

Natural curiosity

A new book makes the case for letting students learn by exploration rather than by instruction **BY CHARLES EUCHNER**

IMAGINE A BASEBALL team run on the same organizational model as a typical school. Players would join not because they love the game, but because reformers in the 19th century decided that all children should play. Players would learn by attending classes all day. They would sit at desks arranged in rows, listening to teachers explain the history of baseball, pitching, hitting, fielding, strategy, statistical analysis, and the culture of baseball and sports.

Students would demonstrate their mastery of these subjects in tests. Only occasionally would students go to labs, where they could throw balls and swing bats. To win praise as a “high-achieving” team, coaches would drill their players before standardized tests. Parents would also spend thousands on test-prep programs. At the end of the year, players would advance to the next level if they showed a bare recognition of concepts like bunting, slugging percentage, and the Black Sox scandal. At the end of the year, everyone would collapse in exhaustion and frustration.

You get the idea. The experience would be miserable. But schools of all kinds—public and private, rich and poor, urban and suburban and rural—try to teach kids with that kind of arbitrary and inflexible system. Since the Industrial Revolution, the basic model of schools has changed little. Students gather in large buildings, separated by age and ability. Teachers stand in the front of the classroom, telling kids what they need to know. Kids shuffle from class to class, indifferent to most of what they are supposed to learn. Many thrive. Many don’t.

None of these complaints is new. Fundamental critiques of modern schooling include liberal voices like John Dewey, Paolo Friere, A.S. Neill, Theodore Sizer, and Jonathan Kozol and conservative voices like Milton Friedman, William Bennett, and E.D. Hirsch. Critics agree that schools have become bureaucratic and arbitrary, but they disagree about what to do. Liberals usually urge greater attention to the child, with lower teacher-student ratios and programs to meet “special

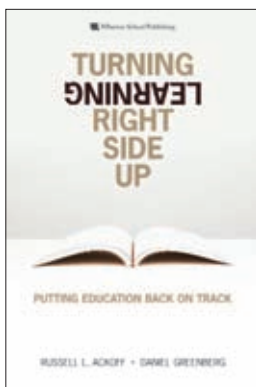
needs.” Conservatives urge a return to “standards” and “values” and allowing families to choose schools in a marketplace.

These two perspectives check each other so changes occur on the margins. Schools become ever more bureaucratic, rule-bound, test-oriented, and alienating. Administrators and teachers (and their unions) often clash, but their battles lock in the status quo. State bureaucracies, testing companies, textbook publishers, education schools, and ideological activists all make inflexible demands, creating less and less room for change. Even sincere reform efforts regiment schooling, reducing the freedom of everyone in the school.

Russell Ackoff and Daniel Greenberg—the former an emeritus management professor at the University of Pennsylvania’s Wharton School of Business, the latter a founder of the Sudbury Valley School in Framingham—have entered the debate with a brilliant but uneven manifesto for wholesale change of the way children (and adults) learn.

Turning Learning Right Side Up: Putting Education Back on Track (Wharton School Publishing, July 2008) began as a correspondence between the authors. Greenberg and Ackoff, one of the pioneers of “systems theory” in business, met at a conference and discovered that they shared ideas on learning. And so they started talking.

Ackoff and Greenberg’s dialogue provides a compelling philosophical case for letting kids learn by exploration rather than by instruction in a common curriculum, but it offers little hard evidence that this type of schooling works. Still, by focusing on the basic questions of how learning works, the authors speak some brutal truths about the current state of education—not just in



America, but across the world.

The basic problem, the authors say, is that schools are designed upside down. Rather than serving students' innate abilities as learners, schools are stuck in an input/output mentality. Schools use all kinds of programs and materials—textbooks, tests, interventions—to push students to produce outputs like high test scores and college acceptances.

Little of this activity has to do with real learning. Schools operate from the top down, and concerns from the bottom rarely filter up. “The schools are an almost perfect model of political autocracy,” the authors write. “There is a well-defined hierarchy, a clear chain of command. Each level has almost unlimited control over the next level below, the student being at the bottom of the heap.... One predictable result of this setup is that the system is permeated with resentment and hatred, and at every level enormous energies are spent breaking or subverting the rules.”

The ideal school would begin with a simple question: *How do people learn?* Research, as well as our own experience, tells us that learning happens through exploration. A toddler discovers the world through moving around, playing, and observing. At every age, people learn by exploring and building models of the world. The school's job—and the job of every social institution from the family to sports teams to choirs and theater troupes—is to create opportunities for people to discover and pursue their passions. The teacher's job is to give students resources and gentle nudges.

“Anyone who has observed infants cannot help noticing the intensity of their curiosity,” Ackoff and Greenberg write. “They are consumed by a passion to observe the world around them, to make sense out of it, to figure out how to operate within it, and to learn how to control as much of it as possible to their own benefit. This trait never departs from the human spirit.... Curiosity keeps the individual in motion, always seeking change and innovation. ... Plainly put, it is no more necessary to teach people ‘problem solving’ than it is to teach people breathing. Every human being develops his own approaches to solving problems, and does so naturally.”

In other words: Leave ‘em alone. But Ackoff and Greenberg acknowledge that curiosity alone does not “give direction to motion, nor does it contain within it the skills to maintain motion.” What does? “The key factor operating to produce tendencies in our behavior is our character,” the authors write, adding that schools can help develop character only if they bring students into a truly democratic community.

At the Sudbury Valley School, students play critical

roles in policymaking and discipline. School meetings are run with Robert's Rules of Order, and everyone in the school votes on every aspect of the school's governance.

Forget about a core curriculum. The authors scoff at the idea that students can master the basics in the full range of liberal arts subjects like math, science, literature, history, languages, and the arts. By insisting on course requirements, they say, education becomes a process of force-feeding. The more we demand, the more students resist; the more students resist, the more pressure we put on them; the greater the pressure, the more schooling becomes a passionless stalemate.

So what do kids do at these “free” or “democratic” schools? They explore whatever captures their interest. They play lots of games. They learn musical instruments and make furniture. They fix engines and work on computers. They read books and write stories. They play with animals, work in gardens, and cook meals. Frequently, students decide the way to dive into an academic subject like biology, math, mythology, physics, or philosophy.

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In a way, Ackoff and Greenberg want learners to be like the “connectors” of Malcolm Gladwell's famous essay “Six Degrees of Lois Weisberg.” Weisberg is a key political and social figure in Chicago, not because of high office but because of her ability to know and bring together people from all walks of life. Like Weisberg, every kid should be able to tap into a network that extends far and wide—a network that includes not just people, but also ideas and resources. If a student wants to learn about sea life, for example, he should be able to link up with everything having to do with sea life—biology, environmental issues, shipping, economics, community issues. As with Weisberg, the most compelling connections occur among apparently dissimilar topics—sea life could be connected to music or colonial history, for example. That's what education is all about.

What proof do Ackoff and Greenberg offer that free learning is superior to standard school programs? Not much—at least not the kind of proof that can be quantified in test scores. The authors say graduates of the 40-year-old Sudbury Valley School succeed because they know how to play, work, and learn. “They have become used to

working hard,” the authors write. “They are used to working independently. And they know who they are. They can describe their own strengths and weaknesses and their own methods of exploiting the strengths and overcoming the weaknesses. So they seem to be quite successful in their next pursuits.”

Studies published in the *Journal of American Education* and co-authored by a trustee of the Sudbury Valley School found that the school succeeds by encouraging students to help one another. The academic literature has long found peer tutoring to be among the most effective means of learning. And graduates of Sudbury Valley seem to do well after graduating. More than half have graduated from college, and the rest either took college courses or found ways to teach themselves or find apprenticeships. Graduates reported that they knew how to track down whatever they needed to pursue their goals. When they wanted to compete on standard academic tracks, they did that. When they wanted to get involved in music and the arts, they did that. When they wanted to start businesses, they found mentors and partners.

Is that enough evidence for parents and policymakers frustrated with the state of public education? Hardly. We live in an age of anxiety. We want assurances, if not guar-

antees, that learning strategies work. That’s the greatest attraction of top-ranked schools like Bracket Elementary School in Arlington, Carlisle Middle School, and the Boston Latin School. Surveys and test scores show these schools work.

Common sense would tell you that the free-schooling model works for some but not all students, but then no single model works best for everyone. My opinion is we need choice, and we need it before another generation grinds through yet another round of reform, with teachers and students locked into mutual suspicion, with mind-numbing textbooks and chaotic school board politics, and, of course, more tests and more metal detectors.

Ackoff and Greenberg could have produced a classic book on the virtues of free schooling in the postmodern age. They could have made a tighter argument, marshaled more evidence, and engaged opposing views. Too bad they didn’t. But they have started an important conversation, and maybe that’s enough.

Now, go play. **CW**

Charles Euchner, a New Haven writer, was the executive director of the Rappaport Institute for Greater Boston at Harvard University from 2000 to 2004.

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