Psychological Theory and Educational Reform

How School Remakes Mind and Society

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The Discourse of Educational Reform

Philosophizing should focus about education as the supreme human interest in which … other problems, cosmological, moral, logical, come to a head.

(J. Dewey, 1984, p. 156)

Few regard educational theory as the queen of the sciences. Educational theory tends to be regarded as an applied science if a science at all. Yet education, like government, economics, and law, defines a special space that requires one to cross traditional disciplinary borders as well as frontiers between theory and practice. Because educational theory requires a framework that embraces a rich diversity of knowledge, it is an ideal candidate for the position as, if not the queen, at least the handmaiden of the sciences. Educational theory has rarely risen to that challenge. Most of the discourse on education is either a defense of the traditional or an urgent call for reform. The discipline has been slow to articulate the space in which such debate takes place.

Setting out that frame is one of the major intellectual tasks of this new century. The end of the 20th century, marked by remarkable progress in the specialized sciences, gives way to the 21st, in which the larger problem stands out in bold relief – What is the relation between these bits of specialized knowledge that have been carefully constructed so as to honor their autonomy? As Yehuda Elkana (2000) has pointed out, the Enlightenment, of which the specialized sciences are the fullest flower, succeeded only by marginalizing the question of the relation between its specializations. The problem is visible everywhere. Psychology has as its domain the mental life of individuals, but most psychologists recognize
that the contents of consciousness are defined interpersonally and socially. Sociology, law, and economics have as their domains the action of groups and institutions, but most sociologists, legal theorists, and economists recognize that social practices are lodged in the consciousness of individual minds. Economists develop impersonal laws of the market but recognize that such laws—essentially those for maximizing personal gain—are routinely violated by personal whim, allegiance, charisma, habit, or conformity. One is not being melodramatic to say that these specialized scientific disciplines face a crisis.

The basis of the crisis, I believe, is what appears to be an unbridgeable gap between the institutional and the personal: between the formal as embodied in large-scale institutions and the informal as embodied in individual minds and local culture; between the fixed, public rules and subjective, private intuitions; between the objectively given and the subjectively taken; between social norms and intentional actions; between custom and law; between written record and local interpretation. The gap is also manifest in disciplinary contexts. In linguistics, it is the gap between the formal rules of the grammar, insisted upon by parents and pedagogues, and the implicit pragmatic knowledge of speakers; in law, it is that between the formal law as stated and its contextual interpretations assigned by the courts; in literature, it is between what a text specifies and what a reader can bring to it; in psychology, it is between algorithmic cognitive processes detailed by the cognitive scientists and the contextualized, subjective judgments of rational and responsible human agents; in sociology, between social norms and local practice.

In educational discourse, the problem is clearest of all. John Dewey formulated it in terms of the “child” and the “curriculum.” It is the chasm between what the society through its institutions defines, mandates, and assesses in its curriculum of study and what teachers and children make of it in their subjective and intersubjective mental lives. In its most local form, it is the gap between the child as a person and the child as a member of a defined school population, a class. In its most political it is the widening gap between proposals for school reform, one group seeing the achievements of the collective as primary, the other seeing the experience, beliefs, and goals of individual learners as primary. It is only a slight overstatement to say that if we could solve the educational theory problem, the rest would be easy. “Solve” may be a bit ambitious, “address” more realistic.

Admittedly, the so-called mature disciplines are unlikely to rush to take up a lead offered by educational theory. Dewey, one of the leading
philosophers of the 20th century, despaired of ever being taken seriously by other philosophers because he based his analysis on the study of education. Although he rarely referred to his own work, he once wrote:

Although a book called *Democracy and Education* was for many years that in which my philosophy, such as it is, was most fully expounded, I do not know that philosophic critics, as distinct from teachers, have ever had recourse to it. I have wondered whether such facts signified that philosophers in general, although they are themselves usually teachers, have not taken education with sufficient seriousness for it to occur to them that any rational person could actually think it possible that philosophizing should focus about education as the supreme human interest in which, moreover, other problems, cosmological, moral, logical, come to a head. (Dewey, 1984, p. 156)

Dewey’s “bottom-up” pragmatism is now recognized as standing on all fours with any other philosophical tradition at the same time its value as educational theory is seen by many as at an all-time low; for many modern critics Dewey is seen as the problem rather than as the solution (Ravitch, 2000). Yet Dewey’s theory was the last theory broad enough to justify characterization as a “theory of education” (he preferred the expression “science of education”), because he viewed education in a social context, integrating considerations of a democratic society on one hand and the nature of children’s lived experience on the other. In that sense Dewey stands as the paradigm for all such theory.1 I share both Dewey’s optimism and his pessimism. Education provides an ideal context for grappling with the large problem of the relation between persons and institutions. But even if progress can be made there, one cannot be optimistic that educational theory will be seen as sufficiently “queenly” to be read carefully beyond its own borders. Whether or not it is adopted beyond its own borders, addressing the dilemma in the study of education is of importance in its own right and it defines the purpose of this book.

Not that educational researchers have slumbered in Dewey’s shadow. Despite considerable scholarship and important local advances, it is widely conceded that educational thought and research lack an organizing theory and consequently cannot be regarded as science (Elkind, 1999). Pedagogy is a central concern of educational research, but pedagogy refers primarily to practices of teaching, not to the broader question

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The Discourse of Education

of why teaching is required in the first place. A sufficient number of the-
tories have been applied to education – Thorndike’s laws of learning, 
Skinner’s theory of behavior modification, Erikson’s theory of person-
ality, Thurstone’s theory of primary mental abilities, Berlyne’s theory of 
motivation, Piaget’s theory of mental development, Vygotsky’s theory 
of cultural appropriation, Bruner’s theory of knowledge construction –
to have kept researchers and writers occupied for almost a century.
For reasons that are not hard to grasp, such research has been moti-
vated by the goal of improving education whether through upgrading 
either teachers, programs, or materials, including books and computers,
or through improving the quality and equity of the pedagogical inter-
action through an improved understanding of learners and improved 
teaching techniques.

Why have these efforts not turned into an educational theory? I can 
suggest at least three reasons. The first is the problem of deciding just 
what is meant by a “theory.” A theory is a conceptual system, that is, 
a system of concepts with four properties. First, the concepts refer to 
etities that can be identified or pointed out and referred to. Second, 
the concepts are linked logically to one another to form a network al-
lowing for inference and for some concepts to be defined in terms of 
others. And third, a theory is composed of causal laws linking concepts 
to each other. The theory thereby allows prediction and explanation of 
the events specified in it. All conceptual understanding has these prop-
erties so we must add a fourth, namely, that the theory is amenable to 
documented elaboration and refinement. With these four in place we 
would have what Thomas Kuhn referred to as a paradigmatic “normal 
science.” It has been argued, following Kuhn’s (1962) analysis of sci-
entific revolutions, that education is in a preparadigmatic state, that is, 
lacking an organizing framework, indeed, awaiting such a framework.

Currently, the study of education is essentially an applied field, a do-
main of practice rather than theory, and unified not by theory but by 
a practical concern, namely, educating our children and training teach-
ers to do so effectively: hence, the inchoate programs of study in most 
schools of education. But even practical activities may, with increased 
understanding, mature into theories. Theories, however, abstract from 
the complexity of everyday events and practices. After all, Galileo suc-
cceeded in formulating a theory of motion only by delimiting his attention 
to a prescribed area, simple objects in rectilinear motion in frictionless 
space, while deliberately ignoring the “causes” of motion. Morrison 
(1974) and Pacey (1974) have described the long and complex history
of how practical knowledge of engineering survived and grew before it came to be dominated by theory. Perhaps education is like engineering, accumulating local knowledge while waiting for the development of a theoretical framework sufficiently broad to incorporate and explain that more local and contextualized knowledge and practice.

Second, once we acknowledge the value of theory, we must decide what kind of a theory it is to be. Is it to be a cause–effect model as one encounters in the physical sciences or a more rational–intentional theory that one meets both in Dewey and in the more advanced biological and cognitive sciences? As Cziko (2000) has noted, if you put a glass of warm water into a refrigerator, the temperature of the water drops to match that of the refrigerator. But if you put a bird into a cool room, the bird’s temperature remains unchanged. Part of the bird’s biology is directed to maintaining constant body temperature. Analogously, successful students know that if the teacher’s explanation is inadequate, they may fill in the missing bits from the textbook, a peer, or a parent, thereby maintaining a certain standard even in an impoverished environment. Cause and effect models are largely inappropriate.

Behaviorism was the attempt to explain action in simple causal terms. These days it is difficult to find a defender of behaviorism, yet the dominant tradition of educational research continues to rely on analysis of variance (ANOVA) models that attempt to isolate the causal factors such as dispositions and traits in the individual and various factors in the environment that may account for behavior. A population of persons or a classroom of children continues to be treated as a field of grain, the yield of which could be attributed to such causal factors as the quality of the seed, the days of sunlight, the quantity of rain, and the amount of fertilizer. Researchers continue to search for independent variables that account for some, however small, percentage of the variance of some dependent variable such as school achievement. Thus putative causal factors such as intelligence quotient (IQ), social class (SES), school type, teaching method, and classroom organization continue to be examined to determine their effects on learning with little regard for the fact that children are more like the bird mentioned earlier than like the glass of water. What has yet to be recognized is that individual children making up the population, unlike individual plants, may have their own

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2 Researchers in Nordic countries may perhaps be forgiven for seeing a room full of bobbing tow-headed children as analogous to a field of ripened grain; for the rest of us there is no excuse.
goals, interests, beliefs, and intentions to which explanations must ultimately appeal. It is individuals who are ultimately responsible for their learning and their actions. Questions of intentionality and responsibility, plans and goals of the persons so affected, are nowhere to be seen in such educational theorizing.

The kind of theory chosen also determines what is to be taken as real, the individual learner or the groups individuals participate in, namely, school classes. Different causal laws are applicable in the two cases. The laws that apply to the learning of an individual have everything to do with intentionality, including understanding, consciousness, and responsibility. The laws that apply to the group of children, the class, on the other hand, average out intention and responsibility in order to assess the effects of independently determined variables such as class size, type of student, form of the curriculum, and form of assessment on the mean and standard deviation of some criterion variable such as mathematical achievement. The former appeals to such intentional states as beliefs and goals; the latter, to more direct cause–effect relations. Thus both the entities taken as real – individuals or classes – and the types of explanatory relations appealed to – intentional or causal – must be carefully distinguished.

Intentional versus social causes are not distinguished in educational theory. This results, as we shall see, from the tendency in Anglo-American tradition to treat social institutions as if they were merely aggregations of individuals. Consequently, the personal and the social are routinely conflated, both when research designed to assess the impact of some variable such as social class or quality of teaching is used as explanation of the personal, intentional learning of individuals, and vice versa, when psychological theory whether learning theory, ability theory, or, for that matter, Piagetian theory, is used to mandate programs of study and norms or standards of achievement. Intentional causation, the “first-person” beliefs and intentions of teachers and learners, does not map onto the social causation, the “third-person” variables found to be predictive of average class achievement. In my view, failure to distinguish persons from institutions is responsible in large part for the hodgepodge of contradictory claims manifest in current proposals for educational reform.

A third problem in constructing a framework theory for education is inherent in the changing nature of the entities under discussion. A rigorous science assumes that the entities postulated retain their properties through time, an assumption that is clearly violated in any
developmental theory, including education, in which neither the characteristics of individuals, the attitudes about child rearing, nor the goals of education remain invariant through time. These changing attitudes and goals of education mirror major historical changes, as we shall see. Social institutions such as the family have always turned sons and daughters into husbands, wives, farmers, cooks, or whatever, on the basis of a kind of evolved, collective wisdom. What is new in the age of bureaucracy is a new faith in the exteriority of knowledge, that is, the belief that knowledge can be made explicit, that it is a public commodity that has a value, that can be bought and sold, that can be stored and transmitted, and for which both learners and schools may be held accountable. It is therefore inappropriate to describe historical changes in education in terms of a single criterion such as rising or falling standards.

What is less obvious is the role that institutions have come to play in this bureaucratic age. Explicit knowledge can be used, it is believed, to design institutions rationally to achieve specific goals, and schools are one such institution. Institutions are now called upon to do what formerly was taken to be the product of private virtue and wisdom. It was the Second World War that discredited the Enlightenment view of the perfectibility of humankind, the view that had been used to justify and to reform education for the preceding two centuries. What became clear in the aftermath of that war was that those who committed the greatest atrocities were often the most cultured and best educated. Contrary to the dream of the Enlightenment, education does not civilize human beings. So much for the perfectibility of humankind.

What has replaced the hopefulness of the Enlightenment, I suggest, is the view that it is institutions, not persons, that are perfectible.3 Whereas individuals may prefer personal gain to social justice, institutions can be created that, it is believed, ensure that justice triumphs over greed. What we are called upon to do is to establish appropriate institutional forms; institutions, unlike persons, we now believe, are perfectible. In a sense this is the old Marxist view but with an important difference. The Marxists hoped to kill two birds with one stone, namely, perfect the institutions and in that way perfect the individual as well. That is, for the Marxists, the Enlightenment goal of the perfection of the individual was to be achieved through social, institutional means: Collectivize the

3 Although I thought this to be an original discovery, I later discovered that Hirschman (1970, p. 114) referred to the belief in the perfectibility of human institutions as a “typical American conviction.”
farms, share the modes of production, and everyone will not only share the benefits but learn the essential human virtues.

The new view abandons the Enlightenment hopes altogether. People are just fine as they are; they do not need to be changed in any basic way. What they need to learn is to participate in the institutions, not just to achieve personal goals, but also to contribute to the perfection of those institutions, to make them more effective in achieving their specialized goals. Ideally, they need to learn not only to participate effectively in those institutions but also to criticize them, to make them more accessible, more just, and more humane. In such an institutional context it is no more realistic to address questions of personal beliefs independently of the society’s knowledge and its institutions than it is to address questions of personal virtue independently of the courts and respect for law. The personal is completely embedded in the institutional. I examine this issue in detail in Chapter 14.

Like all single-minded goals, the goal of perfecting our institutions is perhaps doomed to failure because institutions, like persons, are prone to creating and then preserving narrow interests that others experience as oppressive. We could, presumably, create institutions in which everyone learned the “appropriate” cultural knowledge, but the methods needed to do so would be oppressive indeed. Individuals, too, have rights, in Canada guaranteed by the Charter of Rights, including the right to remain silent and the right to hold wildly quixotic beliefs.

Whether or not the belief in the perfectibility of institutions is warranted, modern societies are defined by their institutions, including their schools. But here is the catch: We must learn to think about our institutions with their rights and responsibilities while thinking about persons as individuals with theirs. We must avoid the temptation to reduce one to the other. Whereas persons may be thought of as a kind of institution and institutions may be thought of as a kind of person, it is a mistake, I believe, to see schooling either as just socialization or as just human development. By clearly distinguishing persons from institutions and by recognizing schools as the conflictual space in which persons and institutions negotiate their goals and achievements, we may take some steps toward advancing the study of education.

\(^4\) Bruner (1996) described such a conflictual space in terms of three antinomies: individuals versus cultures, local versus universal, and talent-centered versus tool-centered. Antinomies require trade-offs rather than reconciliation.
My purpose, then, is to advance an account, not of all education, but of its institutional form, namely, schooling, an account that views learners, teachers, and schools themselves in intentionalistic terms, adopting a vocabulary of agency, intentionality, responsibility, and accountability. Such an account will allow us to see the quite different and sometimes incommensurable responsibilities of students, teachers, and schools and will provide a framework for relating individuals to their public institutions, beginning with the school.