Ask the Expert

Rebecca Klemm explains how exploring numbers’ history, background and application to everyday life can pave the way for learning breakthroughs

Rebecca Klemm, PhD (Statistics) has been a teacher for over 40 years. She makes maths relevant for children and adults around the globe using storytelling, the senses and activities.

What is NumbersAlive!?
NumbersAlive! creates foundational and levelled multimedia activities, games and integrated learning tools that make maths relevant and prepare learners of all ages for the future. Questions or concerns about maths from teachers and students challenge NumbersAlive! to create cross-disciplinary stories, STEM activities and discovery-oriented tools. The organizational goal is to alleviate maths anxiety and make numbers ‘friends you can count on®’ for life.

As the founder and head of content, how did you develop your approach?
When I first began teaching I asked students what maths meant to them. Horrified by the responses, I began every day with a story or activity about where maths came from and its evolution into the various and beautiful systems of today. I would draw from art, history, daily transactions, literature, music, fashion, architecture, sports, news and more, and soon students and parents became fascinated.

How do your learning tools and activities differ from those of others?
We offer integrated physical and digital learning tools that allow for years of learning using the senses. We level our stories, puzzles, and activities and include surprises and patterns for students to discover and discuss. We provide initial guidance and encourage creativity, imagination, teamwork, and innovation to augment the tools or activities, so that they become part of their own experience.

What types of teaching do you do today?
I teach all ages of students, including teachers and parents. When teaching adults I begin with questions: what is maths? Where did it come from? What maths have you used daily, monthly, annually – or never – since attending school? What do you wish you had learned?

One of my major activities, Building NumberOpolis! asks participants to build a house for a number that reflects the meaning of the number in name, shape, quantity and/or order. Once the concept is understood they begin their design-thinking process, hide clues from colleagues and are proud of the results of their creativity and numerical understanding.

How has NumbersAlive! increased pupil engagement with maths in primary schools?
NumbersAlive! makes numbers ‘friends you can count on®’ for life! We use stories and ‘learning to look for numbers’ activities to link numbers to everyday life as you experience them. For example, in patterns (such as animals with four legs, zebras with two-tone stripes, car wheel designs based on five spokes), names (5th street), everyday tools (tape measures, time, temperature, keyboards, money), order (1st, 2nd, 3rd) and shapes (triangle, square, pentagon). That way, they begin to see how numbers show up everywhere. Maths calibrates our lives, and is thus useful and important to daily communication.

By discovery, children learn that 3 is not always 4-1. Recognizing ‘3’ as the symbol of recycling, triangles, Shakespeare’s witches, the sides of the Great Pyramids and more demonstrates a far deeper understanding of numeracy and its daily influence.

FURTHER INFORMATION
To find out more, contact info@numbersalive.org or visit numbersalive.org