How schools from Shanghai to Italy to the U.S. succeed by breaking the rules. BYKATERIX

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N A TYPICAL AFTERNOON AT SUMmerhill School in Suffolk, England, you might see a student playing piano, kids riding their bikes on the grounds, and others reading in their rooms or just hanging out. Many attend scheduled classes but they do so by choice. At Summerhill, children are free to learn, free to socialize, free to play as they see fit. All day, every day.

Sound like your school? Probably not.

You might be thinking that the kids—or the faculty—would be at loose ends with all this unstructured time. To the contrary. Zoë Readhead, the school's principal, says visitors are surprised by the calm and quiet air that pervades the school—a consequence, she says, of giving children autonomy and responsibility. The enduring success of Summerhill—Readhead's father, A. S. Neill, founded the school in 1921—inspired a group of Massachusetts teachers and parents to found the Sudbury Valley School in the late 1960s, which in turn has blossomed into a thriving Sudbury school movement of several dozen "free" or "democratic" schools in this country and around the world.

"During the day here, students talk and play and fall and skin their knees," says Vicente López, a staff member for the past five years at Diablo Valley School, a Sudbury school in Concord, California. "We don't even suggest that it's time to learn to read." The Sudbury school philosophy holds that children want to understand the world and participate in it. Given the freedom to decide what to do with their time, they will naturally seek out the information and skills they need.

"It's impossible to be a human being without reading," continues López. "Kids pick up on the importance of the skill and get tired of asking people to read for them." So when they decide they want to learn, he says, they approach an adult.

What would this model look like in a traditional American public school? Complete chaos? Maybe.

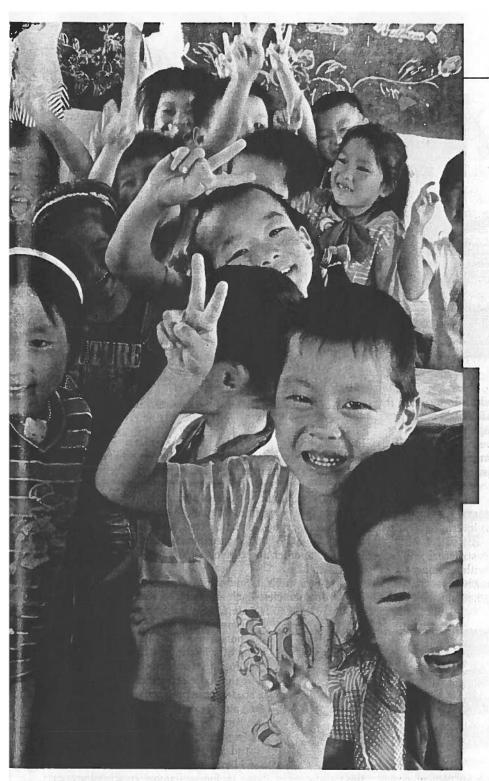
In Shanghai schools, meanwhile, every student in every classroom is given enough time to repeat in his or her own words what the teacher has just taught. Under another system,

developed in Italy, students help teachers build the curriculum. These methods raise some basic questions about children's innate capabilities and how much structure they require to thrive. In an age of persistent achievement gaps and doubts about high-stakes testing, it's worth taking a look at the successes of other educational models, both here and abroad. Loosening some restrictions—and some of our fixed ideas of how a school should run—might just be the way to increase student performance.

### **Paying Attention to Attention**

IF SUDBURY SCHOOLS, WITH NO FORMAL CLASSES AND NO assessments, operate at one end of the spectrum, then schools in Shanghai are at the other. Long school days, lots





Rehearsal Counts. Shanghai students repeat their teacher's instructions to prove they understand expectations. They also go deeper into the topics they study.

In one study of first-grade classes, researchers did a tally every 30 seconds of how many children were focused on the task at hand. At first, the numbers for both Chinese and American students were high. By the end of the exercise, less than 50 percent of American children were paying attention, compared with 80 to 90 percent of Chinese kids.

It turns out that from infancy, children in Shanghai and other areas of China are trained to pay attention and tune in to directions. "Listening is taught as a specific skill," says Miller.

It's common for parents to hold a toy in front of their babies and just let them look at it for 30 seconds. Only after that do they let the baby hold the toy. In schools, teachers of young children make instructions very clear and ensure that all children have understood before moving on.

"If children are about to come in from outside, the teacher will tell them to wash their hands, sit down, and have their snack. Then the teacher has children repeat the instructions," Miller says. "They rehearse what is about to happen."

"In the U.S., a teacher will give a quick explanation and then go around the class explaining to the students who don't get it," says Miller. "The problem is that if you're one of those kids who doesn't get it, you're waiting for the teacher to come around, and you stop paying attention."

Chinese students are also taught to understand deeper relationships in the material they're studying. Rather than simply drilling students on multiplica-

tion tables, Miller says, a teacher might ask second graders the answer to 999 x 5.

"This could take a long time for an American student to figure out," Miller says. "But in China they have been taught to multiply five by one thousand and subtract five. American kids are told to practice something over and over until it sinks in, but what they are practicing is so simple they don't really understand it or know what the patterns are."

By at least one measure, Shanghai's approach is working. In 2010, the Paris-based Organisation for Economic Co-operation and Development (OECD) released results of an assessment administered to 15-year-olds in 65 countries. Shanghai stu-

of homework, and the world's top test scores in math, reading, and science have built Shanghai's reputation as an academic powerhouse.

Can stellar performance be attributed solely to hard work and long hours? No, says one researcher who has compared American and Chinese schools. A determining factor may be a concerted emphasis on cultivating attentiveness and comprehension, both at school and at home.

Kevin Miller, a professor at the University of Michigan's School of Education, and his colleagues studied the ways math is taught in Chinese classrooms. They also looked closely at techniques used there to foster attentiveness in children.



dents bested their peers around the world in science, reading, and math. (Not all Shanghai children benefit from the city's stellar school system. Shanghai does not admit the vast majority of 400,000 children of migrant worker families into city schools. They attend a lower tier of free public schools, where the quality of instruction is inferior.)

# Learning "Without Interference"

IN SHANGHAI CLASSROOMS, THE TEACHER RULES. EXPECTATIONS are made clear, and students are taught to internalize, rather than challenge, teacher instructions.

For educators in traditional schools, this structure will feel familiar. The Sudbury school philosophy—with its emphasis on self-direction and responsibility—will feel much less so. Students design their own education. They may work alone at a task or

Valley School's founders. "We discover ways to find out what we need to know, rather than sitting in front of someone who's telling us."

Sudbury schools are private (tuition-funded) and accept students from preschool up to age 19. While there aren't formal classes, grades, or homework, there are plenty of rules. Codified in a "law book," the rules have to do with how people treat one another and the school, not what they learn or how they learn it.

As at Summerhill, Sudbury schools govern themselves as direct democracies. Each student and staff member has one

vote at regular school meetings, where all matters related to the running of the school are handled, including budget, hiring of staff, and ratifying the law book. Complaints about misconduct are heard by the Judicial Council, which consists of students and one staff member, all selected at random.

At Clearview Sudbury School in Austin, Texas, the rules require, for example, that students wear a snugly buckled helmet while riding a wheeled vehicle. They pro-

hibit all forms of abuse, including damage to school property, and detail the procedures of school meetings.

"Rules typically develop from real-world situations where issues of conflicting rights have arisen that require a new rule to state the current school policy," says Clearview staff member Tom Bohman. "Arbitrary or unnecessary restrictions of freedom aren't very popular in the school meeting."

The Judicial Council is the heart of the school. Meetings can go on for hours, with witnesses called and past offenses discussed. Issues of fairness and justice receive full deliberation. In the end, students found guilty receive a sentence. A student charged with repeatedly leaving a mess in the kitchen might be banned from the kitchen for a number of days. A child who runs through an area where running is not allowed (by the stu-

Most of what we get out of life, we learn on our own. We discover ways to find out what we need to know.
Sudbury's Daniel Greenberg

with others, and while they can ask an adult for help, no structured teaching takes place.

Sudbury schools may sound like "unschooling" to many adults, who might worry that students would end up watching TV or playing video games all day. These concerns are unwarranted, say Sudbury staffers and kids alike. True, some Sudbury students learn to read by playing text-based video games. Others spend all day writing or playing basketball or making up their own games. Whatever the activity, children move at their own pace. There is no curriculum and there are no assessments. (Summerhill does offer scheduled classes, distinguishing it from the Sudbury model.)

"If we think about our lives, most of what we get out of life, we learn on our own," says Daniel Greenberg, one of Sudbury





Total Immersion. While these schools in Italy, the U.S., and Shanghai (left to right) are different, each makes sure its learners are engaged in their work.

"Students here are more self-confident, loving, and social people," says López. "With those skills in your pocket you can accomplish anything you want."

dent-approved rules) might be made to serve as

"The students with attention deficit issues might end up with a lot of cases in front of the Judicial Council," says Vicente López of the Diablo Valley School. "It's not an adult wagging a finger in front of their faces, it's the communi-

ty saying, 'If you want to be with us, this is what you have to do.'"

It's not all about process. Since there are no formal teachers, there are no content units. One Sudbury Valley School gradu-

ate spent an entire school year doing nothing but playing a single computer game.

"I did have a pretty close-knit group of friends," says the former student, "Ben." "We studied those video games like an economist would study the stock market."

Ben spent the next year playing guitar. Toward the end of his third year, he realized he was interested in neuroscience. He spent his fourth year working a full-time job and preparing to apply to a university.

It doesn't always work out so well. Some children "filter themselves out" after two or three years, says López. A child may want a larger social circle (Diablo Valley School has 36 students this year while Clearview Sudbury has only nine) or they might want more structure.

Success at Sudbury is measured by how well students prepare themselves for post-graduation life. The only required written assignment is a final paper in which the student discusses how he or she is equipped for the outside world. The student presents the paper before the entire school community, including parents, which votes on whether to grant the student a diploma.

# an on-campus safety monitor.

# **Put It to Work in Your Schools**

### **10 TEACH LISTENING**

in Shanghai, teachers give instructions about a lesson or the day's schedule and then ask children-not just one or two kids but the entire group—to repeat the directions.

### **@** CONNECT THE DOTS

Teachers in Shanghai schools teach math conceptually and make the connections clear. For example, they emphasize the relationship between addition and multiplication rather than hammering home rote memorization of the times tables.

### **© EXPECT THE BEST**

in Sudbury schools, children have total freedom to choose how they spend their days. Their behavior, however, is subject to the many rules they've agreed to follow. Putting children in charge of their own conduct engages them in the process.

### **9** GO DEEP

Consider spending more time studying one historical event in depth, rather than just moving through the textbook chronologically. Going deeper can provide students with an opportunity to expiore concepts of justice, public safety, law, and equality using art, writing, economics, and science.

## Listening to the Child

ON THE EDUCATIONAL SPECTRUM, Reggio Emilia's approach falls some-

where between those of Shanghai and the Sudbury schools. Named for the city in northern Italy where it was developed in the aftermath of World War II, the heart of the Reggio approach calls upon parents, teachers, and children to work together. Children, according to the system, must have some control over their learning. Typically, in the early days of a school year, teachers hang back and observe their students.

"Listening is used a great deal in Reggio schools," says Lella Gandini, the liaison for the North American Reggio Emilia Alliance. "By observing and listening to children's ideas, teach-

ers construct the curriculum."

A group of preschool-age children in a Reggio school, for example, was interested in studying measurement. There was, Gandini recalls, a small table that all the children used and loved. They wanted to build a replica.

"The teacher thought, 'This is a good occasion for the children to measure," Gandini says. "She brought in the carpenter but told him not to take out his measuring tape." Instead, they asked the children to do the measuring and just watched.

An extended project developed. Children used various things to measure the table, including one child's shoe. They created their own tape measures, only to realize they weren't the same sizes. They went back to using the shoe. The table, it turned out, measured six shoes by three-and-a-half shoes.

"Some people might say, 'But what a waste of time!" Gandini says. "But the children came to understand the mechanism of measure and its function."

In the municipality of Reggio Emilia, the approach is used in infant and preschool programs. In the United States, a small number of elementary schools have integrated the approach, joining a large num-

ber of American preschools.

Opal School in Portland, Oregon, incorporates Reggio at both levels. Toddlers attend the private Opal Museum School. In the same complex of buildings, adjacent to a zoo and several parks, is the public Opal Charter School, for grades K-5.

Now in its eleventh year, Opal School serves 88 children. Each of the four classrooms has a full-time teacher. A mentor teacher, more experienced with the Reggio Emilia approach, splits her time between the classes.

As a public school, Opal is beholden to state standards. In fourth grade, children across Oregon study the history of their state. Traditionally, that involves diving in to the familiar story of the pioneers' journey on the Oregon Trail. Instead, Opal teachers took their students to a play that explored a different event from the state's past: the conflict engendered by the decision to dam the Columbia River at Celilo Falls, which had been

Neither of these statements sounds new to anybody who has been paying attention to the steady stream of criticism heaped upon educators in the last year. What is new, however, is that they didn't come from anyone in the United States, but from Michael Gove, Britain's education secretary.

Gove got this year's BETT (British Education and Training Technology) show off to a rolling start when he announced that the current curriculum for information and communication technology—required for all students—has left children "bored out of their minds being taught how to use Word and Excel by bored teachers."

Gove announced that starting in September, the old iCT curriculum will be scrapped in favor of an "open source" approach, giving teachers the flexibility to teach skills favored by employers and leading academics.

invoking the legacy of computer science pioneer Alan Turing, he added, "Our school system has not prepared children for this new world. Millions have left school without even the basics they need for a decent job.... imagine the dramatic change, which could be possible in just a few years, once we remove the roadblock of the existing ICT curriculum." BETT, with an estimated 30,000 attendees, is England's largest ed tech show. Officials from Google, Facebook, and the BCS Academy of Computing all welcomed the proposed changes.

it was a busy week for Gove, who also addressed teacher evaluation and job protection. He announced new rules that would allow schools to fire teachers during their first year, require annual assessments, and remove time limits on teacher observation.

Schools would also be able to more freely share information on teachers who receive poor assessments in an attempt to keep bad teachers from hopping from one school to another. Union officials said they would "vigorously" oppose the changes. Will U.S. schools follow the U.K.'s lead? —Wayne D'Orio

a key native fishing area for 15,000 years.

"The teachers were curious about how the children would react. They threw it out as a provocation," says Susan MacKay, director of education at Opal.

"It's an important Oregon story," says MacKay. "The kids loved the play and were passionate about the conflict."

For the bulk of the school year, the children came up with projects related to the play. They created a clay model of the falls, studied hydroelectric power, and took a field trip to the dam. They studied the Great Depression as a way to understand the context of the event and created their own version of the play.

"The theory is that the deeper kids go into a subject, the more hooks they develop for any other time when they are studying something similar," says MacKay. "You can plan and plan and plan, but if the kids aren't with you, you've got nothing. We've got to make sure their curiosity is alive."