

Calculus teaches flexible thinking in life

By Elise L. Moore, C.S.

“Learn how to think.” This is what my dad told me one year when school started. He explained that every subject in school required a different type or style of thinking. So what I was learning in school was not just a bunch of facts. I was learning how to adjust my thinking in new ways. This, he said, was what made for success in life.

Math, for example, requires a willingness to accept rules. The rules are fixed. The answer is either right or wrong. There is no grey area here. Rules don't bend for us because we tried hard and deserve a break. We must learn to adapt to the rules.

In college I struggled with a calculus class. It was required. There was no avoiding it. I would pay attention in class, do the homework, study long hours, and do miserably on the test.

Did I not have the ability? Had God given me only a limited amount of intelligence or ability only in certain subjects? Rather than dwell on praying to express intelligence, I decided that this was an opportunity to learn to think differently. My method of thinking apparently was not appropriate for calculus.

God gives His children intelligence, but also persistence, perseverance, determination. In this case, I realized I needed to not give up. I needed to express the Godly qualities of diligence and patience. But I also knew I needed to think in new and fresh ways. The rules were not going to change for me. I needed to change in order to utilize the rules.

I found a guy who understood calculus. I told him I needed to adjust my method of thinking so I actually could “think” like calculus. When he began to explain a concept to me, I realized my problem. I could actually feel my thinking being rigid. I couldn't relate the rules of calculus to what I saw in the world around me. It was more intangible. I wasn't thinking flexibly enough. So he would explain again, and again, and again.

It was amazing when the first breakthrough came. I opened my reasoning a little bit, let go of preconceived images of how things were supposed to be, and bingo! I understood the concept he was explaining. It was more than just being able to do the problems. I grasped the idea behind it.

We went through the entire semester that way. Gradually my thinking process became a little less rigid and more willing to accept new perspectives. I began understanding the concepts the second time he explained them instead of the fourth or fifth.

I got an “A” in the course. But more importantly, I learned to think in fresh, less rigid ways.

It has helped in prayer. Instead of resisting a spiritual concept that doesn't fit my preconceived notion of how things should be, I try to be willing to listen for God's explanation. Even if spiritual ideas are not tangible, even if spiritual concepts seem difficult to accept, it is just a matter of changing our thinking. It's not God and His ideas that need to change. It's us. If we are patient, persevere and are willing to be flexible mentally, we will grasp important spiritual ideas which will help us through the homework of daily life.

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