

Editor's Message

[Stewart Craven, *Ontario Mathematics Gazette*, September 2008]

For a very long time, I have been concerned about the fact that the majority of students who graduate from our schools do not have a very positive disposition toward mathematics. In fact, some could be described as outwardly hostile toward our subject—the “I hate mathematics” group—while others could be described as math phobic. I feel that this is a travesty. It is my contention that society needs “numerate citizens” who are able to confidently:

- use mathematics in their day-to-day lives to make decisions that are, for example, environmentally appropriate and socially responsible,
- inform their opinions by accurately interpreting numerical and graphical information presented in the media,
- apply mathematics as required in their jobs or professions,
- do (and enjoy doing) mathematics for recreational purposes, and
- enjoy the mathematically aesthetic aspects of both natural and constructed objects.

Why, then, do so many people not embrace mathematics? Is it the very nature of the subject? Is it the curriculum? Is it how we teach mathematics? Is it a self-perpetuating vicious circle—math phobic/disinterested students become phobic/disinterested parents, who quite often inadvertently raise math phobic/disinterested children? It is, most likely, a combination of all of these factors and more.

There are, however, individuals in all walks of life who love mathematics. Some of these people are highly skilled in mathematics (e.g., professional mathematicians), but there are many others who simply take great pleasure in solving mathematical problems and doing mathematics for enjoyment. We must seek out the influences that led these people to enthusiastically embrace mathematics. Was it that exhilarating “Aha!” feeling when one solves a challenging problem? Or was it discovering the amazing connections between such constructs as the Fibonacci sequence and natural phenomena, such as the arrangement of seeds in a sunflower? Perhaps it was the opportunity to solve problems with, and work with, like-minded individuals. Or perhaps the catalyst was the unparalleled beauty of a fractal image, or the ultimate elegance of Euler's equation $e^{\pi i} - 1 = 0$.

Is it possible to entice the majority of people to not only be curious about mathematics, but also to embrace it as a way of making sense of the world? Would it be possible to “brand” mathematics in such a way that even very young children, who almost universally recognize McDonald's “Golden Arches” (my own daughter, at 15 months of age, would point and shout, “Fries!” whenever the famous “M” came into view), would respond to a cleverly designed symbol/logo that would lure them into the marvelous kingdom of mathematics? Is “branding” mathematics an idea whose time has come? Perhaps this is something for all of us to ponder!