Students no longer waiting to exhale
National program to bring breathing, meditation to Gunn freshmen next year

by Elena Kadvany

There's a scientific reason the saying "take a deep breath" exists.

"Every emotion that we experience, there's a corresponding rhythm of breath," said Anjali Vishwanath, a Palo Alto mother and self-described left-brain engineer-turned-firm-believer in the power of breathing and other mindfulness techniques.

When we're angry, anxious or stressed, our breathing is faster paced and shallow. Deep, slow breathing is associated with feeling relaxed. Breathing is also unique in that it's something we can control; studies have shown that purposefully taking deep, slow breaths can help to increase relaxation and decrease levels of the brain's stress hormone, cortisol.

This is one premise behind Youth Empowerment Seminar (YES!), a national organization that delivers mindfulness curricula, from breathing techniques and yoga to lessons on stress and nutrition, to school communities. YES! is launching a pilot program at Gunn High School this fall for all incoming freshmen, with the goal of giving Palo Alto students simple, tangible tools to manage stress.

In November, Gunn Principal Denise Herrmann connected the school's nascent student wellness committee with Vishwanath, the mother of two Gunn juniors and a YES! instructor, to discuss the possibility of bringing the program to Gunn. Vishwanath has taught the YES! curriculum for several years at other Bay Area schools, including Lynbrook High School and Yerba Buena High School in San Jose and Bowman International School in Palo Alto. The curriculum is delivered in about 30-minute segments over four to five weeks during physical-education classes.

The potential value of incorporating more mindfulness education into Palo Alto schools has risen to the top of the community's consciousness this year following several student deaths by suicide and a debate about how to boost mental health at Palo Alto's two public high schools. During those community conversations, students have repeatedly asked for more education around stress-management and mental health awareness.

Software engineer Vishwanath understands why some people are skeptical about the impact of practices like breathing and meditation. She said she felt similarly before she tried it herself. She turned to a local mindfulness class after her husband died of leukemia when her children were 4 years old, and she said it completely shifted how she viewed and dealt with the loss.

"It helped me parent better; it helped me be a better individual; it made me look at problems in a different light," she said. "It's not that problems don't come now, but the way I react to them changed for me."

She teaches students, for example, something called "straw breathing," in which you breathe deeply through your nose and then pretend there is a straw between your lips as you exhale. She starts with eyes
Vishwanath also teaches students to be "button proof." She asks them to think about a person who knows how to push their buttons -- how to draw anger, annoyance, jealousy, fear or any emotion from them -- and for 24 hours, become "button proof" to this person. Instead of instinctively reacting, she asks them to pause, take a few breaths and then respond. Learning this technique can also open up conversations about the people who push students' buttons -- what is going on in their lives outside of school that might be weighing on them, Vishwanath said.

Other breathing techniques help with things critical for teenagers, like improving focus and concentration or falling asleep, Vishwanath said. YES! also includes physical activity, emphasizing the connection between body and mind, and teamwork activities that teach how to manage emotions and resolve conflict.

Gunn and Paly student government members sampled the YES! curriculum together during a condensed pilot event one weekend in February. The district is also paying for Gunn teachers to attend a pilot program for educators later this month.

"Most teenagers are skeptical -- what's breathing differently going to do?" said Gunn sophomore class president Chloe Sorensen, also a member of the student wellness committee. But the effect of the simple straw breathing exercise, she said, surprised students.

"A lot of kids were kind of amazed, like, 'Wow, that actually worked.' Just 20 seconds of breathing differently can make a huge impact," Sorensen said.

Aggregated survey results from 18 schools across the country that have participated in the youth program backs this up: 76 percent of students reported improved sleep; 84 percent reported improved mood; 83 percent improved focus; and 78 percent reduced anger, frustration, stress and worry. Researchers from the University of California, Los Angeles, compared students who participated versus those who did not and found that the participants reported less impulsive behavior after the program. Further research is also underway, including a large study funded by the National Institutes of Health to determine the effects of the program on behavioral and neural markers of emotion regulation as well as sustained attention and resilience to stress. A Stanford University study is looking at how the program might alleviate symptoms of depression and anxiety among adolescents with eating disorders.

Sorensen said that for her the pilot also had an unintended positive consequence: bonding with Paly students she wouldn't otherwise know. She imagined this would be doubly helpful for freshmen students entering a new school.

The Gunn student government voted unanimously to bring YES! to their school. Paly's has not, mostly because many teachers already incorporate similar techniques in their classrooms, according to Paly student body president Claire Liu, who participated in the pilot.

Paly's Associated Student Body (ASB) leadership class meditates for about five minutes at the start of every class. Student news website the Paly Voice reported last week that other history, psychology and English teachers have too started the practice in their classes. Gunn teachers have as well; PE teacher Amy Anderson recently started "wellness Wednesdays," during which students work on breathing, stretching and yoga.

"I feel like this realm of stress management is sometimes overlooked and seen as a little unorthodox or bizarre, but from my own experiences, and those of a range of my peers, they prove to be quite effective," Liu said. "We meditate for a little under five minutes at the beginning of each ASB class, and I definitely feel more calm and focused afterward. What I think is really valuable about the incorporation of mindfulness is that it teaches students how to proactively address their stress and emotions."
Sorensen echoed that and said there's also something powerful about the short-term, tangible and personal impact of breathing and mindfulness techniques.

"Simple techniques for stress reduction -- that's really what kids need more," she said.

Both Sorensen and Liu said when they're feeling overwhelmed or anxious, they now turn to breathing or taking a few moments to decompress. This is the purpose of YES!: to equip all incoming high school students with the tools necessary to do this on their own, whether it's on a regular basis or during a crisis.

As Vishwanath put it: "You have a life jacket; you're not looking for one when you're drowning."