



Teacher Evie Stone stopped offering rewards to her students in order to encourage leadership.

Volume 28, Number 1
January/February 2012

From Math Helper to Community Organizer

New longitudinal studies identify key factors in leadership development

by LAURA PAPPANO

Is the student who organizes tag during recess or chooses to help a classmate with math on track to be a senator, a CEO, or a community leader?

He—or she—may well be.

Behaviors like embracing novel experiences, supporting peers, even pestering parents for lessons can predict whether a child will emerge as a leader in adulthood, according to researchers who say they are the first to plot a pathway from childhood experiences to adult leadership. The research may also help educators encourage leadership—a commonly heralded “21st-century skill”—if teachers know what behaviors to look for and support, they say.

Theories abound about what makes one child develop into a leader and another not, says Ronald E. Riggio, Henry R. Kravis Professor of Leadership and Organizational Psychology at Claremont McKenna College and editor of [a special issue of the *Leadership Quarterly*](#), which last year published four studies of leadership development based on data going back to 1979. “There are these crazy ideas like pushy mothers or pushy fathers” feeding adult leadership success, he says, adding that research on leadership is often retrospective beginning with questions like, “What was Churchill’s mother like?”

Rather than looking backward, the new studies use longitudinal data to test hypotheses about the relative importance of factors such as the role of parents, inner motivational drive, intelligence, childhood social skills, and personality traits like extroversion in shaping future leaders.

To do the studies, researchers contacted the parents of every child born in Orange County, Calif., in 1979. They then tracked a sample of 106 subjects (whose parents agreed to participate and who stuck with the study) from the time they were one through age 29. Some, but not all, emerged as “everyday” leaders. Researchers defined this type of leadership as “taking on the role of and engaging in the process of influencing others toward a common endeavor, goal or cause, regardless of designated formal position.”

Researchers met with the children (and parents) twice a year for the first four years, then once a year through age 17 and once at 24 and again at 29. The assessments—20 for each child—included home observations, surveys, interviews, the Children’s Academic Intrinsic Motivation Inventory, IQ test scores, and academic grades and transcripts.

While Riggio and others are just beginning to analyze data (there are more than 18,000 variables), taken together, the four papers offer an emerging guide for leadership development.

Initiative and Everyday Leaders

Researchers were able to show, for example, that children as young as two reveal temperaments that predict for later leadership. How a child initially responds to a novel situation—like a person, place, toy, or food—is important, according to Allen Gottfried, director of the [Fullerton Longitudinal Study](#), who has led the collection of data since 1979 and coauthored the four papers with his wife, Adele Gottfried, professor of educational psychology at California State University at Northridge, and other researchers. “Some hold off, some withdraw, some engage,” he says. Those who engage, “tend to become more extroverted, socially engaging and become everyday leaders.”

Researchers also found that children who placed the most demands on teachers and parents to join or do activities were more likely to be leaders as adults. More critical than the type of activity they lobbied for was the emergence of a quest to acquire new skills and knowledge. It also mattered that a child invested in and committed to the new activity if permitted to pursue it.

Equally important was the parent’s support in fostering new passions and interests, he says, noting that the same issue arises in

classrooms between students and teachers. “It doesn’t mean you say yes to everything the kid wants,” says Allen Gottfried. But if a child “shows a genuine interest” in something, he says, that support can be essential to fostering a key leadership quality—the drive to take on a challenge and pursue it until they find mastery or success.

“That quality is very relevant because when you are a leader you have to delve into a world that is uncharted,” explains Adele Gottfried. The everyday leaders they identified enjoyed tackling problems and finding solutions and did not view it as a chore, she says.

More Than IQ

Researchers found just this sort of inner motivation to be a common ingredient among the children they tracked who held leadership posts as early as high school. While there was “a little overlap” between those with the strongest inner motivation and those with top IQ scores, the data showed that stronger motivation trumped higher IQ in winning top roles in clubs. “The motivationally gifted were significantly more likely to be the leaders,” according to Adele Gottfried.

The importance of inner motivation to leadership is not surprising to Carol S. Dweck, psychology professor at Stanford and author of *Mindset: The New Psychology of Success*. She says the study offers a strong argument for schools “to do things fundamentally differently.”

“We have fallen into a culture that tests and labels—and we need to be creating people who are visionaries, who are risk takers, who know how to adopt a challenge and pursue it over time,” says Dweck.

Dweck says her work shows that those who are encouraged to have a “growth mindset” and find satisfaction in achieving their own intrinsic goals are more likely to persevere and succeed at tough tasks than those who are simply labeled “smart.” And yet both Dweck and Adele Gottfried point out that schools place such heavy emphasis on extrinsic rewards like test scores and classroom prizes that they risk stifling development of students’ inner drive.

When classroom teachers provide a rich variety of experiences and give students choices as they tackle required material, they help students take charge of their own learning, Adele Gottfried adds.

Cultivating Leadership

The studies show that schools must become “intentional and purposeful” in creating opportunities for students to connect with real-world experiences, to fail and pick themselves up, and to connect with passions they can pursue and master, according to Tim Magner, executive director of the [Partnership for 21st Century Skills](#). “What this study seems to be indicating is that there are what I would call ‘make or break skills’ that come on top of the three Rs,” he says.

Giving more responsibility to her students is one way Evie Stone, special education teacher at [Vista Middle School](#) in Van Nuys, Calif., is trying to help them develop leadership qualities.

Stone, a former student of Adele Gottfried’s, used to have a classroom system of rewards: Students would get stamps on a card if they did something she wanted them to do (a full card earned a prize). But she scrapped this system one day after she saw how it was killing her students’ inner motivation. “I asked a question in front of the class and no hands went up. I went to the stamper. It was like Pavlov’s dog. As soon as I grabbed it, the hands went up. That told me they would only respond if they were getting a reward. At that moment I said, ‘We are done with this.’”

She now will offer verbal praise—or not. “If I forget verbal praise, some will ask, ‘How am I doing? Am I having a good day?’ I will turn it around and say, ‘How do you think you are doing?’”

Stone says she believes some students are naturally more inclined to be leaders, are more self-motivated, and will even compliment or encourage others. But that doesn’t mean others can’t learn. To help, Stone got rid of that classroom staple of assigned jobs and instead created an opportunity for her students to spontaneously step up and take charge. “We do not need a book passer-outer,” she tells her students. “If something needs to be done, please get up and do it for us all.”

Laura Pappano is an education journalist based in New Haven, Conn. She is the author of [Inside School Turnarounds: Urgent Hopes, Unfolding Stories](#) (Harvard Education Press, 2010).



Also By This Author

- [The "New PE" Aims to Build Bodies and Brains](#)
- [Charters and Districts \(Begin to\) Collaborate](#)
- [Computer Science for Everyone?](#)
- ["Trauma-Sensitive Schools"](#)
- [Engaging Young Minds with Philosophy](#)
- [Attention, Class!](#)
- [Changing the Face of Math](#)
- ["Grit" and the New Character Education](#)
- [The Algebra Problem](#)
- [Waldorf Education in Public Schools](#)
- [Using Research to Predict Great Teachers](#)
- [Differentiated Instruction Reexamined](#)
- [Kids Haven't Changed; Kindergarten Has](#)
- [Scenes from the School Turnaround Movement](#)
- [Bonding and Bridging](#)
- [Answers and Questions](#)
- [The Power of Family Conversation](#)
- [Small Kids, Big Words](#)
- [Meeting of the Minds](#)
- [More Than "Making Nice"](#)

Related Articles

- [Teaching 21st Century Skills](#)
- [Unleashing the "Brain Power" of Groups in the Classroom](#)
- [Student-Directed Learning Comes of Age](#)