

# Good News, Bad News

*All children can do well at math, given the necessary teaching and practice.*

By A. Parent

Right from the start, my son struggled with mathematics. By the time he finished grade two and I started paying attention, he was still writing some of his numbers backwards and he had not memorized a single number fact.

I began by panicking. I was sure that my son had a 'learning disability' and would have to drop out of high school. As I lay awake at 3:00 a.m. worrying, I mentally ticked off all the math-related careers that he would have to rule out. I just hated the thought of all those doors closing.

In an effort to learn more about learning disabilities, I decided to audit a Psychology course on the topic. At the professor's suggestion, I did a fair amount of extra reading, and I emerged from the course more or less convinced that there was no such thing as a learning disability.

This was a good news, bad news scenario. The good news was, of course, that my son was not permanently handicapped by some mysterious flaw buried deep inside his skull. The bad news was that I was going to have to do something about it — because his teachers sure as heck weren't going to.

By now, he was in grade 3, at least in theory, still reversing his numbers, still sans number facts. I was really feeling my way at this point, but it seemed to me that it would make sense to begin by correcting these problems.

Bucking the tide (one resource teacher told me some kids can't ever learn number facts; a consultant said my son would probably have to use a calculator all his life), I started to teach my son at home, after school and on weekends. It was horrible. He hated it. He fought it. We had tears and temper tantrums. But he learned!

And I learned too. I learned, for example, that short, frequent sessions were best. I learned to go one

step at a time, introducing one small piece of new learning at a time and then requiring practice until it was thoroughly memorized and integrated with previous learning. I learned to use bribes and behaviour modification charts and timed tests and flashcards.

Six months later, my son was forming his letters properly, knew all his number facts and could do grade-level math. By now, he was in grade 4, and it was very tempting to step back at this point and leave it to his teachers. But I was saved from this blunder because I had begun to volunteer at the school and I could see what was going on.

My son's grade 4 math teacher as a sideline taught (board-sanctioned) astrology courses. This teacher joyously embraced cooperative, interdisciplinary, project-oriented, fuzzy learning, and she got around to actual math only a few days a week, if that. She was my son's teacher in grade 6 too.

It was at this point that I realized that my son's math education was entirely up to me. The need for proper number formation and memorized math facts had been pretty obvious, but now things were getting more complicated. I needed a curriculum guide of some kind, and practice questions and problems.

Over the years — yes, years, because my son didn't get a real math teacher until grade 8 — I tried out various aids. I first considered my son's textbooks, when he had some, but they were practically worthless. Full of pictures and distracting sidebars, they jumped from topic to topic like grasshoppers and rarely did a decent job of explaining the subject matter. Furthermore, the practice questions were all over the place: some far too hard, some far too easy, some way off topic.

The first tool I used was the *Check and Double Check* workbooks.

They had the advantage of being extremely economical. I found them helpful because they gave me an idea of what my son should be learning in each grade, and they allowed me to see where he needed help. Often, the workbooks didn't provide enough practice exercises, in which case I created supplementary ones. The main problem with *Check and Double Check* was that the topics weren't organized in a very logical and sequential order.

Later on, I turned to **Kumon Math**. This program was far more expensive, costing about \$65 a month, after an initial start-up cost. The intent of the Kumon program is to teach only computation. It does this by providing its students with carefully-sequenced worksheets which introduce concepts in minuscule steps and provide extensive practice. The students are assigned 20 worksheets a day to a required level of accuracy and speed. While in the Kumon program, my son's math steadily improved. His disposition, however, steadily deteriorated, because he loathed doing Kumon and it caused horrible strife. Not the best state of affairs at the portal of adolescence!

I finally found *Saxon Math*, a complete program which teaches all aspects of math in a sequential and fully-integrated fashion. One year of Saxon cost less than \$100. This program proved to be ideal for our circumstances.

So now, 11 years on, the results are in. My son has just graduated from grade 13 with three math OAC's, all marks in the 80's or 90's. Best of all, he is now operating entirely under his own power. In fact, it's lucky I don't have to help him any more — he's doing math that's far too hard for me!

*(The author's name has been withheld, in order to protect the identity of the young man. Comments addressed to this newsletter will be passed on, however.)*