Meet the **Author**

GREG TANG

Math, science and multiple literacies

From his many picture books on math and science, to the Kakooma™ app for the iPhone, to cool math games and activities for kids, Greg Tang is an innovator when it comes to "multiple literacies in the library."

TingL: What started you on your journey to write books to help children become better in math?

Greg Tang: When my daughter was in kindergarten, I was volunteering in her classroom and noticed that all the kids were still counting everything, long after they had mastered that skill. I even noticed that the dominoes had pencil marks on all the dots, which meant they were counting them too! I helped the kids learn to see the dots in groups, and soon they were adding rather than counting. The work I did with those kids later turned into my first book *The Grapes of Math.*

Did your company, Technovations Inc., a multimedia and systems design company, help you evolve into a picture book author?

My work at Technovations gave me many of the skills I use to create my books and teaching materials today. We created presentations for Fortune 500 companies, and writing speeches for their CEOs forced me to become a better writer. Senior executives have to make their points clearly and precisely, which is what good teaching requires as well. We would also create the visual components of their presentations, and art-directing tens of thousands of PowerPoint slides and graphs which definitely honed my visual and graphical skills. I try to combine all of my skills and interests in my work, which is why I think I find my job so enjoyable and rewarding.

You opened a Tae Kwon-Do school and managed the health club Fitness First. It seems that you understand the importance of physical activity. Do you see a correlation between physical activity and understanding math? Have you considered encouraging kids to become more interested in physical activity in your math books?

I'm not sure if there's a connection between physical activity and understanding math, but I know kids will sure feel a lot better if they're healthy and working out regularly! I think when people feel good physically they have more energy to do everything at a higher level. This means they can delve a little deeper and gain the appreciation that comes with greater understanding. I encourage kids to be mentally and physically fit because even if it doesn't make them better in math, it will make them happier, more interested and well-rounded individuals.

You say that "solving problems quickly leads to mastery." How do your books help children do this?

Kids that are good at math are generally fast at solving problems for two reasons. First, they're abstract thinkers. They don't need to see and visualize everything and can instead use mental math to solve problems quickly. Second, they're algebraic thinkers as well. They're good at making connections and applying strategies to different problems. My books develop both these skills. They help kids transition from concrete to abstract thinking by using pictures to show groupings, but mental math to do calculations. They also use clever grouping strategies to solve a range of problems, helping kids see and make connections and think more generally and algebraically.

How does your book The Grapes of Math teach a child to be open-minded?

Many kids solve problems by using the first strategy they think of — the most obvious one. But good problem-solvers don't use the most obvious strategy — they use the best strategy! In all of my books, I've designed each problem with a clever twist based on color and spacing. I use visual tricks to fool