

**Just Enough  
Friction**

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# From The Principal's Pen

As a kid, Sunday afternoons were reserved for Nascar races. In a time back before every race was on TV, we often found ourselves sitting in lawn chairs in the front yard of my grandmother's house listening to the race on the radio. Nascar was a source of great pride for our family and more than one yelling match. In the mid-eighties, a family with divided loyalties had a hard time eating together without a fairly direct conversation. My brother and I were strictly Chevy guys and rooted for Dale Earnhart. At the same time, other less domesticated members of our family drove Fords and were well entrenched in the camp of Bill Elliott. It made for more than one memorable Sunday, and my mother hated every minute of it. My grandmother was usually the referee and would let it go on for a while before stepping in and letting us know we had crossed the line. Interestingly, I still watch racing, but I sometimes root for an Elliott who now drives a Chevy while I drive a Ford. It's funny how things turn out.

Almost every type of auto racing is built on the management of friction. Cars that have too much friction are too slow to be competitive. Those with too little friction usually find the wall or some other hard surface that reduces their chances of winning. The trick is to find the sweet spot. Just enough friction to make it through the corners but not so much that you lose speed and positions to other cars. Winning is all about the physics of friction.

For our youngest students, learning and growth are all about managing the physics of education friction. If every lesson is too easy, nothing is gained or learned. Make the process too complicated, and you risk them giving up and disengaging before they ever make it to a point where they are proficient. I remember being told a story about a young twelve-year-old boy who always begged his dad and grandad to teach him to drive. One early June Saturday, while the family was loading hay onto a trailer, the boy was tossed the keys and told to drive slowly. If he dumped the trailer, he picked it back up by himself. I'm not sure if this was a disproportionate amount of friction, but he didn't pick up hay that day. The friction involved made sure he learned a valuable lesson in driving and responsibility.

When we find the sweet spot with our students, magic happens. Both at school and home, we have to find ways to make sure we are making the work just difficult enough for our students. In educational terms, we call this differentiating instruction. In its simplest form, it's about individually managing the amount of friction for each of our students so that they can be put in a position where substantial growth can occur. The amount is different for each child depending on their age, ability level, and passion for the subject matter. When we send homework, great teachers have thought through this friction and made assignments that maximize growth and allow students to struggle just enough. While I know my first instinct was usually to fly in and help my child "do" their homework, my wise wife would remind me that I needed to back up and let him do it on his own.

She was always better at understanding the amount of friction he needed. I seemed to either apply way too much or far too little. So I tended to listen to her wise counsel. When we give them support but allow them space to struggle, we help them grow. Excellent teaching and great parenting are about figuring out how to give our children just enough space and support to safely figure out the physics of friction on their own.