



.P.E.N

GLOBAL VILLAGE

ORIGINAL PEOPLES' EDUCATION NETWORK, INC.

Mindful Math Techniques for building
Concentration, Confidence,
and Cultural Capital

Mindful Math Coach: Michael Little Crow
Mindful Meditation Coach: “Bo” Uraiwan Pinthong

Open-global-village.org

Philosophy of Presenters

Michael Little Crow. Indigenous Math Educator

As young children we all acquired our first language using a natural learning process genetically hardwired within the human brain. By examining the cultural and biological connections to mathematics during this workshop, we will take advantage of this same natural learning process to assist our students to successfully learn and enjoy math. Additionally these processes foster open and creative thinking which is powered by each person's unique strengths and Local Wisdom. To take full advantage of this method we will build a personal framework to understand our own math learning styles as well as being able to diagnose the preferred learning styles of our students. By guiding students to work from their areas of strength they will improve in using their preferred style while also strengthening the learning styles that they once struggled with.



Bo Uraiwan Pinthong, Graduate Scholar ASU



My perspective for education is it needs to be more about reflectively training of the mind, using your breath to experience and comprehend by openly observing the mind-body connection while being in the present moment. Mindful Meditation practice is significant for each learner because it helps them to eliminate the pollution of the mind caused by the interference of living in the modern global era. They need practice in contemplation to create more single-mindedness, organized cognition, cultivating memory, patience, and elasticity of mental processes.

Meditation is needed as the foundation of each individual's personal development which will bring them to be successful in all their tasks whether during their education or while implementing their learning. By commencing a meditative practice at an early age, the sooner they will experience less stress, delusion, and violence while building self-regulation with executive attention throughout their lives.

RESEARCH

Mindfulness Exercises Improve Kids' Math Scores

Mandy Oaklander

Jan 26, 2015

TIME Health

For more, visit [TIME Health](#).

In adults, mindfulness has been shown to have all kinds of amazing effects throughout the body: it can [combat stress](#), [protect your heart](#), [shorten migraines](#) and possibly even extend life. But a new [trial](#) published in the journal *Developmental Psychology* suggests that the effects are also powerful in kids as young as 9—so much so that improving mindfulness showed to improve everything from social skills to math scores.

Researchers wanted to test the effects of a program that promotes social and emotional learning—peppered with mindfulness and kindness exercises—called MindUP. Developed by Goldie Hawn’s foundation, it’s used in schools across the U.S., Canada and beyond.

The study authors put 99 4th and 5th grade public school students in British Columbia into one of two groups. One group received four months of the mindfulness program, and the other got four months of a standard "social responsibility" program already used in Canadian public schools.

In the mindfulness classrooms, the program incorporated sense-sharpening exercises like mindful smelling and mindful eating, along with cognitive mindfulness exercises like seeing an issue from another’s point of view. Children did a three-minute meditation three times a day focusing on their breathing. They also acted on their lessons by practicing gratitude and doing kind things for others. For the four months, researchers analyzed all kinds of in-depth measures, like behavioral assessments, cortisol levels, children’s self-reports of their own wellbeing, reviews from their peers about sociability and the objective academic scores of math grades.

The results were dramatic. “I really did not anticipate that we would have so many positive findings across all the multiple levels we looked at,” says study co-author Kimberly A. Schonert-Reichl, a developmental psychologist at the University of British Columbia. “I was very surprised,” she says—especially considering that the intervention took place at the end of the year, notoriously the worst time for students’ self-control.

Compared to the kids in the social responsibility program, children with the mindful intervention had 15% better math scores, showed 24% more social behaviors, were 24% less aggressive and perceived themselves as 20% more prosocial. They outperformed their peers in cognitive control, stress levels, emotional control, optimism, empathy, mindfulness and aggression.

The program also may have had an unintended effect—one the researchers didn’t measure, but now want to. “Anecdotally, teachers tell us that the program helped them calm down more—by doing the program and integrating these mindful attention practices and being more aware and thinking more about others, that they actually become less stressed,” Schonert-Reichl says. “That has huge implications, and a further area of research is needed.”

More research is needed, but mindfulness interventions like these are promising. "Doing these kinds of programs in school does not take away from academics," Schonert-Reichl says. "It adds to a growing research literature that’s showing, actually, these kinds of programs and practices increase academic gains. By adding this on, you not only create more academically capable, successful students, but actually create more caring, less stressed, kind students."

<http://time.com/3682311/mindfulness-math/>

यथा शिखा मयूराणां, नागानां मणयो यथा ।
तद्वद् वेदांगशास्त्राणाम् गणितं मूर्ध्नि स्थितम् ॥

—वेदांग ज्योतिष*

*“Like the crest of the peacock, like the gem on the head of a snake,
so is mathematics at the head of all knowledge”*

Vedanga Jyotiso (500 B.C.E.)

Dr. V.S. Agrawala

Vedic Mathematics

This system of Vedic Mathematics given to us by Sri Bharati Krsna Tirthaji points towards a new basis for mathematics, and a unifying principle by which we can simultaneously extend our understanding of the world and of our self.

It should also be noted that in the Vedic system a mental approach is preferred so we always encourage students to work mentally as long as it is comfortable. In the Vedic system students are encouraged to be creative and use whatever method they like.

“To practice centering the mind is to build a landing strip for yourself.
Then, when discernment comes, you'll be able to attain release safely.”

“When you want knowledge, simply make the mind still and let go of all preoccupations,
leaving just the brightness and emptiness. Think one or two times of whatever you want to
know -- of things inside or outside, concerning yourself or others -- and the knowledge will
arise or a mental picture will appear.”

Phra Ajaan Lee Dhammadharo

https://www.forestmeditation.com/teachings/forest_tradition/lee/in_mind.html

Thank you for your participation.

May you have

Peace

Calmness

Well Being

And Success

In all you do.