

# Uncovering innovations that are invisible in plain sight

Positive deviants are individuals who face the same challenges as others and have the same resources but still manage to find ways to effectively address problems.

**By Arvind Singhal**

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In one of his many guises, mystical Sufi character Nasirudin appears on Earth as a smuggler, arriving at the customs checkpoint each day leading a herd of donkeys. The customs inspector would feverishly turn the baskets hanging on the donkeys upside down to check the contents to find nothing of interest. Years go by and Nasirudin's legend as a smuggler grew while the inspector became more frustrated.

One day, after Nasirudin and the inspector had retired from their respective occupations, their paths crossed.

The former inspector pleaded, "Tell me, Nasirudin. What were you smuggling?"

"Donkeys," Nasirudin said.

Nasirudin's donkey story holds important lessons for educators and educational institutions. Often the solutions to highly intractable problems in schools — e.g. absenteeism, tardiness, gang violence, timely graduation, and others — stare us in the face, but remain invisible in plain sight. To discover these invisible, in-house, innovative practices, educators need to pay attention to the Positive Deviance (PD) approach to social, organizational, and individual change.

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The Positive Deviance (PD) approach assumes that every community has individuals or groups whose uncommon behaviors and strategies enable them to find better solutions to problems than their peers although everyone has access to the same resources and challenges (Pascale, Sternin, & Sternin, 2010). However, these people and groups are ordinarily invisible to others in the community, and especially to expert change agents. These implausible outliers are deviants because their uncommon behaviors are not the norm; they are positive deviants because they have found ways to effectively address the problem, while most others have not.

Over the past two decades, the PD approach has been employed in over 40 countries to address a wide variety of intractable and complex social problems, including solving endemic malnutrition in Vietnam, decreasing neonatal and maternal mortality in Pakistan, reducing school dropouts in Argentina and in the U.S., reintegrating returned child soldiers in northern Uganda, and drastically reducing the spread of hospital-acquired infections in U.S. healthcare institutions (Pascale, Sternin, & Sternin, 2010; Singhal, Buscell, & Lindberg, 2010; Singhal & Dura, 2009).

#### **PD & malnutrition**

In December 1990, Jerry and Monique Sternin arrived in Hanoi to open an office for Save the Children. Their mission: Implement a large-scale program to combat childhood malnutrition in a country where 65% of all children under age 5 were malnourished (Singhal, Sternin, & Dura, 2009).

Vietnamese officials challenged the Sternins to come up with an approach that enabled the community, without much outside help, to improve children's nutritional status. They were given six months to show results.

Tasked with the impossible, the Sternins wondered if the concept of positive deviance, codified by Tufts University nutrition professor Marian Zeitlin, might hold promise. Zeitlin was investigating why some children in poor households were better nourished than others (Zeitlin, Ghassemi, & Mansour, 1990). What were they doing that others were not?

Positive deviance sounded good in theory but no roadmaps existed to design an intervention. Working with local resource persons, the Sternins decided to survey families in four village communities in Quang Xuong District in the Thanh Hoa province, south of Hanoi, where childhood malnutrition was high.

Community members weighed about 2,000 children under age 3, compiled a growth chart for each child, and mapped their locations. About 64% of the weighed children were malnourished.

The Sternins asked the quintessential PD question: Are there any well-nourished children who come from very, very poor families?

Indeed, there were some children from very poor families who were well nourished.

## Every community has individuals or groups who manage to find better solutions to problems than their peers although everyone has access to the same resources and challenges.

Those who had managed to avoid malnutrition without access to any special resources were the positive deviants.

Through a process of community-led self-discovery, the Sternins learned that the PD families were practicing a few simple behaviors that others were not (Singhal, Sternin, & Dura, 2009):

- Families collected tiny shrimps and crabs from paddy fields and added them to their children's meals. These foods are rich in protein and minerals.
- Families added greens of sweet potato plants to their children's meals. These greens are rich in essential micronutrients. Both the shrimp and the greens were accessible to everyone, but most community members believed they were inappropriate for young children.
- Families were feeding their children smaller meals three to four times a day, rather than the customary two a day.
- Families were actively feeding their children, rather than placing food in front of them, making sure no food was wasted.

With best practices discovered, the natural urge was to disseminate this knowledge. Initially, such was done through local resource persons who visited homes, made posters, and presented informational and educational sessions. But these solutions encountered resistance from most households because they didn't fit their established practices.

In one of the community meetings, a village elder offered some advice; "A thousand hearings isn't worth one seeing, and a thousand seeings isn't worth one doing."

The Sternins dwelled on the sagacity of the elder's remark. Could a nutrition program be designed that

emphasized doing more than seeing or hearing? So, they designed a two-week nutrition program around the notion of "doing" in each of the four intervention villages.

They asked caregivers whose children were malnourished to forage for shrimps, crabs, and sweet potato greens. The focus was on action, picking up the shrimps, crabs, and sweet potato shoots. They recruited local women to host cooking sessions where the caregivers learned how to cook new recipes using the foraged ingredients. Again, the emphasis was on doing, not simply on information transfer.

Before feeding their children, mothers weighed them. No food was wasted as the children were actively fed. Upon returning home, the non-PD mothers were encouraged to feed their children three or four small meals a day.

Such feeding and monitoring continued for two weeks. Mothers could actually see their children becoming noticeably healthier. The scales were tipping!

From the original four communities in Thanh Hoa, the project was first expanded to another 10 adjacent communities, and then, over the next several years, nationwide. Each time, the Sternins insisted that the community engage in a process of self-discovering the PD behaviors rather than importing them from other communities. This process of self-discovery was as important, if not more, than the actual PD behaviors that were uncovered.

Overall, the PD program helped over 2.2 million people, including over 500,000 Vietnamese children improve their nutritional status (Pascale, Sternin, & Sternin, 2010). A decade later, a study showed that successive generations of impoverished Vietnamese children in the program villages were well-nourished (Mackintosh, Marsh, & Schroeder, 2002).





## Those are the positive deviants.

Born out of necessity, this pioneering experience in Vietnam paved the way for other PD applications to follow. The first systematic use of PD in educational settings occurred in Argentina, inspiring other PD investigations in the U.S. and elsewhere.

### **Reducing dropouts in Argentina**

In 2000, a 1st grader in Argentina's rural Misiones province had no more than a one in two chance of making it past 6th grade. Students routinely dropped out to help with agricultural tasks. For most parents, school attendance for their children was a relatively low priority. Survival took precedence over education.

To explore the potential of the PD approach in combating high rates of school dropouts, Jerry Sternin was invited to Misiones. In Alem and San Pedro, two communities in Misiones, Sternin worked with a team of school officials, teachers, and parents to conduct a PD inquiry (Dura & Singhal, 2009). Perhaps there were some elementary schools in Misiones that had higher graduation rates and no access to any extra resources.

The first step in a PD inquiry is to define the problem. The participants defined the problem as "Schools in Alem retain only 56% of students through grade three." Then they specified a desired outcome: Schools in Alem would achieve retention rates of 75% or higher (Dura & Singhal, 2009, p. 3).

The next step was determining if Alem had schools that did not have a dropout problem. With school enrollment and attendance data at hand for 63 schools, the team identified eight schools with retention rates ranging from 78% to 100%. The team eliminated two schools because they had access to extra resources. Six schools were identified as PD schools (Dura & Singhal, 2009).

Teams of teachers, parents, and school administrators set out to discover uncommon practices by

visiting those six PD schools (Sternin, 2003).

The process of self-discovery is not just about looking at what is going right. Several groups reported that teachers in the PD schools showed unusual respect for their students, rather than identifying the specific uncommon behaviors or practices through which that respect could be observed. The groups were challenged to identify specific, verifiable practices that led to good outcomes.

The PD inquiry yielded specific and verifiable practices (Sternin, 2003; Singhal & Dura, 2009). In PD schools, teachers warmly greeted parents whenever they visited the school. In turn, parents felt comfortable approaching the child's teacher and were heavily involved in the school's activities, providing skills workshops (i.e. sewing, woodworking), mending fences, and volunteering. Teachers also asked parents to RSVP to invitations for meetings, and when parents did not respond, teachers went out of their way to contact them. In PD schools, teachers felt supported to break up their class into smaller groups and modify lessons and assignments to cater to students' abilities. Further, PD schools served breakfast to students, recognizing that hungry children have difficulty in learning. Serving breakfast also meant that students showed up at the beginning of the school day, resulting in higher attendance and higher attention. The common practice in the non-PD schools was to serve lunch.

In a fourth step, the Sternin team designed a PD intervention that would make knowledge and solutions actionable across schools in Alem and other communities. For instance, teachers, parents, and students entered into learning contracts, defining their respective roles and responsibilities to ensure the students made steady progress. These were assessed routinely so no one fell through the cracks. A subsequent World Bank report noted that school dropout rates in Misiones, Argentina, dropped significantly (Sternin, 2003).

### **Student performance in U.S. schools**

Inspired by the Sternins' work, the National Staff Development Council conducted the first-ever study of positive deviance in U.S. schools (Richardson, 2004). Six school districts were investigated that achieved above-average student results without access to any additional resources. Richardson (2004) reviewed several salient PD practices, including the ones that follow.

Mary Dunbar Barksdale, a 3rd-grade teacher in Velasco Elementary School in Brazosport, Texas, was an implausible outlier among her peers. Although 94% of her students lived in poverty, all of her students scored highly on the statewide assessments. A PD inquiry revealed that Barksdale's mo-

dus operandi included a close examination of all her students' tests in order to identify problem areas, retooling her classes to plug these gaps, and retesting students until they achieved the desired level. Over the next seven years, Barksdale's process was shared widely across Brazosport Independent School District schools, and further refined, honed, and standardized for implementation.

Each teacher in Brazosport received reports for how each student in their class performed on tests. They noted which questions students missed, which wrong answers they chose, and what remedial action was needed for which student on which question (Richardson, 2004). Only when all students met the required testing standard did the class move forward. Students who needed additional learning time were regrouped and retaught for what they missed. Students who needed substantial help were tutored one-on-one by instructional aides in learning labs. No child was to fall through the cracks!

Given that several teachers in a school in Brazosport taught the same class, if one teacher's students did particularly well on a standardized exam, other teachers were enabled to learn what their colleague was doing differently. He or she may simply have passed out a weekly review sheet of the critical concepts covered in class; this would have served as a study guide and helped with subject retention. Once identified, such "hidden" PD practices were widely shared and amplified.

Richardson's (2004) analysis also found that the Mason School District in Ohio scored significantly higher than its peers. Their secret sauce was a judicious use of review sheets, pacing charts, and common assessment protocols. Curriculum leaders for each subject in a Mason school jointly developed a pacing chart for each course, ensuring that "students taking the same course from different instructors get an equal amount of instruction in each topic" (Richardson, 2004, p. 85). The pacing chart broke down the instructional walls between classrooms, allowing for implementing common in-time assessments across classrooms. Student performances on tests allowed curriculum leaders to determine what worked and what remedial actions were needed.

### **PD at Merced High School**

In 2009, Merced High School in Merced, Calif., engaged Mark Munger, a longtime colleague of the Sternins, to serve as a PD coach to address its graduation rate — a dismal 56% (Po, 2011). The odds of graduating were stacked heavily against students: Most hailed from poor families (75% were eligible for free and reduced-price meals), English was a second language to many (Spanish and Hmong were the predominant first languages), and many female stu-

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dents, especially the Vietnamese and Hmong, bore the burden of household tasks that took time from classes and assignments (Po, 2011). Further, students were also falling off track because of absenteeism, gang participation, drug use, and abuse at home.

Although resource constraints made it impossible to implement a "pure" PD progress in Merced, Munger was able to work with at-risk students to identify and develop several PD strategies to get students back on track. For students who were gang members, this meant walking away from a fight without losing face with the opposing gang while maintaining loyalty and membership in their own gang. The simple act of walking away ensured physical safety for all and soothed tensions rather than incite them. Further, many students said they would actively seek a "reflective pause" when engaging in any action that might land them in detention. This allowed them to uphold their familial responsibilities and also to continue with their after-school part-time jobs.

Teachers who participated in the Merced PD project invested time to meet among themselves to identify and implement solutions for students who were in difficulty. They also met with these students individually, offering support, guidance, and mentoring. Enough trust was generated that participating students felt comfortable disclosing problems to each other and to sympathetic teachers and administrators. Through such conversations, participating students at Merced learned what their successful peers were doing differently.

Within two years of the PD program being implemented, graduation rates at Merced increased by about 25%.

### **Absenteeism in Clairton City**

Close on the heels of Merced, the Clairton City

has been tapped thus far. Barring a few exceptions, most innovations in schools are introduced from the outside by experts, while innovative and effective solutions lie hidden in plain sight. Possibilities abound to use the Positive Deviance approach in schools across the U.S. and elsewhere. I hope that Positive Deviance becomes the norm to solve complex intractable problems in educational institutions which defy simplistic, expert-driven solutions. ■

## Some of the PD practices that were uncovered were astonishingly simple.

School District in Pennsylvania used a PD approach to address absenteeism among 7th to 9th graders, as well as address late arrivals and disruptive classroom behavior (Niederberger, 2011).

Initially designed to address gang violence and street crime in Clairton, the PD program morphed into a school-based program when it became clear that keeping youth in school meant keeping them off the streets. With the active engagement of a local church group and a core group of parents, students, and school officials, a PD inquiry assessed what enabled at-risk students to attend school, arrive on time, and display no disruptive behavior.

Some of the PD practices that were uncovered were astonishingly simple. PD students used alarm clocks to wake up on time. Some placed these alarms across the room from their beds so they had to get out of bed to turn them off. Those practices made it easier for them to get ready and make it to school in a timely manner. Another group of students implemented a regular peer-based texting system each morning to make sure they were all awake and getting ready for school. The PD inquiry also showed that children of parents for whom school attendance was “non-negotiable” were unlikely to be tardy or absent.

The Clairton PD program showed remarkable results: From 2009-10 to 2010-11, both in-school and out-of-school suspensions dropped by 50%, disruptive class behavior decreased by 57%, and tardy arrivals dropped by 45% (Niederberger, 2011). Parental involvement in school affairs, slow to catch on, increased significantly over time.

### A call to educators

The Positive Deviance approach holds important implications for U.S. schools and institutions of higher learning. However, very little of this potential

### References

- Dura, L. & Singhal, A. (2009). Will Ramon finish 6th grade? Positive deviance for student retention in rural Argentina. *Positive Deviance Wisdom Series*, 2, 1-8.
- Mackintosh, U., Marsh, D., & Schroeder, D. (2002). Sustained positive deviant child care practices and their effects on child growth in Vietnam. *Food and Nutrition Bulletin*, 23 (4), 16-25.
- Niederberger, M. (2011, March 31). Clairton district's 'positive' initiative shows results. *Pittsburgh Post-Gazette*. [www.post-gazette.com/pg/11090/1135793-55.stm?cmpid=news.xml](http://www.post-gazette.com/pg/11090/1135793-55.stm?cmpid=news.xml)
- Pascale, R.T., Sternin, J., & Sternin, M. (2010). *The power of positive deviance: How unlikely innovators solve the world's toughest problems*. Boston, MA: Harvard University Press.
- Po, V. (2011, March 7). Positive deviance: Combating high school dropouts. *New America Media*. <http://newamericamedia.org/2011/03/positive-deviance-a-program-to-combat-high-drop-out-rate.php>
- Richardson, J. (2004). *From the inside out: Learning from the positive deviance in your organization*. Oxford, OH: National Staff Development Council.
- Singhal, A., Buscell, P., & Lindberg, C. (2010). *Inviting everyone: Healing healthcare through positive deviance*. Bordentown, NJ: PlexusPress.
- Singhal, A. & Dura, L. (2009). *Protecting children from exploitation and trafficking: Using the Positive Deviance approach in Uganda and Indonesia*. Washington DC: Save the Children.
- Singhal, A., Sternin, J., & Dura, L. (2009). Combating malnutrition in the land of a thousand rice fields: Positive Deviance grows roots in Vietnam. *Positive Deviance Wisdom Series*, 1, 1-8.
- Sternin, J. (2003). *Positive deviance and student retention and educational enhancement program*. Unpublished report. Washington, DC: The World Bank.
- Zeitlin, M., Ghassemi, H., & Mansour, M. (1990). *Positive deviance in child nutrition*. New York, NY: U.N. University Press.