose their capacity to reflect on the larger educational issues and to develop their own solutions (effective supplementation). As Aronowitz and Giroux (1993) report, "many of the [contemporary] educational reforms appear to reduce teachers to the status of low-level employees...whose main function is to implement reforms decided by experts in the upper levels of state and educational bureaucracies" (p.33).

Others similarly argue that the hierarchical model "deskills" the student. Jackson (1968) has described how the hierarchical relationships in schools discourage creativity and innovation among students. Wood (1988) and others have extended this analysis, arguing that students are shaped "to take their place unthinkingly in a world that operates beyond their control with no respect for their needs" (p.174). Once we attend to the relational aspects of knowledge production, we can also see that deskilling does not happen equally to all social groups. Rather, because professional knowledge is largely spawned within a particular segment of the society more generally (predominantly white, English speaking, upper middle class male) its discourses are more meaningful (cohesion building) within this context than others. For students confronting these discourses from other sectors of the society, they are particularly remote and their pragmatic functions deeply obscure. It is in this vein that we can appreciate the critiques of Apple (1982), Freire (1985), Walkerdine (1998) and others who describe how certain historically underprivileged groups—because of their ethnicity, gender, and class—disproportionately suffer under the traditional educational system.

Given the inherent problems of authority based knowledge, what alternatives are suggested from a constructionist standpoint? The present analysis first calls for a desacralizing of professional knowledge. Rather than presuming that the traditional knowledge makers provide "the best" or "last" word, let us realize that all claims to knowledge grow from culturally and historically situated traditions. This is not at all to deny their value, but to realize that such values are also contingent. For example, knowledge of painting typically presumes the value of self-expression or aesthetics; knowledge of medicine presumes the value of curing what we deem to be illness. All such values are circumscribed and negotiable. Thus, rather than monologues to be mastered, we might think of the disciplines as offering resources that may or may not be valuable depending on a particular condition of life. We shall say more about these issues in later discussions of reflexivity and meaning in context. For present purposes, however, situating knowledge in this way invites a shift from monologue to dialogue - from hierarchy to heterarchy. Others are invited into deliberation about the subject matter of education, its value, and relevance.

John Dewey (1916) once made strong arguments for viewing education as a germinating grounds for democracy. However, these views were put forward at a time when it was generally believed that real knowledge was objectively accurate and politically neutral. From a constructionist perspective, all knowledge is perspectival

and value saturated. Thus, to enter a domain of knowledge is to step into a particular form of life. Such entry is not in itself a step toward democracy; it is to acquire one voice at the possible expense of others. In this sense the present arguments lend strong support to current movements toward plurivocality in education, attempts to empower those who have traditionally been excluded from knowledge production. Beyer and Apple (1988), for instance, have argued that "meaningful curriculum reform must occur within those institutions, and by those people, most intimately connected to the lives of students: teachers, administrators, students, and community members" (p.6). Instead of seeing teachers merely as technicians trained to dispense authoritative knowledge, many wish to enhance the role of "teachers as curriculum makers." For example, "action research" projects train teachers to explore their own intuitions about educational processes (see for example, Hollingsworth and Sockett, 1994). Rather than accepting experts' accounts of teaching and learning, teachers trained in action research gather their own data and address educational questions themselves. In many cases this results in more context-specific utilization of knowledge. Yet, the process of curriculum making should not in the end rule out students, parents or the community. Regarding students, Wood's (1988) proposal regarding educational curricula is relevant: "In its content we (should) provide students with the tools to live a democratic life and the visions of what is possible in our shared social context. In terms of form, the curriculum should engage students in actual decision making in a shared community of equality and justice. " (p.184) Decision making at the The Sudbury Valley School is illustrative: here a weekly School Meeting, composed of all students and staff, deliberates on the day to day practices and policies of the school (Greenberg and Sadofsky, 1992). In another educational initiative, Claire Eiselen has established a supplementary curriculum for gifted students:

Small groups begin each year with their teacher in an empty classroom. There are as yet no books, no papers, no curriculum. Nothing will enter the room except by way of a student's bringing it. The meaning of things comes from the people bearing and using them. The value of ideas comes in the same way. Ideas and imaginings emerge with the youth and some of these begin to coalesce into projects. Life together begins to need some guidelines. Small groups begin to construct these; larger groups can critique them. Meanwhile projects and ideas begin to proliferate and out of these a larger cultural whole slowly emerges. By the end of the year the room is packed with student-designed items that speak movingly of the human experience while emerging from their constructed culture within our own human community. The classroom looks like many issues of the *UNESCO Courier* enacted in one place.[\[7\]](#)

In conclusion, we may follow Lather's(1991) admonition that we shift away from a model of discovering universal knowledge fit for a general curriculum, and endeavor to elaborate context-specific intelligibilities, that include the concerns of all parties

involved in the particular educational situation.

### **Beyond Disciplines of Knowledge**

It is traditional to view the terms of our language as gaining their meaning by their links to specific, real-world referents. We have such words as "lion," "rabbit," and "elephant" because we wish to distinguish between three different species of animals. However, for the constructionist, this view of language as a picture is found wanting. Rather, echoing the emphasis on meaning in use, the meaning of words is traced to the relationships in which they play a part. Thus, the meaning of the term "aggressive" is not derived from a specific datum in the world, but from the linguistic contexts in which it is used by people to do things with each other (e.g. index action, assign blame, prepare a reply). Its meaning will thus change importantly depending on whether one is working with others to deploy troops, develop a business strategy, or combat cancer cells. In the same way "lion" may mean quite different things depending on whether one is speaking about jungles, the stars, or a performance of *The Lion King*. It is largely this polysymous character of words, their capacity to be used in multiple contexts of relationship, that both injects the language with flexibility and allows for the subtle nuancing of action in any given setting.

Within the present century there has been a concerted attempt to delineate fields of knowledge - chemistry, physics, history, and the like. Curricula of study are typically arranged so that students are exposed at least minimally to a variety of the separate fields, and ultimately acquire in-depth knowledge of at least one of them. However, from the constructionist standpoint, delineations in knowledge are useful primarily for those within a particular domain of study. They enable communities of knowledge makers to generate achievements in the terms of their traditions. While education in these traditions has much to be said for it, educational processes circumscribed by disciplinarity are deeply problematic.

At the outset most issues of central significance to the culture are either tangential or entirely irrelevant to the existing traditions of study. Disciplinary agendas are seldom set by national or local agendas; they tend to remain internal - honored by the denizens within. Thus, the public tends to look with dismay at the work of "eggheads," and the latter view with disdain the "low level" of public deliberation. Unfortunately, it has only been slowly and sporadically that the traditional disciplines have made a contribution to national dialogues on abortion, social justice, environmental degradation, the mushrooming of internet communication, social conflict, gay and lesbian issues, welfare and medicare reform, and so on. When scholars have spoken out, they are often considered mavericks - not quite acceptable within the disciplinary mainstream - and have resorted to developing new domains of study (e.g. Women's Studies, Cultural Studies, Environmental Studies, Peace Studies, Interpretation Studies).

To the extent that education is about enhancing the quality and efficacy of public deliberation and action, there is much to be said for curricula released from the

demands of disciplinarity. Rather, in pre-professional education a premium may be placed on liberating the discourses and practices from their disciplinary lodgements. From a constructionist perspective, disciplinary forms of life may be invited on holiday. Issues of practical public (or private) concern may set the agendas for education; the disciplines may supply relevant resources. As students confront major issues of the times, they would not be constrained by the few tools of a constricted subject matter. Rather, they would be free to roam across whatever domains are necessary in terms of their goals - ransacking, borrowing, extricating, annexing, combining, reformulating and amalgamating in any way necessary for the most effective outcome. Students working on a problem of local water pollution, for example, might find they require statistical methods, a handful of ecological concepts, historical sources, and a poem for rhetorical impact. As the various vocabularies of relationship are opened for continuous reconstitution, so are we positioned for efficacy across changing conditions within the broadest spectrum.

To illustrate, the Departments of Education in the states of both Connecticut and Maryland (see Baron et al. 1989) have attempted to transform the means of student assessment in grades 9-12. In particular, the aim has been to shift emphasis away from mere regurgitation of accumulated facts (favored by the "mind as slate orientation"), and to gear assessment to the means by which students utilize and combine multiple skills in newly challenging contexts, and communicate their conclusions to others. Thus, students may work individually or in groups to solve complex, multi-step problems, collect data, analyze, integrate, interpret, and report their results to real audiences. As the educators see it, such tasks allow students to "construct meaning and structure investigations" for particular audiences. The teaching emphasis thus shifts from preparing students for mere repetition of the regimented and standardized discourses, to developing skills for confronting complex and ever-changing circumstances outside the educational sphere. These arguments are closely related to an emphasis on meaning in practice.

### **Toward Meaning in Practice**

By traditional accounts, education functions to produce learned or knowledgeable individuals, who either by dint of what they know and/or their rational abilities, are equipped for effective action in whatever situations life has to offer. Inscribed on their mental slates are maps of what there is, along with the details of history, the proper modes of deduction, and so on. Education is for purposes of mastery and storage of knowledge; subsequent life provides the conditions for its use. Paulo Freire (1972) has voiced one of the most stinging critiques of the resulting mode of education:

"The teacher talks about reality as if it were motionless, static, compartmentalized, and predictable. Or else he expounds on a topic completely alien to the existential experience of the students. His task is to "fill" the students

with the contents of his narration - contents which are detached from reality, disconnected from the totality that engendered them and could give them significance. Words are emptied of their concreteness and become a hollow, alienated, and alienating verbosity." (p.57)

As advanced above, language acquires both its social value and its meaning largely from the way in which it is used by people in specific contexts. The challenge for the educational process, then, is not that of storing facts, theories and rational heuristics in individual minds. Rather, it is to aid in generating contexts in which the value and meaning of the constituent dialogues may be most fully realized, conditions under which dialogues may be linked to the ongoing practical pursuits of persons, communities, or nations. In effect, the constructionist would favor a substantial reduction in the canonized curriculum in which students are required to take courses either because they are prerequisites for other courses, or necessary preparations for life. (In few of these cases is the course material linked to an immediate and practical context of usage, and too often the course material makes sense and is applicable only within the rarefied and delimited atmosphere of the educational system.) Rather, the constructionist would favor practices in which students work together with teachers and others to decide on issues of importance, and the kinds of activities that might best allow significant engagement. For example, if students are concerned about ecology, racial tension, abortion, drugs, the rock music industry, the demands imposed by the fashion industry, forms of self-expression and so on, can projects be developed that will generate requisite skills? Can they interact with those engaged in these domains, collect relevant materials, read related books and articles, discuss with each other, and ultimately formulate views that can be brought to the attention of parents, police, business leaders, government officials and the like? For the constructionist, then, educational dialogues should be wedded as closely as possible to the circumstances of application.

To put it in other terms, why should education be preparatory to communal existence rather communal existence determining the contours of education? When one is carrying out responsible practices in the world, books, mathematics, and experiments are not hurdles to be jumped under threat of punishment. Nor are they building blocks for a good life at some point in a distant future. Rather, they serve as resources for ongoing dialogues and their associated practices. To possess books is much like having additional participants in the dialogue. Mathematics for example, would no longer be the odious medicine it is to many, and which they are forced to swallow even when they cannot articulate the sickness for which it is said to be the cure. Rather, mathematical techniques might become the needed tools for advancing a cause - determining significant perturbations in a phenomenon, assessing costs and benefits, reading demographic charts, or effectively communicating the results of one's efforts to others.



To illustrate the possibilities, consider a program of education carried out in a medical school in Limburgh, Netherlands. Traditional medical training is premised on an exogenic view of knowledge, holding that practical engagement should await the "filling of the mind." Thus, three years of education may precede any significant engagement with the challenges of medical practice. Yet, in the the Limburgh experiment, the incoming student is immediately placed into apprenticeship with a practicing doctor. As problems are encountered within the practical setting, they raise questions that the student cannot answer without inquiring into relevant resources (books, journals, statistical charts). As these resources are sought out and incorporated, the student gains further efficacy as an apprentice, only then to encounter further questions of practical significance which again send him or her back to the necessary resources. When operating at its best, the student is highly motivated to acquire information, and this acquisition is tied to specific contexts of usage.[\[8\]](#)

### **Toward Reflexive Deliberation**

As professional communities coalesce around visions of the real and the good, they tend toward insulation from that which lies outside their boundaries. It is not simply a matter of two cultures - sciences and humanities - but insulation among disciplines within the sciences and humanities, and within sub-sectors of these disciplines. (For example, the American Psychological Association now lists over 50 sub-divisions, many of which have their own journals, professional meetings, reputational hierarchies, and so on.) Most important for present purposes, there is little means within a discursive community for questioning its own legitimacy - its strengths, weaknesses, limitations, and suppressions. In the sciences, for example, one may easily question the validity of a given piece of research, but the value of research itself is scarcely a matter of debate. Further, there is little means of acknowledging the potentials of alternative world views. For example, one trained in physiological research has little means of questioning the legitimacy of physiology as a form of truth, or recognizing the benefits derived from alternative discourses outside this domain (e.g psychological, spiritual, or aesthetic). In effect, physiological discourse (like all others) is self-referring and self-substantiating, and in this sense fails to invite alternative forms of articulation into dialogue.

Consistent with the preceding emphasis on moving from authoritative monologue to dialogue in the educational setting, means are required for opening the authoritative languages to reflexive deliberation. That is, the authoritative discourses must be opened to evaluation from alternative standpoints, including both authoritative and informal. By exposing any professional discourse to the concerns of its peers - for example, by considering biological texts in terms of its dominant metaphors (literature), or literary texts in terms of implicit political ideals - we gain perspective on the strengths and weaknesses of the work in question, and add dimension to subsequent dialogues. By exposing authoritative discourses to the local and informal standpoints of the community, such discourses are again challenged and dialogue enriched. In all cases, the analyst may also gain insight into the strengths and

limitations of the standpoint he/she brings to bear.

This concern with reflexive deliberation takes on added dimension in light of longstanding discussions of the “hidden curriculum,” a term referring to beliefs and values that schools teach implicitly. As the hidden curriculum argument suggests, all discursive practices carry with them an associated range of values and practices. Thus, to incorporate a professional discourse (and the modes by which it is taught) is also by indirection to absorb its implicate orderings for cultural life. For example, Bowles and Gintis (1976) have described how working class students, in particular, are encouraged to be obedient, passive, and unoriginal. Apple (1982) has discussed how the production of textbooks and other curriculum materials establishes the values and beliefs of certain groups as “official” knowledge. Aronowitz and Giroux (1991) argue that mainstream expectations systematically exclude members of subordinate groups from academic success, and reinforce and justify the values of dominant groups. Similarly, Beyer and Apple (1988) argue that, instead of producing citizens capable of articulating their own views on our collective life, schools produce workers prepared to subordinate themselves to others’ judgments.

For most of those concerned with hidden curriculum effects, a strong emphasis has been placed on a pedagogy of critique. Critique is most certainly to be welcomed; it is through this means that otherwise marginalized groups acquire confidence in their own positions. However, two problematic features of such reflexivity are noteworthy: first its exclusive emphasis on critique, and second its dedication to liberation values. Yet, while critical reflexivity is imperative, it is also delimiting (see Gergen, 2001). Critique typically fails to credit the discursive communities under question with internal sensibility - with “making good sense for good purposes” within their own terms. To presume the condemnation of the “hidden curriculum” is to suppress the voices of those who embrace its values. By using critique alone, the potentials of such discourses and practices are suppressed, and appropriation for local purposes discouraged. From the relational standpoint developed here, critique must be supplemented by modes of appreciative inquiry. The point of reflexive deliberation is not to widen the chasm between cultural enclaves, but to enrich the forms of cultural life through processes of inter-interpolation.

As also indicated, most critical analyses also favor an alternative, liberationist agenda. For example, McLaren emphasizes the “guiding referents of freedom and liberation” (1994, p.201). Giroux (1992) argues that we must demystify the official and the hidden curriculum by revealing the evaluative choices implicit in them, and then explore alternatives to these mainstream beliefs and values. Aronowitz and Giroux (1991) argue that we must “make a firm commitment to cultural difference as central to the meaning of schooling and citizenship” (p.12), and must, “educate students for the maintenance and defense of the principles and traditions necessary for a democratic society” (p.34).

From the present standpoint, while such commitments represent valuable traditions within the culture, they also circumscribe the conversation. They too derive from

authoritative communities of knowledge makers, and thus, tend toward isolation, suppression, and self-rationalization. For example, how is the educational process to accommodate those who do not believe in the equality of all voice - ranging from Orthodox Hindus or Catholics to those who would not "spare the rod?" And what conception of equality should guide our decisions: an equality of opportunity, in which everyone gets a fair chance but those who fail are left behind; or an equality of outcome, in which everyone is guaranteed some degree of success? Facing such diversity, a liberation curriculum runs the same risks of hierarchy and suppression as those institutions under attack.

These limitations have scarcely gone unrecognized. Aronowitz and Giroux (1991) remind us, that we should not paternalistically impose "alternative" views on students and teachers. As Lather (1991) also points out, "Too often, tied to their version of truth and interpreting resistance as 'false consciousness,' liberatory pedagogies fail to probe the degree to which 'empowerment' becomes something done 'by' liberated pedagogues 'to' or 'for' the as-yet-unliberated." (p. 105) From the present standpoint, there is no means by which a pedagogical practice can escape the criticism that it favors an ethnocentrically circumscribed vision of the good. Or to put it otherwise, there is no escaping a history of relationship. However, because it is within relationships that conceptions of the good and true are generated, then the existence of difference invites the development of new forms of relatedness. That is, forms of interchange must be sought from which disparate groups can forge new and possibly more inclusive orders of the good. In addition to pedagogies of appreciation and critique, then, it is essential to develop modes of creative interchange, practices that will enable creative amalgams to replace conflict and hostility.

### **Toward Generative Relationships**

Traditional views of knowledge as "within individual minds" favors a distinct division between the teacher and student. The teacher "knows," and students are thrust into the position of objects to be operated on - minds to be filled with contents or rationalities. From the constructionist standpoint, the individual is not the possessor of contents or rationalities, but rather, participates in them. Knowledgeable and rational statements are not external expressions of the internal mind, but are relational achievements. What stands as reason, memory, motivation, intention and the like are the result of coordinated action and negotiation within a community (Billig, 1987; Edwards and Potter, 1992; Myerson, 1994). For the constructionist educator, the primary challenge is that of contributing to generative relationships - relationships from which the student emerges with expanded potentials for effective relating. The student's role shifts from that of object to be operated on to a subject within relationships.

Explorations of relational process in the classroom are now substantial. For example, Edwards and Mercer (1987) have researched the shared meanings within a classroom, and the challenge for teachers to make explicit the usually hidden or implicit ground-rules for what is being shared. A fine-tuned analysis of the jointly

constructed worlds of teacher and student, especially within the context of assessment, is contained in Grossen's (1988) work. Wortham (1994) demonstrates the ways in which classroom interactions can be swept away by the particulars of the examples under discussion. Walkerdine's (1997, 1998) explores the the life of students as participants in the discursive regime of the school, and demonstrates the capacity of the student for multiple positionings within the discourse. Still other inquiry enables us to see rational thinking as a process *distributed* among participants in a classroom (Salomon,1996).

Most important, however, is the question of how the focus on relationship may enrich pedagogical process. Rather than a subject matter or child centered classroom, how would educational processes be constituted if relationships were primary? In this context one appreciates more fully the limitations of the lecture or teacher's monologic presentation. From the constructionist standpoint lecturers are primarily demonstrating their own skills in occupying discursive positions.<sup>[9]</sup> While there is some gain to be achieved in furnishing students with models for playing out the role of authority, exposure to models is insufficient to enable them to do the same themselves. To face the issue more bluntly, the very processes necessary for the public production of authority, are hidden from student view. The hours of preparation - the re-reading of texts, scanning of notes, exploration of new resources, discussions with colleagues, trial and error presentations in preceding contexts - all of which may be necessary for a consummate lecture, are essentially removed from student view. Such removal is essential, of course, in sustaining the myth of authority as an individual possession - "my lecture demonstrates the superiority of *my* mind." However, these preparatory actions are all immersions within ongoing dialogues within the field, and what one says on the podium are simply localized manifestations of these dialogues. To obscure this range of preparatory participations is not only to sustain a problematic myth, but it is to deny access to the very kinds of processes in which students must engage if they themselves are to communicate with efficacy.

As we shift from the individual to the relationship as the center of focus, we can again appreciate the work of social constructivists on processes of teacher assisted learning, semiotic apprenticeship, and relations in the zone of proximal development are salutary (Kozulin, 1998; Wood, Cobb, and Yackel,1995; Becker and Varelas, 1995; Laroche, Bednarz, and Garrison, 1998). All locate the site of learning within the relational matrix. However, perhaps the most visible outcome of constructionist thinking thus far is the emergence of collaborative or cooperative learning (Sharan, 1990; Bleich, 1988). As Kenneth Brufee (1993) puts it, collaborative learning is a process in which the ongoing exchange among students serves as the primary educational function. One learns through engaging, incorporating, and critically exploring with others. Ideally, through social interchange skills in articulation and responding are developed, and new possibilities of world construction are opened. Learning becomes a "shift in our language-constituted relations with others." In one inventive display of collaborative learning, author Ken Kesey worked with his creative writing class of 13 students at the University of Oregon to write and publish a collective novel, Caverns (Penguin Books, 1989). In other contexts, much the same

logic has lead to the production of other, book-like products (including computer files, video cassettes, films, pamphlets), which themselves can stand as inputs to other groups (parents, city government, community members) or classes. In the same motif, class groups work together in developing positions in a debate, materials to use in teaching others, or communiques to like-minded students in other parts of the world.

Yet, collaborative inquiry may be viewed as but a beginning of exploration into the enormous potential of relationship centered education. We are thus enriched, for example, by inquiries into forms and potential of dialogue in the classroom (Barbules, 1993; Wells, 1999), and by explorations into the importance of the friendship relationship in teacher-student relations (Rawlins, 2000). Much to be welcomed is also an expansion of the concept of relationship to include more than the social relationships within the class. It is here that the pedagogical innovations fostered by the social constructivists can play a particularly important role. Inspired by Vygotsky's work, the concept of relationship is expanded to include the various tools and materials encountered in the educational process. However, there is no principled end to the perimeters of relationship. Already we have commented on relationships between the school and to both community and national agendas. We are only beginning to appreciate what may lies beyond the horizon of a fully relational education.

## **In Conclusion**

While contentious in many respects, it should finally be understood that there is nothing within these arguments that favors an abandonment of traditional educational practices. All practices construct the world in their own way, carry values of certain sorts, and lend themselves to certain futures at the expense of others. What is being proposed is an alternative epistemology to that offered by the existing traditions, with which we might open new possibilities in education. As we have proposed here, a social constructionist view of knowledge argues strongly for greater democracy in negotiating what counts in educational practice, the local embedding of curricula, the breaking of disciplinary boundaries, the lodgment of disciplinary discourses in societally relevant practices, educational practice in societal issues, and a shift from subject and child centered modes of education to a focus on relationships – extended so far as practicable. Many of these emphases are not new to the dialogues on education. And in this sense social constructionism does lend a strong support to certain forms of practice. However, in our view we have yet to open the door to the full potentials of a constructionist epistemology; the future is open to the dialogues that will follow.

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[1] For further elaboration of exogenic vs. endogenic conceptions of mind, see Gergen (1985).

[2] von Glazersfeld.....

[3] A more complete account of this relational view of meaning may be found in Chpt. 11 of Gergen (1994).

[4] For further critical discussion of constructivist orientations to knowledge and education see Phillips (1997) Shotter (1995) , Olssen (1996), and Osborne (1996).

[5] There are exceptions to this emphasis, and Vygotskian educators now lay increasing stress on social process. See, for example, Holzman (1997) and Wells (1999).

[6] A social constructionist would thus find uninteresting, if not obfuscating, a theoretical statement such as "The chained complex (in the child's movement toward the mastery of concepts) is constructed in accordance with the principle of a *dynamic, temporal unification of isolated elements in a unified chain, and a transfer of meaning through the elements of that chain.*"(Vygotsky,1987,p.139).

[7] Mary Fox, personal communication.

[8] To further illustrate, vocational students at a high school in Gainesville, Georgia engage in building houses. Local businessmen provide money and supplies for the project, with the understanding that the houses will be sold and the money used to build others.

[9] See also Kvale's (1987) discussion of traditional examinations as ways of sustaining institutions of knowledge (power) and censoring their alternatives.