

applied to them. The basic question concerns the nature of education with no qualifying adjectives prefixed. What we want and need is education pure and simple, and we shall make surer and faster progress when we devote ourselves to finding out just what education is and what conditions have to be satisfied in order that education may be a reality and not a name or a slogan. It is for this reason alone that I have emphasized the need for a sound philosophy of experience.

CRITICAL COMMENTARY



There would be no fixed ends in a democratic pursuit of progress. Nor were there to be fixed objectives or ends in democratic education. This position was made acidly clear in a debate launched by Robert Maynard Hutchins, president of the University of Chicago and founder of the "Great Books" approach to curriculum. Hutchins had long been attacking Dewey and his associates for what he conceived to be a vocational and overly materialist approach to education. Progress, multiplicity, relativism—all were attacked. Amid more or less powerful arguments for general education, Hutchins wrote in *The Higher Learning in America* (1936, 66), "Education implies teaching. Teaching implies knowledge. Knowledge is truth. The truth is everywhere the same. Hence education should be everywhere the same." Any course of study, Hutchins added, will be the same at any time or place and under any political, social, or economic conditions. Emphasizing absoluteness and universality, he insisted that the idea of progress was meaningless. Education had to be properly understood as the cultivation of the intellect. It could only be contaminated when windows were opened to the social, public, and political world outside.

Hutchins's book appeared only a year before *Experience and Education*, and the very resurgence of an old debate may well have sharpened Dewey's conviction that the ends of public education had to be viewed as the enhancement of experience and the encouragement of growth. For Hutchins, there was a gulf between the intellect and "mere" experience. For Dewey, the notion of experience referred to all human transactions, all encounters with the physical and human world. If education was to mean anything at all, it had to involve a heightened reflectiveness with respect to lived experience, a more conscious and

Experience and Education: Contexts and Consequences

by Maxine Greene

Experience and Education is a reformulation of John Dewey's educational thinking as it developed from the start of the century. Based on a 1938 address and published under the aegis of the League for Industrial Democracy, it radiates with unexpected meanings when viewed in context. First, Dewey delivered it near the end of the Great Depression that had exposed so many of the flaws and inequities of the pecuniary system. In the immediate background was *The Social Frontier*, a journal published by members of the Teachers College faculty of Columbia University who were concerned about incursions on the rights of teachers, academic freedom, and the future of progressive education. The journal regularly featured "John Dewey's Page," in which Dewey could clarify the liberalism infusing his educational and political writing. Second, in 1937, Dewey chaired a commission that went to Mexico to investigate the charges against Leon Trotsky raised in the Moscow show trials. In doing so, he outraged those who thought the Communists should be supported in the interests of popular-front politics. Debating with Trotsky, Dewey dramatized the differences in their moral perspectives, even as he helped expose the over-coming of socialist goals by violent methods. Related to his educational thinking at the time was the question of how to bring about social change and what it would take to bring about progress by democratic means.

thoughtful way of being in the world. Without such an approach to experience, it was highly unlikely that a pursuit of knowledge could begin. The cultivation of intellect would be passive and largely contemplative, without consequence for the actualities of lived life.

Less than a decade before *Experience and Education* was written, Dewey (1927, 110–42, 184) was exploring the “eclipse of the public” and speculating about the role public schools might play in creating an “articulate public.” In *Characters and Events* (1929a, 503), he was stressing the importance of science for the industrial revolution and for the growth of democracy, which could not come into existence in a society dependent on “mass human labor.” Still, he continued to challenge the “mechanics of modern life” and call for the kind of public education capable of transfiguring such mechanics into “sentiment and imagination.” Yet we may never get beyond the mechanics, Dewey (1929a, 503) reminded readers:

We may remain burly, merely vigorous, expending energy riotously in making money, seeking pleasure and winning temporary victories over one another. . . . To bring to the consciousness of the coming generation something of the potential significance of the life of today, to transmute it from outward fact into intelligent perception, is the first step in the creation of a culture. The teachers who are facing this fact and who are trying to use the vital unspiritualized agencies of today as means of effecting the perception of a human meaning yet to be realized are sharing in the act of creation. To perpetuate in the name of culture the tradition of aloof-

ness from realistic science and compelling industry is to give them free course in their most enlightened form. Not chiding but the sympathy and direction of understanding are what the harsh utilitarian and prosaic tendencies of present education require.

With such cautionary words in mind—and with a reminder that neither science nor the great changes in industry could be ignored by teachers trying to empower students to confront the complex questions raised by cultural change—contemporary educators must remember the gradual wedding of science to technology since the 1920s and, of course, since *Experience and Education*. What Dewey once had called the contest between old and new forms of education now became a contest between “traditional” and “progressive” education. He had in mind, of course, the progressive schools that had grown up since the 1920s in protest against traditional, formalist schools. Affected by the atmosphere of reform during those years, progressive schools were largely private, developed by and for a liberal middle class. The problems of social class, ethnic differences, discrimination, and exclusion scarcely entered the ongoing debate. In *Experience and Education*, Dewey (93) mentioned the importance of students “delving into their roots in the past” to understand the problems of present social life; but there is no talk of diversity, multiculturalism, or the matter of rights, nor of the need to release long-silenced voices—those of women, minorities, and immigrants.

There is no question that TheodoreSizer’s *Horace’s Promise* (1992), Deborah Meier’s *The Power of Their Ideas* (1995), Vito Perrone’s *A Letter to Teachers* (1991), Eleanor Duckworth’s

The Having of Wonderful Ideas (1987), and other recent books further Dewey's notions of active learning, critical questioning, and learning through experience. The so-called "small schools" movement puts emphasis on the importance of creating situations that stimulate questioning and the construction of meanings. None of them fall prey to old notions of romantic progressivism or libertarian ideals of unfettered freedom. Lisa Delpit's *Other People's Children: Cultural Conflict in the Classroom* (1995) came particularly close to *Experience and Education* when she called for attentiveness to the voices and experiences of members of long-ignored cultures. Like Dewey, Delpit (1995, 45) has rejected the "either-or" of subject matter and process, structure and spontaneity:

I suggest that students must be taught the codes needed to participate fully in the mainstream of American life, not by being forced to attend to hollow, inane, decontextualized sub-skills, but rather within the context of meaningful communicative endeavors; that they must be allowed the resource of the teacher's expert knowledge, while being helped to acknowledge their own "expertness" as well; and that even while students are assisted in learning the culture of power, they must also be helped to learn about the arbitrariness of those codes and about power relationships they represent.

Like Dewey, Delpit has expressed concern for the integrity of young people's experience and the importance of effecting relationships between their "expertness" and a relevant stock of knowledge associated with part of the culture of power. Both

would argue that we must teach with this framework in mind.

Questions about the hegemonic influence of the schools still underlie many recent accounts of school reform. Dewey emphasized, as few school critics are likely to do today, the hopes aroused by an intelligent handling of "social control." "The ideal aim of education," Dewey (75) said, "is creation of power of self-control. But the mere removal of external control is no guarantee for the production of self-control. It is easy . . . to escape one form of external control only to find oneself in another and more dangerous form of external control. Impulses and desires that are not ordered by intelligence are under the control of accidental circumstances." Whether Dewey (1929a, 503; 100) was writing about "realistic science and compelling industry" or "the continuous study and learning of the young," he placed constant emphasis on the need for intelligent direction of the common life. From the earliest years, Dewey (100) said, there should be a systematic effort to make "the method of intelligence, exemplified in science, supreme in education." Not only did science become his example of intelligence working at its highest level, the study of science, in elementary and high school, became a paradigm for those interested in solving the problem of organized subject matter. "The case of science," said Dewey (101), "is here employed as an illustration of progressive selection of subject-matter resident in present experience towards organized: an organization which is free, not externally imposed, because it is in accord with the growth of experience itself. The utilization of subject-matter found in the present life-experience of the learner towards science is perhaps the best illustration that can be found of the basic principle of using existing experience as the means of carrying learn-

ers on to a wider, more refined, and better organized enviro-
 world, physical and human, than is found in the experiences
 from which educative growth sets out." The vision of ongoing
 expansion as more connections are made and more perspec-
 tives are opened is present in Dewey's work on the public, the
 arts, and theories of mind and knowing. Whether the perspec-
 tives derive from participatory study of literature, social sci-
 ences, mathematics, or chemistry, each one permits a learner
 to see more, to make more connections. Organized knowledge,
 as the learner succeeds in making new integrations, enables us
 to interpret by bringing together the diverse, swarming facts of
 life in some sort of order. The order is largely conceptual, but it
 arises out of perceived, imagined, and lived realities—and nei-
 ther obscures nor substitutes for them. Indeed, these integra-
 tions allow many aspects of actuality and shared experience to
 become visible in ways ordinary common sense or conventional
 wisdom cannot disclose. Meanings multiply and diversify in
 consequence. As Dewey wrote in *Experience and Nature* (1929b,
 410), "The realm of meanings is wider than that of true-false
 meanings, it is more urgent and more fertile. When the claim of
 meanings to truth enters in, then truth is indeed pre-eminent.
 But this fact is often confused with the idea that truth has a claim
 to enter everywhere; it has monopolistic jurisdiction." Dewey
 (1929b, 411) then noted, "Poetic meanings, moral meanings, a
 large part of the goods of life are matters of richness and free-
 dom of meanings, rather than of truth; a large part of our life is
 carried on in a realm of meanings to which truth and falsity as
 such are irrelevant."

Those words were written less than a decade before the ap-
 pearance of *Experience and Education*, and we can assume that

the same view of meanings underlay what Dewey was saying
 about the sciences, intelligence, and the understanding of so-
 cial issues. Appropriate organization of subject matter, conti-
 nuities and interactions, growth and expansion—these re-
 mained the marks of the Deweyan approach to education. It
 still opens up possibilities for enhanced experience, increasing
 wide-awakeness, and breaks with the merely habitual and rou-
 tine. Reading the book in 1998, however, and realizing that the
 news of the Nazi applications of scientific methods in death
 camps had not yet reached North America in 1938, we cannot
 help wondering about the questions the Holocaust would have
 aroused in Dewey—especially questions having to do with in-
 telligence and control. The work done at Los Alamos and the
 bombings of Hiroshima and Nagasaki had yet to come. We may
 think of critiques of the sciences with which we have become
 familiar, especially those evoked by the effects of technological
 or instrumental rationality. We have become familiar with the
 positivistic splits between knowledge and morality, as we have
 with the lack of reflectiveness when it comes to some uses of
 the sciences. Emphasizing the importance of intelligent con-
 trol of scientific activity, Dewey (100) did acknowledge that sci-
 ence had been applied more or less casually and "under the in-
 fluence of ends, such as private advantage and power, which
 are a heritage from the institutions of a prescientific age." There
 is a measure of irony and pathos in his belief that, if the method
 of intelligence, "exemplified in science," were supreme in edu-
 cation, there would be a greater likelihood of intelligent con-
 trol and planning where the sciences were concerned. We want
 to ask, "But what of private advantage and power? Are they only
 the heritage from the institutions of a prescientific age?"

We cannot reread *Experience and Education* without some of the reconceptualizations as well as the doubts in mind. Not only have we become acquainted with questions dealing with the relation between language and thought but we know what we did not know when it was written: something about the symbol systems impossible to translate into words. The literature on "frames of mind" or "multiple intelligences" (Gardner 1983) has affected how we look at science teaching. We are also likely to take into account Jerome Bruner's (1986) view of the "two modes of thought"—the logico-scientific and the narrative. For Bruner, the logico-scientific has been paradigmatic over the years but requires complementation by a way of knowing that focuses, by means of storytelling, on the particularities of existence. Looking through lenses of this kind, we are bound to look somewhat differently at Dewey's view of development in and through experience and, especially, his view of science and its effects on lived experience.

None of this argument invalidates Dewey's notions of intelligence, social control, continuity, or interaction, though it may deepen and complicate them. It may, in addition, require a reflective and deliberate effort to render our experience with the Dewey text a truly educative one. It is hard to believe that Dewey himself would have recommended separating the text from its social, cultural, and psychological contexts. It is unlikely that he would have set aside the frameworks of ideas from which the book drew so many of its insights. Educative experiences, as we have seen, are those governed by a principle of continuity—what is learned must feed into future understanding and enhancement of experience. Also, the more a given subject matter feeds into the future, the more light it may shed upon

the past. As Dewey (31) put it: "If an experience arouses curiosity, strengthens initiative, and sets up desires and purposes that are sufficiently intense to carry a person over dead places in the future," it becomes a "moving force" to "be judged only on the ground of what it moves toward and into."

Many of us read this text with a pleasant sense of recognition. We find within it many of the suggestions and values that have guided one wing of the educational reform movement today. That wing focuses on the child and young person as an agent, active in the pursuit of meanings and the posing of questions, moving from efforts to make sense of the immediately impinging reality to understanding the continually expanding world beyond. Fully aware of the demands posed by an advanced technological society and the changes wrought by new means of communication, we are unwilling to view our learners as "human resources" subject to the manipulations of powerful outside forces. At once, we are aware that "success" lies at the end of the paths of technological education and, too often, training. In the face of a conservatism suspicious of multiplicity, relativism, pluralism, and constructivism, we hold on to the conviction that experiential learning—much of it suggested on Dewey's pages—can, with properly prepared teachers, instill intensified curiosity, enlarged vision, and clearer and more pointed communication. We nurture hopes as well that such learning may move the young to greater care for their classmates and neighbors and, possibly, to participate in the restoration of a public and the kind of intelligent action that may give rise to authentic democracy.

When we look back at what many persons consider a shatterd public space, noisy with sound bites and the clamor of formulaic television programs, we may think about what it signi-

fied to work for causes such as public arts, conservation, youth activities, rural renewal, and the other attainments that brought people together and gave them reasons to live. The defense of freedom, the resistance to tyrannies, the awakening of solidarity—these forces served as the ground out of which *Experience and Education* took shape. If we seek an educative experience with the text before us, we may begin with our own “present life-experience” and find the kind of “moving force” that may propel us to new modes of sense-making with regard to the public school in a technicized, multicultural society. The questions provoked by efforts to recall what we know about the reforms and the failures of the years before the Second World War should feed our current anxieties regarding schools’ responsibility for educating an “articulate public” (Dewey 1927, 152). There remain open questions about democracy, community, and pluralism.

There are clues to be found in Dewey’s account of experiential education for the learning of the kind of children with whom Delpit is so concerned. We must probe for clues when it comes to universalist, absolutist attacks on schools, never mind the challenge to the very existence of those schools. We need, as well, to ponder again what it demands of us to institute intelligent planning concerning the achievements of science and technology. What is the connection between Dewey’s views of communication and what the Internet and e-mail are making available today? Communication creates community, Dewey (1927, 184) argued: “When the machine age has . . . perfected its machinery it will be a means of life and not its despotic master. Democracy will come into its own, for democracy is a name for a life of free and enriching communion. . . . It will have its consummation when free social inquiry is indissolubly wed-

ded to the art of full and moving communication.”

How, with all our concern for efficiency and speed, can we foster “free and enriching communion” in our classrooms? How can we make possible such communion among immigrants and the native-born? How do we overcome class differences sufficiently to wed social inquiry to communication? How can we reconcile a call for progressive and peaceful social change with what we know as the “savage inequalities” (Kozol 1991) that still plague our public schools? How, beginning with the experiences of diverse young people, can we proceed in a Deweyan spirit to uphold civil rights and civility in our classrooms? How can we introduce a regard for different vantage points or for situatedness in classroom communities often marked by a cacophony of voices and interests? How, among the conflicts of today, can we educate for citizenship as well as competence? How can we bring about the kinds of conditions in which imagination is nurtured and the arts are given renewed regard?

A look at *Experience and Education* in context may enable us to pay heed to questions below the surfaces of schooling and education. At the end of the book, Dewey (115) wrote: “I do not wish to close, however, without recording my firm belief that the fundamental issue is not of new versus old education nor of progressive against traditional education but a question of what anything whatever must be to be worthy of the name *education*.” We are left, happily, in incompleteness. It is up to us in the present day to rediscover the meanings of teaching and learning, education, and the school. Furthermore, it is up to us to reach beyond Dewey, expanding in the direction of social justice, equity, mutuality, and enhanced existence in a not always hospitable world.

Critical Commentary

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Dewey's *Experience and Education* Revisited¹

by Philip W. Jackson

As the subject of my remarks today I have chosen to focus on John Dewey's small book, *Experience and Education*, which was published in 1938 and which continues to be read by large numbers of persons preparing to teach and by many other groups of educational practitioners and scholars throughout the world. There are two principal reasons for my choice. The first is that it is so *apropos*. Indeed, today's occasion almost makes it mandatory.

John Dewey, you see, wrote *Experience and Education* in response to a request from the Kappa Delta Pi Executive Council of his day. He delivered it as the culminating event in the first 10-year cycle of the Kappa Delta Pi lecture series. He had also delivered the first lecture in that series 10 years before, I might add. On this, the occasion of the first Kappa Delta Pi lecture to be named in Dewey's honor, it seems altogether fitting, even perhaps obligatory, as I have said, that we turn our attention back to that celebrated address that Dewey gave more than a half century ago. Dewey's words on that occasion should easily repay examination, for the publication that grew out of his talk has been described as "the best concise statement on edu-

¹Adapted from the inaugural John Dewey Lecture at the 40th Biennial Convocation of Kappa Delta Pi, Birmingham, Alabama, 4 November 1995. All quotations, unless noted otherwise, are from *Experience and Education: The 60th Anniversary Edition*.

cation by the most important educational theorist of the twentieth century," and further as "the simplest and most readable extended statement on this subject that Dewey ever made" (Collier Books 1963, 7). In light of that praise, and given the history that I have just recited, what better choice of a topic could there be?

My second reason for choosing to discuss *Experience and Education* is a rather odd one and, therefore, a bit harder to explain. It stems from the fact that I have never really liked the book, despite the high praise that has been heaped upon it. That may sound like a surprising confession to make, especially on this occasion. And I have to admit that its shock value had a certain perverse appeal to me when I first thought of making it. However, its potential for surprise was not what helped convince me of the rightness of my choice. Rather, it was the possibility of my coming to discover what it was that I *really* found to be discomforting about the book; for though I acknowledge disliking it, the truth is I have always felt a bit uneasy about saying so in public, not because I fear taking an unpopular position on a matter of such note but simply because I have never been absolutely sure why I felt as I did. The occasion of this speech, I reasoned, provided the perfect opportunity for me to find out why and thus to dispel my uneasiness when confessing my opinion to others. I also hoped, of course, that in trying to become clear about why I felt as I did, I might find something to say that would be worth sharing with today's audience.

So far as my own opinion is concerned, my reexamination of *Experience and Education* in preparation for today's remarks has certainly had the payoff that I expected. In my own mind I now am much clearer than before about what I find unattrac-

tive about the book. I also see the book's strengths more clearly than I have in the past. That too is a plus—an even bigger one, in fact, than getting straight on what it was that I had found wanting. Whether my exploration has also yielded something worth sharing with others, I leave for you to decide.

Given what has just been said, my next step would seem to call for an account of what initially troubled me about the book. However, in order to make such an account comprehensible I need to say a few things in general about the book's contents, especially for those who may never have read it or who have read it so long ago that they now only dimly remember what it was all about.

Experience and Education contains 116 pages, divided into eight chapters, which means that it is physically thin as books go. Its most widely disseminated version, the Collier Books edition (91 pages), fits comfortably into a woman's purse or a man's jacket pocket.

In its first three chapters, entitled "Traditional vs. Progressive Education," "The Need of a Theory of Experience," and "Criteria of Experience," Dewey defined the problem that he wished to address and laid out a theoretical conception that presumably holds the key to its solution. Chapters 4, 5, 6, and 7 applied Dewey's theory to a group of educational questions organized under four chapter titles: "Social Control," "The Nature of Freedom," "The Meaning of Purpose," and "Progressive Organization of Subject-Matter." The final chapter, "Experience—The Means and Goal of Education," is a scant three paragraphs long and covers less than three-and-a-half pages.

The size of *Experience and Education* provides the first clue to the source of my discomfort with the book. It's like one of

those models that often show up in women's fashion magazines: too thin to be believed. When laid flat on the palm, as on a scale, the volume feels almost weightless. It's too small for a book and too large for a speech, at least one delivered on a single occasion. To check the latter hypothesis, I conducted a brief experiment. I read one page of the book aloud just slow enough for it to be understood by a listening audience (or so I judged), and then I multiplied that time in seconds by the number of printed pages in the book, minus allowances for a few pages that were partially or totally blank. By my calculations, it would have taken Dewey more than three hours to deliver the printed version of *Experience and Education* to his Kappa Delta Pi audience. I surmise that neither he nor they could have endured a three-hour talk, therefore, I conclude that he must have delivered a drastically shortened version of the book's contents, perhaps only a third as long as the book itself. But shortened in what way? Leaving out what? Sentences? Paragraphs? Chapters? Which ones? How many? Because I have no answer to those questions, I can only leave them dangling. My misgivings about the book's size, however, go beyond worries about the sheer number of pages it contains and how he may have expanded them as he moved from the spoken to a printed version.

Eight chapters in 116 pocket-sized pages? That sounds like a lot of subdivisions to me. Why so many? And the chapter titles themselves! What big words for such skimpy treatment! Seven-and-a-quarter pint-sized pages on "The Nature of Freedom"! Nine on "The Meaning of Purpose"! What can one say about such vast topics in such brief compass? The answer must surely be: not much, or at least not enough to constitute a systematic treatment of the topic.

Of course the easy rejoinder to that complaint is that Dewey probably wasn't intending to offer a *systematic* treatment of *any* of the topics named in those titles. He was only touching upon them in a very cursory fashion, the way a public speaker is commonly forced to do. Fair enough, I suppose. Objection withdrawn. But what, then, *was* he intending? Chapter titles aside, what is the book really about? To answer that question we must shift our attention from the Table of Contents to the text itself.

Chapter 1, "Traditional vs. Progressive Education," sets forth the problem that Dewey hopes to address. Yet, oddly enough, it is not *his* problem, at least not initially. It is, instead, the problem given him by the Executive Council of Kappa Delta Pi. In the book's "Editorial Forward" (Hall-Quest, x) the Council's invitation to Dewey is described as follows:

In the interest of clear understanding and a union of effort the Executive Council of Kappa Delta Pi requested Dr. Dewey to discuss some of the moot questions that now divide American education into two camps and thereby weaken it at a time when its full strength is needed in guiding a bewildered nation through the hazards of social change.

The fact that Dewey accepted the council's invitation and did so on its terms suggests that he found its delineation of a problem satisfactory or at least compatible with some of his own thoughts. However, his impatience with the bickering between opposing "camps" of educators comes through loud and clear in his text, suggesting that the condition he was asked to address was actually a source of discomfort and annoyance to him

more than anything else. At several points in the book the author's tone of voice can only be called hectoring or scolding. The *real* problem for Dewey—the problem that he felt educators of the day should be worrying about—was not that of choosing whether to be “traditional” or “progressive.” Nor was it one of deciding how the warring factions within the community of educators might negotiate a settled peace. Instead, the *real* problem, framed as a question, remained for Dewey (11) the classic pedagogical query, which asks: “Just what is the role of the teacher and of books in promoting the educational development of the immature?”

But Dewey was not fully satisfied with that formulation either. What truly intrigued him was an updated version of that ancient question, one in which Dewey's own views on education are tacitly embodied. In its altered form, the one in which Dewey (11) wants his audience to think about it, the question becomes: “How shall the young become acquainted with the past in such a way that the acquaintance is a potent agent in appreciation of the living present?” That way of asking the question, writes Dewey (11), sets “a problem that is new in the story of education.” What chiefly is new about it is the tacit requirement that school learning be of *direct* value to students, serving them *now* and not solely in some dim and unforeseeable future.

Dewey does not attack directly the reformulated question that he poses at the end of Chapter 1. Instead, he starts from much further back, laying the groundwork upon which the answer to that question must ultimately rest. In Chapters 2 and 3 he spells out what he calls “a theory of experience.” He begins by saying why such a theory is needed and then proceeds to

give the notion some substance by filling in a few of its details. The 41 pages that comprise these two chapters constitute the heart of the book. Or, to change metaphors, they house the engine that drives Dewey's thought, not just as he moves through this book but as he chugs along throughout much of his writings. Or, to shift metaphors once again—with an almost audible grinding of gears, no doubt—these two brief chapters contain a boiled-down version of several of Dewey's key ideas. That culinary figure of speech comes closest of all to capturing one of the major sources of my discomfort with *Experience and Education*, for the version of his key ideas that Dewey offers in this small book are so condensed that to me they begin to resemble the gummy residue of something that has been left too long on the stove. Boiled-down, indeed! One might better say, *caramelized*!

To restore that viscous mass to a state that makes it consumable without courting indigestion, one needs to add a vast amount of liquid in the form of prior understanding, the kind of understanding that can only come from having read widely and deeply in Dewey's works as a whole. As but one example of just how concentrated the material is in this section, consider the following—at one point (17), Dewey said, echoing a more famous saying:

The more definitely and sincerely it is held that education is a development within, by, and for experience, the more important it is that there shall be clear conceptions of what experience is.

A few paragraphs further on he returned to the sentiment

expressed in that sentence. "I remarked incidentally," he said (19):

that the philosophy in question [his philosophy] is, to paraphrase the saying of Lincoln about democracy, one of education of, by, and for experience. No one of these words, of, by, or for, names anything which is self-evident. Each of them is a challenge to discover and put into operation a principle of order and organization which follows from understanding what educative experience signifies.

But what does it mean to offer such a challenge? All it says to me is that the reader or listener must work out on his or her own what it means to say that "education is a development within, by, and for experience." The truth is, however, that Dewey meant something very definite by each of those tiny prepositions, though he didn't pause to spell it out. When he said that education is a development *within* or *of* experience, he meant that not *all* of experience is educative, only a portion of it is. The challenge to educators is to determine in advance what makes some experiences educative and others not. When he said that education is a development *by* experience, he meant that it is only *by means of* experience, by interacting with one's environment, that a person becomes educated. The challenge to educators is to design environments, chiefly in the form of classroom situations, that actively engage the learner. But mere engagement, of course, is not enough. The educator must also assure that the form of engagement is *educative*. When he says that education is a development *for* experience, he means that

the goal of education, its ultimate payoff, is not higher scores on this or that test, nor is it increased feelings of self-esteem or the development of psychological powers of this or that kind, nor is it preparation for a future vocation. Instead, the true goal of education, Dewey wanted us to understand, is none other than richer and fuller *experiencing*, the ever-expanding capacity to appreciate more fully the living present. The challenge to educators is to translate that goal into reality, hour by hour, day by day, and subject by subject.

This brief expansion of Dewey's aphoristic, Lincolnesque remark does not begin to reveal the richness of thought that lies behind his words. It should suffice, however, to explain my initial discomfort as I worked my way through those two key chapters of *Experience and Education*. Other examples could easily be added to the one that I have given. I have no wish to say anything more, however, about the book's shortcomings as a document. Instead, I would like to turn to what I now see as the book's strengths and its relevance for us today. In so doing, however, I cannot completely abandon my critical perspective, as will soon be evident, but I do promise to tone it down considerably.

Dewey's outlook on educational practice, and his entire reputation as an advice-giver to practitioners, rests upon a single, fundamental premise and a derived conclusion or consequence. The premise is this: *By examining human experience at the highest level of abstraction possible, asking how it works in general, we should be able to identify a set of traits or characteristics that hold true of all experience, everywhere and possibly for all time.* The conclusion or consequence that adjoins that premise is this: *Our understanding of those generic traits of ex-*

perience can provide guidelines of a sort for the conduct of all forms of human endeavor, including, of course, educational practice. Those two sweeping generalizations frame Dewey's project. Their promise constitutes Dewey's vision of what he hoped to accomplish as a philosopher. *Experience and Education* marks but one instance of his lifelong effort to make good on that promise.

The two aspects of experience that Dewey chose to concentrate upon in this instance are what he called *the principle (or category) of continuity* and *the principle (or category) of interaction*. The principle of continuity says, in a nutshell, that "every experience lives on in future experiences" (16), "that every experience both takes up something from those which have gone before and modifies in some way the quality of those which come after" (27). Moreover, this process goes on willy-nilly, whether we want it to or not. This means there is *always* some residual effect, for good or for ill, of everything we undergo and of every action we take. No experience is without a past. None disappears with a trace.

The category of interaction, which houses Dewey's second broad principle, addresses the situated character of experience. It says that there is always some kind of commerce going on between ourselves as organisms and our environment. (As organisms, incidentally, we are more than physical beings. Conscious awareness constitutes a crucial aspect of our condition.) We act upon the world and the world acts upon us—constantly, without letup. This interactive condition in which we find ourselves and in which we participate forms the situation we currently inhabit. In these terms, we are always situated, even when asleep or unconscious. Moreover, a crucial set of elements

within that interactive mix includes all that we *bring* to the situation in the way of funded knowledge, needs, purposes, interests, the residue of past experience, our readiness to respond in this way or that, and so forth.

Now, from these two principles alone—continuity and interaction—plus whatever interconnections they might be shown to have, Dewey aspired to derive from his audience of educational practitioners (or to encourage them to do it on their own) a corresponding set of education principles, or at least a set of reminders of some kind that would be helpful as they went about their work. This he insisted upon, for, as he pointed out (17):

Unless experience is so conceived that the result is a plan for deciding upon subject-matter, upon methods of instruction and discipline, and upon material equipment and social organization of the school, it is wholly in the air.

Dewey did not want his conception of experience to float away like a gas-filled balloon. He demanded that it be earth-bound. However, before he could turn to the business of applying his two principles he had to do something else. If the categories of continuity and interaction were to serve as guideposts of some kind, he had to buttress them with an additional set of considerations. Why so? Because, standing alone, they function as givens within Dewey's system. Like the earth's roundness or gravity's pull, they are simply there to be dealt with. They operate all the time, whether we want them to or not. Therefore, what is needed is some way of *taking advantage* of them being

there, of learning how to *make use* of the principles of aerodynamics in designing a plane that will fly.

How, then, might educators begin to take advantage of the two major attributes of experience that Dewey identified in *Experience and Education*? Dewey began his answer to that question by introducing the concept of growth. Continuity and interaction operate in our favor, said Dewey, *only insofar as they contribute to growth*. But the concept of growth all by itself is not sufficiently restrictive, for it is possible to grow in ways that seriously curtail or retard growth in general. Cancer, we must remember, is a growth. Dewey had his own way of reminding us. He used the example of the man who "grows" to become an expert burglar. Such a person, Dewey pointed out, has grown in ways that shut off the opportunity for continuing growth in new directions. Therefore, the criterion of growth has to be understood, said Dewey, "in terms of the active participle, *growing*" (28). "Only when development in a particular line conduces to continuing growth," he concluded, "does it answer to the criterion of education as growing" (29).

So where does that leave us? We now understand continuity and interaction to be ubiquitous. We also see that the broadest good that experience might serve, making it worthy of the designation "educative," is that of continuing growth.

This means, among other things, that educators should always be future-oriented. They must constantly ask: where is this experience (or activity) going? Where is it taking us? How is it contributing to future growth and development? But is it not good enough, of course, to direct such questions solely to the present situation and to ongoing activities, for by then it may be too late to do much about them. Educators must also plan

in advance. On the basis of prior knowledge of their subject and of their students they must choose those activities and arrange those environments that conduce to the fullest development of those in their charge. Here is the way that Dewey expressed it (35):

A primary responsibility of educators is that they not only be aware of the general principle of the shaping of actual experience by environing conditions, but that they also recognize in the concrete what surroundings are conducive to having experiences that lead to growth. Above all, they should know how to utilize the surroundings, physical and social, that exist so as to extract from them all that they have to contribute to building up experiences that are worth while.

He further warned (45):

It is not enough that certain materials and methods have proved effective with other individuals at other times. There must be a reason for thinking that they will function in generating an experience that has educative quality with particular individuals at a particular time.

At this point some of you may have begun to think that Dewey's advice sounds like a bunch of platitudes that you have heard many times before. "Plan ahead. Choose materials and methods that promise to work with this individual or with this particular group of students. Redirect the discussion or the lesson when it veers off course." All of that sounds familiar enough

to most of us, doesn't it? Common sense alone should suffice to generate those maxims. Why, then, bother to repeat them? Who needs Dewey to tell us *that*? And why all of this preliminary talk about continuity and interaction and continuing growth if all it boils down to (there goes that culinary phrase again!) is a list of dos and don'ts that any neophyte teacher could easily rattle off in his or her sleep?

The chief reason for the preliminaries is that they alert us to the conditions that govern, the things that we can't do anything about but must somehow use to our advantage. A failure to heed *those* conditions—to act, for example, as though it doesn't make any difference what students *bring* to the situation (which would be a violation of the principle of continuity)—is to court educational disaster.

The chief reason for the platitudinous advice, as I see it, laying aside the obvious constraints of time and the nature of the occasion (factors that we have already discussed), is that Dewey could not go much further than that on his own without risking a different kind of disaster, caused by failing to take into account not just the background of the students with whom the teacher works but the specifics of the entire situation, which includes the material to be taught, the nature of the school as an institution, the social expectations impinging from the outside world, and much, much more. Having identified a set of generic conditions, all he, the philosopher, could do was to take the first step or two along the road that leads from principle to practice and then step aside. "Go that way," he said, waving vaguely toward a path whose first turning lay only yards ahead and receded into darkness beyond. The road ahead would be difficult, he knew. "To discover what is really simple and to act

upon that discovery is an exceedingly difficult task," Dewey warned (20). He repeated that warning toward the close of his book, when he said (114–15) that

the road of the new education is not an easier one to follow than the old road but a more strenuous and difficult one. It will remain so until it has attained its majority and that attainment will require many years of serious co-operative work on the part of its adherents.

As words to this wise, those two warnings are more than welcome. Yet I am not sure they suffice. What they leave out is an explanation, or even the start of one, that would help us understand *why* it is difficult to move from principle to practice. Far be it from me to even begin to offer such an explanation at this juncture in my remarks. It is far too late for that and I'm not sure I could do the job satisfactorily even if I had sufficient time. Yet there are one or two things I *can* say that fit comfortably within the constraints, temporal and personal, that govern my remarks today.

Surely one of the chief explanations for the difficulty that Dewey spoke of lies in the fact that there seldom exists a one-to-one correspondence between a principle on the one hand and a practice on the other. What we find when we go looking case by case is that most principles lend support to multiple practices. Conversely, most practices draw upon more than a single principle. Moreover, the lines of influence that supposedly connect the two, fanning out, as they must do, from one to many and from many to one, are seldom the straight arrows that we find drawn on organizational charts. Instead, they more

commonly resemble the irregular tracings left behind by a garden snail as it gingerly makes its way across the sidewalk's cruel cement or the back-and-forth trajectory of an autumn leaf as it slowly tacks to earth.

There is something else to be said about those higgledy-piggledy lines, and it is this: the causal energies whose paths they graphically portray *flow in both directions at once*. This turns out to be one of Dewey's major points. We find it entailed in his concept of continuity. Principles affect practices, true enough, and that's the direction in which we commonly look when we are talking the language of application. But practices also affect principles, as Dewey so forcefully reminded us. We *learn* from what we do and the ripple effect of that learning reverberates from the periphery to the very core of our most treasured beliefs and values, which is where things like principles and statements that express regularities of other kinds also reside. This doesn't mean that everything we believe in is up for grabs with each action we take. Some beliefs *are* more stable than others, thank heavens, which is why we name them premises, concepts, principles, and even laws rather than guesses or opinions or something else. But even the most stable of those constructions, Dewey would have insisted, remains open to the test of experience. Fundamental change in that core-like structure cannot and doubtless *should* not occur capriciously. Yet the potential for change is always there, as the combined force of Dewey's principles of continuity and interaction makes clear. Can those principles themselves be overthrown by experience? To be consistent, we are forced to concede that they too must be vulnerable to change, though from our present perspective such a prospect seems highly unlikely, even perhaps far-fetched.

A question often raised about Dewey's educational outlook asks whether the latter is realistic or unrealistic. By this is meant: Does it hold out a vision of education that might be attained in the foreseeable future, one that might be effectively realized, or does it offer little more than pie-in-the-sky? Over the years, many have taken the latter view. During the days of Dewey's Laboratory school, for instance—the days when he himself was physically present to show folks around—more than a few visitors apparently came to the conclusion that what they witnessed as they wandered from classroom to classroom and on out into the adjoining gardens and workshops was mightily attractive, true enough, but could not be replicated in settings that were less advantaged than those that Dewey and his teachers enjoyed. Similar conclusions were reached by many who only read about the Laboratory School or who had read other educational tracts by Dewey in which the school was not even mentioned.

Yet we also know that Dewey's educational writings and the demonstrable success of his Laboratory School did not have a negative effect on everyone. Not by any means. Indeed, far more readers and visitors were impressed and encouraged by what they read and saw than were critical of it or simply dismissive—hence, the widespread fame of both Dewey and his Laboratory School within a very short period of time.

What of today's readers of *Experience and Education* or those lucky souls (most of them now long gone, I suppose) who were fortunate enough to have heard Dewey deliver the original address? Where do Dewey's words in this thin volume (or in the speech that preceded it) leave his audiences, past and present? Do they generate hope and ambition, or might they also evoke indifference and disbelief? I suppose it depends on

whom you ask. I for one don't find them all that inspiring when read as a message to weary practitioners, but then Dewey doesn't inspire in the usual manner, and I suspect he would have objected to being judged by that criterion.

Dewey's way of inspiring was not to set forth a vision for others to realize. Not even his Laboratory School was intended to do that. His was the way of inquiry. It was to invite thought. To insist upon it. To engage in it himself, openly and responsibly—sometimes even tortuously, I have to say. His way was to trust that such thought, even when labored and haltingly expressed, can, in the long run, only lead to wiser actions and better practices than would have occurred without it.

The final paragraph of *Experience and Education* contains an expression of Dewey's abiding faith in the power of human intelligence. It also reveals his sharp suspicion of what today we might call a bumper-sticker mentality, one that opts for quick answers to complex problems, for shortcuts along the arduous path that leads from principle to practice and back again. All who today remain tempted (as many have been over the years) to reduce Dewey's outlook on education to a line or two or even less, heaven forbid!—"Learning by doing" stands as the all-time favorite, I suppose—would do well to heed his closing words. Even those of us who have never been so tempted might profitably listen with care to his statement (115-16) that

I am not, I hope and believe, in favor of any ends or any methods simply because the name progressive may be applied to them. The basic question concerns the nature of education with no qualifying adjectives prefixed. What we want and need is education pure and simple,

and we shall make surer and faster progress when we devote ourselves to finding out just what education is and what conditions have to be satisfied in order that education may be a reality and not a name or a slogan.

There he goes again, I suppose some would say, hammering away at the same old point right to the very end, trying to make our life as educational practitioners and as just plain human beings more difficult than before, rather than easier. More difficult intellectually, true enough, but also more richly rewarding *at the same time*. One mustn't forget that. And ultimately more effective in practical terms as well. Or so one hopes. One mustn't forget that either. More intellectual effort, balanced by the promise of increased rewards for oneself and for others. Not a bad trade-off, I would say, even though the rates of exchange are neither fixed nor guaranteed. In fact, isn't that the very same offer that we educators are constantly holding out to students of all ages? I think it is. In this light, shed by the hastiest comparison of our work and his, John Dewey's *Experience and Education* reads like an effort to make students of us all and perhaps to keep us that way for life—particularly those of us who teach or who have responsibilities tied to teaching. I for one am grateful to him for having made the attempt. I also am proud today to stand in his enduring shadow and to hear his words echo across the years. I trust you are as well.

Experience and Education: Implications for Teaching and Schooling Today

by Linda Darling-Hammond

As the 21st century dawns, the U.S. schooling system is in the throes of a major revolution, the scope of which has not been seen for more than a century. Just as the Industrial Revolution led to the replacement of one-room rural schoolhouses by modern school bureaucracies, the information age is pressing for new forms of schooling that will enable many more students to think creatively, communicate proficiently, manage information and resources, solve novel problems, and engage in knowledge work.

In response to these demands, educators have created and redesigned thousands of schools during the past decade to educate rich and poor students of all racial and ethnic backgrounds to levels of success traditionally thought impossible to achieve (Darling-Hammond 1997). Like the progressive schools built from the work of reformers like John Dewey at the turn of the century, Ella Flagg in the 1930s, and Lucy Sprague Mitchell in the 1960s, these schools are working to create an "equity pedagogy" (Banks 1993), challenging diverse learners to think independently; create, invent, and understand academic subjects through research, writing, and inquiry; experience ideas firsthand; and make decisions democratically.

These restructured schools reflect what Dewey called a "new education," featuring reforms that have reappeared in each era of progressive reform: disciplinary learning conducted in more

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experiential ways; interdisciplinary curriculum aimed at making connections among ideas; research and other projects emphasizing the use of knowledge and the development of higher-order thinking skills; cooperative learning; shared decision making among teachers, students, and parents; and "detracking" to make a challenging curriculum available to more students. Yet such schools and the practices they embrace remain marginalized, rarely embraced or supported by the systems in which they struggle to exist and generally unexamined for what they can teach about the educational enterprise. Furthermore, the ideas upon which they are built have recently engendered a political backlash—just as earlier reforms gave way to standardizing influences in the efficiency movement of the 1920s, the teacher-proof curriculum reforms of the 1950s, and the "back to the basics" movement of the 1970s and '80s. Today, the curriculum wars center on debates over "whole language" instruction versus phonics, direct instruction versus indirect instruction, transmission of facts in traditional disciplines versus development of skills across disciplinary contexts, "teacher-centered" approaches versus "student-centered" strategies, and authoritarian control over student behavior versus efforts to develop intrinsic responsibility.

In *Experience and Education*, Dewey (1) foreshadowed this dance of the dichotomies by acknowledging that

Mankind likes to think in terms of extreme opposites.

It is given to formulating its beliefs in terms of Either-Ors, between which it recognized no intermediate possibilities.... The history of educational theory is marked by opposition between the idea that education is devel-

opment from within and that it is formation from without; that it is based upon natural endowments and that education is a process of overcoming natural inclination and substituting in its place habits acquired under external pressure.

More than a half century ago, Dewey urged the development of a more balanced educational philosophy—one forged through a thoughtful consideration of experience and its role in education rather than by simplistic rejection of “old” ideas and the adoption of the opposite extreme. Dewey (8) noted,

When external authority is rejected, it does not follow that all authority should be rejected, but rather that there is need to search for a more effective source of authority. Because the older education imposed the knowledge, methods, and the rules of conduct of the mature person upon the young; it does not follow, except upon the basis of the extreme Either-Or philosophy, that the knowledge and skill of the mature person has no directive value for the experience of the immature.

Dewey (9–10) expressed concern about some of the “newer” schools that, in reaction the drudgery of traditional education, “tend to make little or nothing of organized subject-matter of study; to proceed as if any form of direction and guidance by adults were an invasion of individual freedom, and as if the idea that education should be concerned with the present and future meant that acquaintance with the past has little or no role to play in education.”

The critical issue in an education that seeks to make learning meaningful is the ability of the teacher to forge *interactions* among students’ impulses, curiosity, prior knowledge, and the subject matter under study—to bring it *into* experience, as Dewey suggested, rather than assume the learner’s experience is irrelevant. At the same time, the teacher must be able to engage in curricular thinking and develop the *continuity* of experience that adds up to understanding and creates habits of mind. Thus, considerations of subject matter are combined with considerations of students. The teacher’s role is not passive; instead, the teacher is actively exploring how to construct experiences and adapt material so it connects to the interests and capacities of the learner. The mutual adaptation between the learner and the material to be learned is what allows an experience to be educative.

Good teachers engage in *both-and* teaching rather than the *either-or* syndrome. They integrate work on basic skills into rich, meaningful experiences with books, language, materials, and natural settings and activities. They know when to use direct instruction to make ideas clear to specific students or groups of students and when to use discovery methods to engage interest and develop curiosity. They use what I call “two-way pedagogies” to understand what students are thinking and how they are learning. At the same time, good teachers understand the structures and modes of inquiry of traditional disciplines and draw on these while creating interdisciplinary connections and constructing learning opportunities that build on students’ own experiences and questions. They develop authoritative classrooms that are neither permissive nor authoritarian, in which adult authority sets parameters for respectful interactions

and guides students toward responsible decision making. In doing so, they call upon enormous reservoirs of knowledge about children, learning, motivation, and development, as well as flexible understandings of subject matter, and they use a vast repertoire of skills for managing an academic and social learning environment.

The reasons for today's backlash are the same as in earlier times. The kind of teaching demanded by progressive reforms is extraordinarily complex, requiring simultaneous attention to the demands of subject matter and the needs of students. In each of the previous eras of reform, practitioners trying to implement reforms such as "open education" or "the project method" knew they were supposed to make learning relevant and attend to student needs, but they often did not know how to fashion work that was rigorous as well as relevant. Some teachers were able to teach in the more challenging ways intended by the innovations, but others did not know how to implement more variable student-based strategies while also teaching for high levels of disciplined understanding in the content areas.

Many educators lost track of either their students or curriculum goals in the process of breaking with previous routines. They tried to be more child-centered by letting go of subject-matter standards or more subject-centered by ignoring students while the curriculum marched forward. In the 1960s, many educators' inability to manage both sets of goals led to the perception that schools had lost academic rigor in their eagerness to be relevant. Schools were often unable to support new pedagogies with forms of organization, governance, and professional development that made sense together.

Practice that succeeds in developing deep understanding

of challenging content for a wide range of learners maintains a dialectic between students and subjects, allowing neither to overwhelm the other. Such teaching presses for mastery of content in ways that enable students to apply their learning and connect it to other knowledge while developing proficient performances in the field of study. Because students will necessarily come to any learning experience with different strengths and prior experiences—providing different starting points for the material they must learn—successful teachers must know how to create experiences that let students access ideas in a variety of ways, always pressing for a deeper and more disciplined understanding.

This kind of teaching is purposeful and may be highly structured, but it is also inevitably improvisational. Because real understanding is always hard-won and human beings bring different mixes of abilities and types of insight to the task, there is no prepackaged set of steps or lessons that will secure it for every learner in the same way. Teachers have to bring a great deal of knowledge, analytic ability, and adaptability to the task of developing understanding with their students. At the same time, as Dewey (96–97) noted,

Improvisation that takes advantage of special occasions prevents teaching and learning from being stereotyped and dead. But the basic material of study cannot be picked up in a cursory manner. . . . Once more, it is part of the educator's responsibility to see equally to two things: First, that the problem grows out of the conditions of the experience being had in the present, and that it is within the range of the capacity of students; and,

secondly, that it is such that it arouses in the learner an active quest for information and for production of new ideas. The new facts and new ideas thus obtained become the ground for further experiences in which new problems are presented.

Transmission teaching is much simpler. Teachers can "get through" texts and workbooks. Classroom routines are straightforward, and controls are easier to enforce. There is a sense of certainty and accomplishment when a lecture has been given, a list of facts covered, or a chapter finished, even if the result is little learning for students. When a teacher has delivered information, it is easy to say, "I taught that," even if students did not learn it. Active learning situations infuse more uncertainty in the teaching process. When a student is building his or her own understanding through a research project, for example, the teacher must construct careful scaffolding to guide the learning process and well-designed strategies for eliciting the student's thinking process. Many teachers' preparation has not taught them how to create situations in which learners can have real breakthroughs in understanding or how to evaluate learning and adapt their teaching. Thus, they teach as they remember being taught, creating a flow of lessons and activities aimed at fairly superficial coverage comfortably oblivious to student learning.

Efforts to develop thoughtful, democratic classrooms have repeatedly been killed by underinvestments in teacher knowledge and school capacity. Lawrence Cremin (1961, 56) argued that progressive education "demanded infinitely skilled teachers, and it failed because such teachers could not be recruited

in sufficient numbers." When educators denied access to knowledge prove unable to manage complex forms of teaching, policy makers typically revert to simplistic prescriptions for practice, even though these cannot achieve the goals they seek. This is an even greater problem today than it might have been in times past, because the demands for higher levels of performance from a much larger number of young people are more acute, and the failure of society to meet them holds higher dangers.

The need to develop both a balanced philosophy of experience and education as well as widely shared knowledge among teachers is made clear by E. D. Hirsch's (1996) recent caricature of progressive education. He suggested that progressive teaching methods are antithetical to the acquisition of disciplined understanding in subject-matter areas. Hirsch rightfully rejected false dichotomies between the building of shared knowledge and attention to children's interest or between clear, purposeful instruction and learning that is engaging and effective. In his claims that progressive education has undermined U.S. schools, however, he was wrong about the goals of progressive practice; the nature of prevailing practice in U.S. schools; and the body of research evidence about effective teaching and learning. He also misunderstood why less-effective teaching practices—whatever their label—are so difficult to change. Hirsch also misread what would be needed to help students acquire disciplined understanding of subject matter—and the ability to apply their knowledge—we might all agree they need.

Educators must be prepared to dispel the notion that progressivism is "anti-subject matter," as Hirsch (1996, 49) claimed. Major thinkers and practitioners of education who might be called progressive—John Dewey, Jean Piaget, Jerome Bruner,

Howard Gardner, TheodoreSizer, and Deborah Meier, for example—have sought deeper and more disciplined understanding of academic subjects and developed curriculum and assessment strategies for fostering it. In fact, the effort to understand core concepts well and examine ideas thoroughly is an attempt to “discipline” the mind in the manner envisioned by 18th-century champions of the disciplines.

The process of bringing order to experience, of developing increasingly more powerful explanations of things and events, is the process of developing disciplined understanding. As Dewey (102–3) noted,

No experience is educative that does not tend both to knowledge of more facts and entertaining of more ideas and to a better, a more orderly, arrangement of them. . . . When education is based in theory and practice upon experience, it goes without saying that the organized subject-matter of the adult and the specialist cannot provide the starting point. Nevertheless, it represents the goal toward which education should continuously move.

There are, however, two dilemmas: how to connect curriculum to students' experiences, and how to choose what to teach. These dilemmas are heightened when educators must follow a rigidly organized curriculum or must choose between the superficial coverage and memorization of massive quantities of facts and the understanding and connection of any of them. Gardner's (1991) claim that “coverage is the enemy of understanding” andSizer's (1992) argument that “less is more” when it comes to the issue of curriculum construction aptly describe

the challenge. In fact, a recent international evaluation of mathematics and science curriculum found that U.S. curricula and textbooks cover far more topics, with less depth, more repetition, and much less attention to applications, connections, and higher-order thinking skills than those in other countries where students learn at higher levels (Schmidt, McKnight, and Raizen 1996).

Teachers who plan student-centered, flexible lessons are more effective, especially at stimulating higher-order thinking, than teachers who conduct extensive preplanning tightly focused on behavioral objectives and coverage of subject-matter facts. Teachers who set out to implement clearly detailed plans based on lists of topics or objectives are less likely to be sensitive to students' ideas and actions or to adjust their teaching strategies in response to student cues (Darling-Hammond 1997). This approach decreases the amount of higher-level reasoning and “incidental” learning students acquire during a lesson. In other words, teachers who most faithfully “cover the curriculum,” at least when it is defined by large numbers of highly specified topics or behavioral objectives, are least likely to teach for understanding.

Students' prior experiences, motivations, and interests are crucial to learning. Therefore, effective teachers emphasize student needs rather than “delivering instruction.” In a study of teachers (Darling-Hammond and Wise 1985), respondents commented on what they considered first when planning their work: 67 percent mentioned students first, and almost all others mentioned students right behind curriculum goals. Their comments describe how important it is to find the connections between students and subject matter:

Critical Commentary

I think about the children I'm planning for. I think about what it is that I want them to get from the subject. I pull together whatever is needed under that subject and think in terms of the group. . . . Then I make plans to fit the child that I'm planning for.

My main concern is what the group is like that I have that year. I don't think that I have ever taught a lesson twice in the same way in eleven years, because there is never the same group.

Many teachers described their planning as starting with students and looping back to them, while wending their way through many other concerns:

First and foremost I think about what will interest these students and what they are familiar with that I can compare this new idea to. . . . I also think about what their abilities are and what types of materials are available, then which of them the students would be most capable of handling. I try to get some variety into a lesson, perhaps changing activities two or three times during the course of the lesson to help connect with their interests.

First I think about where my kids are: what they already know and what kinds of abilities they have. What would be an interesting way to try and present the material to the children? How does this particular group learn best? Do they get a lot from teacher verbalization,

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or do they get more from a lot of questions and a lot of student interaction? Do they get a lot more from hands-on activities? Should there be less talking and more doing? It is so different with every group, and individual students can vary from activity to activity. They work well in one way in a science activity but need a different kind of exposure in a spelling activity. So you have to get to really know your kids and how they learn.

Though teachers in a highly prescriptive district made a bow to the mandated curriculum, most focused on how they could vary it to meet their students' needs. One creative teacher turned the issue on its head, using the mammoth curriculum guide to provide choices for her students:

We have a set of guides that would just choke a horse. For instance, in one subarea the material in the guide fills eight notebooks that are each 4 inches thick. . . . I say to the students, "These are the things that are identified in here. Now what are you particularly interested in?" And we make choices. Each of them picks out something they particularly like and they delve into that and report on it to the class.

Teachers' insistence on attending to students' experiences, interests, and prior knowledge were once thought to result from tenderheartedness and a disregard for "scientific" methods. Such considerations are now supported by cognitive research that demonstrates learning as a process of making meaning out of new or unfamiliar events in light of familiar ideas or experi-

ences. Learners construct knowledge as they build cognitive maps for organizing and interpreting new information. Effective teachers help students make these maps by drawing connections among different concepts and between new ideas and learners' prior experiences. In the course of this complex work, teachers must identify crucial concepts, those needed to understand other key ideas, and how they all add up. In other words, they attend to the structure of the discipline.

It is also important for teachers to develop pedagogical tools for understanding. The reason U.S. schools underperform compared to schools in other countries is not, as Hirsch (1996) claimed, because they have adopted progressive methods such as research projects and discovery learning while abandoning rote learning and memorization. In fact, national and international studies show that a majority of U.S. schools feature instruction emphasizing algorithms and recall, with heavy doses of lecture, drill-and-practice, memorization, and multiple-choice and short-answer testing (except in more affluent communities and in higher tracks). By contrast, schools in European countries rarely use multiple-choice testing, instead favoring oral and essay examinations and projects. Schools abroad are much more likely to engage students in research and writing, experimentation, and extended discussion of problems and ideas.

The solutions are not simple, and the unguided use of projects and discovery methods does not automatically engender understanding either. Teachers must learn to scaffold students' work in such complicated, large-scale enterprises, ensure that they have the skills necessary for completing their plans, help them organize their efforts, and teach them to in-

quire, test, evaluate, and infer meanings from undigested masses of information and data. It is the rarity of such a disciplined approach to progressive practice that leads to concerns about lack of rigor, the need for direct instruction, and calls for simplification of practice. This is particularly true for children who do not receive scaffolding for this kind of work at home—a distinction that reifies existing inequities in access to powerful knowledge.

For these reasons, educational conservatives often reject progressive practice as "soft," devoid of content, disorganized, or chaotic. Hirsch (1996), for example, selectively cited "mainstream research," most of it from the 1970s, to argue that direct, whole-group instruction emphasizing drill-and-practice is the path to effective learning and that "progressive education," as he characterized it, has failed. He ignored research before, during, and after that time documenting the success of what he called "progressive" methods at engendering higher-order thinking skills. This research illustrated, repeatedly, the failure of his favored prescriptions for enabling students to remember ideas, apply them in new contexts, or perform well on tests of more complex skills and performances (Good and Brophy 1986; Resnick 1987; Gardner 1991).

Among much other research on this score is Smith and Tyler's (1942) famous eight-year study, which documented how students from experimental progressive schools of the 1930s were ultimately more academically successful, practically resourceful, and socially responsible than peers from traditional schools. Like the highly successful schools of today's reform initiatives, these school communities were small and organized around internally developed common goals. They sought to

build a core curriculum linked to community concerns as well as students' interests and developmental needs. The schools demonstrating successes deviated most from mainstream practice. Their teaching was experiential and inquiry-oriented, and their governance systems were democratic.

Although the case for this approach to education was carefully "proved," progressive education virtually disappeared during World War II. By 1950, even schools that had been studied and found successful had reverted to "fundamentals." Communities skeptical about reforms never understood that the changes were important enough to merit their spread. School-level reformers rarely engaged the political system in considering the implications of their work for policies ranging from course requirements, facilities standards, and Carnegie Units to teacher certification and accreditation rules. Journalists focused on test scores rather than changes in school practices that had produced such productive and competent students. Thus, policy makers never understood the systemic changes needed to support reforms that successful schools had produced, and parents and teachers in other communities never fully understood what these schools had done (Kahne 1994).

A text-based, transmission-oriented curriculum returned to U.S. schools during the 1940s and '50s. It was not until Sputnik persuaded politicians that the United States needed to become competitive with the Soviets that a press for more intellectually challenging education was revived. Curriculum reforms launched by the National Science Foundation and the Office of Education during the 1960s aimed to prepare students to think critically and independently as well as to understand ideas well enough to apply them to novel situations. Moreover,

reforms like discovery learning, open education, team teaching, differentiated staffing, and democratic decision making began to proliferate again as well. Research developed during these years showed that efforts to create more intellectually challenging curricula and inquiry-oriented teaching produced noticeable learning gains for students, especially in terms of critical-thinking and problem-solving abilities, oral and written expression, creativity, and self-sufficiency as learners (Dunkin and Biddle 1974; Glass, Coulter, Hartley, Hearold, Kahl, Kalk, and Sherretz 1977; Good and Brophy 1986; Horwitz 1979; Peterson 1979).

The 1960s' reforms, however, also failed to overcome the weight of traditional practice and were overrun by the back-to-basics movement of the 1970s and '80s. Despite successes in places where they were well-understood and implemented, the reforms were unsuccessful when they left the high-intensity hotbeds in which they spawned. Many practitioners urged to "implement" these ideas were unable to do so effectively. The ideas often were poorly understood. These complex practices took time to develop, and they typically required changes throughout the entire school environment rather than just behind classroom doors. Even in schools where the reforms succeeded, they gradually disappeared as individual superintendents, principals, and teachers involved in the changes left, replaced by traditionally trained (or untrained) practitioners.

The lesson of this history is one that Dewey (114-15) foresaw when he warned that "the road of the new education is not an easier one to follow than the old road but a more strenuous and difficult one. . . . [Its] attainment will require many years of serious co-operative work on the part of its adherents." In large

part, this is the work of teacher education: building the knowledge of educators so they can understand how their students think as well as what they know. To accomplish powerful teaching, teachers need deep knowledge of subject matter and a wide repertoire of teaching strategies combined with intimate knowledge of students' development, learning, and experience. Few teachers have had access to this knowledge today, and even fewer work in schools that support the kinds of rich curriculum, performance-oriented assessment, and extended time with students its use requires.

In this era of reform, progressive education will require more than committed teachers striving for classroom-level change. It will require a set of systemic conditions—including widespread teacher knowledge, lean and permeable curriculum guidance, and schools structured for strong relationships and intensive learning—that school designers in the last century did not understand. The success of today's efforts will ultimately rest on whether education policies emphasize standardization of practice or build schools that can productively engage diversity and arm teachers with the knowledge they need to teach skillfully with equal attention to the experiences of children and the exchange of content.

If we care about the futures of our children and the fate of our democracy, we have little choice but to choose the harder path and work to create widespread conditions that can enable teachers to succeed at the task of empowering education. For, as Dewey (1956, 3) understood, "What the best and wisest parent wants for his own child, that must the community want for all of its children. Any other ideal for our schools is narrow and unlovely; acted upon, it destroys our democracy."

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An Invitation to Think

by O. L. Davis Jr.

Most educators have come to expect two things from books addressed to their practice. In the larger set, books savage teachers and administrators as well as contemporary educational programs and procedures. Aligned with a particular ideology, they prescribe drastic reforms as remedies to ills they identify. In another group, books offer largely random and simplistic recipes for teachers and administrators to use during the coming week. From time to time, however, a different kind of book comes to their attention. It meets neither routine expectation.

John Dewey's *Experience and Education* is such a profoundly different book. Published in 1938, it did not ridicule educational practices of its time nor berate educational professionals. It treated both seriously. It also presented a mature perspective on several of Dewey's major concerns. Most important, it invited U.S. educators to think for themselves. It still offers that invitation today.

For these reasons, I return again and again to this slender volume. I have seldom profited from books that advance simplistic educational recipes for practice and reform, nor have I ever been attracted to asserted curatives and salvation solutions for real educational problems. The educational practice that I know is intensely personal and complex; it routinely fails to respond to decontextualized advocacies. My repeated engagements with Dewey's slender volume have been marked more by what I have thought *with* his ideas than by what I can recall

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from my readings. Thus, I am less able than many readers to cite specific quotations from *Experience and Education* than I am to associate my own ideas to those of Dewey. This book is no sacred text. It has been a comfortable—even if occasionally disturbing—companion.

Several examples illustrate my thinking with *Experience and Education*. In its opening chapter, Dewey wrote of conflicts during the 1930s between advocates of "progressive" and "traditional" education. Proponents of each position recognized the importance of robust schooling of the nation's children and youth. Yet they did much more. These partisans insisted on conceptual and practical purity. They claimed virtue only for their position and sought to discredit practices they opposed. Dewey characterized these divisions as results of "either-or" thinking and rejected both extremes. He argued that ideology masks areas of common agreement as well as dimensions of dispute. To think for oneself requires the abandonment of this unproductive "either-or" fallacy.

This reminder remains solid advice to today's teachers. Fashionable advocacies never seem to endure. No matter the season or year, legislators, critics, and pundits insist that U.S. schooling is corrupt. Educational salvation is near only if teachers change what they do. The differences between views of con-tending progressive and traditional parties in Dewey's day are similar to several recent disputes. They include calls for teachers to abandon "whole language" instruction in favor of strictly phonics-based procedures. Other recent advocacies have focused on site-based decision-making procedures, proposals for private charter schools to replace public systems of education, constructivist approaches to teaching, and outcomes-based

educational programs. Any serious pedagogic and political responses to such advocacies can be helped by Dewey's admonitions. Rather than accept or reject ideological proposals, educators and citizens should seek common ground.

Most teachers who have taught children to read, for example, recognize the virtues of both phonics and whole-language procedures. Some pupils, to be sure, respond particularly well to one or the other of these approaches. Other students learn to read better and more rapidly when they use both procedures. Unfortunately for children and the reputation of these ideological approaches, some pupils do not learn easily through either set of procedures. As in medical practice, one instructional "treatment" for all pupils is both unsound practice and corrupt theory.

Dewey's book contains no directly applicable suggestions for educational decisions. It offers ideas that may help dispel rancorous disputes in deliberation and action. It asserts faith in the intelligence of individuals in a democracy to develop appropriate decisions. In *Experience and Education*, Dewey never abandoned his principled positions; nevertheless, he urged mindful consideration of alternatives rather than capricious compromises. Dewey never thinks for us; he confidently encourages us to think for ourselves.

Dewey's major concern in this book, for good reason, focuses on the nature of experience. Of all the mistreatments of progressive ideas, experience likely suffered most grievously in the discourse of the 1920s and 1930s. That it continues to be abused does not indict *Experience and Education* as a failure. Rather, with a single book, even Dewey could not reverse the ill fortunes heaped upon experience. Nor can any among us

change everyone's understandings. On the other hand, each of us can follow Dewey's example and seek more productive, personal meanings of this powerful concept. My search for more fruitful understanding of the nature of experience is not complete. I believe, however, that I am further along than when I began to think about the meanings of experience.

As a young teacher, I uncritically accepted the admonition to "plan experiences" for my pupils. This advice punctuated the ordinary professional language of my teacher preparation and, later, of my colleagues and administrators. My comfort in this language lasted until the end of the first six weeks of my first year of teaching. I realized that something was awry when I tested my pupils. My students experienced lessons much differently than what I planned for them to experience. With too little assistance, I continued to plan experiences for my students; I knew no better. My discomfort persisted for several years. Slowly, I thought through this concern. I decided my understanding was flawed, shallow, and wrong-headed. Moreover, I decided the simplistic use of the language of experience concealed more than it enabled.

Experience is what happens to an individual. Indeed, individuals become aware of an experience *after* the experience. Only sometimes do individuals recognize elements of an experience during the *process* of their experiencing. Consequently, experience is personal, individual, and private. Others can know about an experience only if the individual whose experience it was reveals or tells about it. Based on these meanings, I consider, talk, and write about experience very differently than I once did.

Certainly, I now know that I cannot "plan an experience"

for anyone. This realization, furthermore, is generally true. Teachers, parents, and governmental officials cannot plan experiences for others. The phrase, in fact, is outrageous. It asserts a desire to control other persons, a goal that cannot be achieved.

Does this reality leave us all dressed up with good intentions to further the experiences of our students but with no place to go or no options to pursue? Does it mean that we are unrelated to others' experiences? What can we do? We can and must plan *for* experiences so that our students *engage* tasks in such a way that their experiences will be richer.

Students will have experiences no matter what or how teachers plan. They will experience if they listen to boring lectures and read tepid texts. They will also experience if lectures stimulate their imagination or texts induce them to grapple with ambiguities and inconsistencies. As Dewey rightly noted, the *quality* of experience is not directly related to specific types of activities. No particular teaching procedure or material is a "magic bullet." Involved in the same activity, some students may have positive or agreeable experiences and others may find their experiences negative. Individual students' experiences ordinarily are related more directly to what and how *they do* something than to what and how others—such as teachers—do it. Teachers' planning, consequently, becomes both more involved and problematic in light of this brightened conception of experience. Certainly, it cannot predict the nature and quality of learners' experiences. Teachers, to contribute to their students' experiences, must do all they can in their planning. As their students experience lessons, teachers can hope that students experience richly. Through interaction, teachers can inquire about

the nature of students' experiencing.

As I read *Experience and Education* from time to time, I am attracted to Dewey's discussions about the nature of school subjects and the importance of subject matter. Some colleagues and most of my students express surprise that Dewey is a fruitful source for considerations about school knowledge. Indeed, a particular liability of Dewey's reputation proceeds from the misunderstandings of his concerns about school subject matter. Thus, I encourage teachers and others to reread *Experience and Education* and focus specifically on his serious interest in substantive knowledge.

Essential to all thinking is knowledge. For Dewey, experience does not substitute for knowledge. Experience is a means of knowledge acquisition.

Dewey was concerned, rightly, that beginning "know-ers"—young children or adults—*more likely* will embrace knowledge as they consider, construct, and embrace it in light of their experiences. Dewey acknowledged the importance of circumstance and interest rather than abstractions as the starting points in the process of knowledge gaining. For this position, he risked and harvested misinterpretation and ridicule. Too many readers understood that he opposed teaching abstractions to students! He was concerned essentially about the proper relationship of knowledge and experience, particularly as it related to individuals'—mainly children's—starting points and places of departure rather than the ends of their experiencing. Dewey acknowledged the power and richness of abstractions, generalizations, algorithms, rules, and theorems—indeed, of abundant facts—as long-term goals. However, they seldom are viable starting points for instruction; experiences *are* such start-

ing points. Dewey, unlike too many educators, expressed concern for both beginnings and ends.

Experiences do constitute impressive points of departure for instruction. For many students, experiences also form the crucible within which they kindle their interest. Without question, the notion of interest has suffered from flagrantly imprecise use. In this book, Dewey chided educators who legitimated experience as mainly "fun," an end in itself. His charge remains sound. Of course, students' experiences should be enjoyable. Still, many intentionally educative experiences also should be rigorous, demanding, ambiguous, even frustrating—not because hard lessons are the best; rather, students' interest likely is transient and shallow unless they recognize the need to invest in imagination, study, wonder, construction, memory, and even failure. Such challenges lead students to revisit situations.

Subjects matter. Yet Dewey did not write of his concern in such simple language. He had other purposes. His latter-day readers, however, should not err, as did many of his contemporaries. Subjects matter less to young children because they are only beginning to learn the accumulated sentiments of society. Young children typically learn to use the syntactic elements—for example, subject and adjective—of language long before they learn the names of those elements. Only later do many adolescents understand their increased power over language use as a function of acquired knowledge about grammatical terms and rules.

Recently, pioneering educators have begun to probe dimensions of school subjects—historical narrative and poetry, for example—uncovering distinctive approaches to intellectual understanding embedded in separate subjects. These distinc-

tions constitute significant differences due to the nature of the subject matter itself. Recurring advocacy of thematic, multidisciplinary, and unit-based approaches to school instruction, *properly understood*, does no special violence to the viability of school subjects. However, improperly conceived, these organizational procedures mistake contrived student activity for solid guidance toward students' increased engagement with substantive meanings.

Dewey's ideas in *Experience and Education* can help us extend the boundaries of our understanding. They have served me well. My present knowledge, to be sure, rests in some measure on my continuing engagement with his ideas. Still, neither Dewey nor this book is responsible for my positions. I did not get my ideas *from* him; I *developed* my ideas as I sought to make personal meanings about serious issues. Without a doubt, this book's ideas stimulated me. I accepted his invitation to think, and I thought.

And I continue to think. Now, I reissue Dewey's invitation to you: read *Experience and Education*, and think with its ideas.