My Youth, Revisited

In 1984 I was in a third grade math class in Aurora, Colorado. Mr. Jones, my math teacher, with great enthusiasm told our class that the metric system would be soon taking over the math and science world.

Flash forward 25 years... I was baking a cake for my daughter's first birthday. I only wanted to make half of a cake recipe because who wants two 9-inch round cakes when one would certainly do the job? While I was flipping fractions, multiplying and dividing and reducing common denominators, I had a flashback from 1984: where is the metric system?

Apparently it has not entered the world of baking. As I look around the general world in which I live, it has not entered that arena either. After flipping fractions I concluded that I needed 10/12ths of a cup which reduced to 5/6ths of a cup. I suppose that I could have reduced it to 3.33 quarter cups but why on earth would I do that when with the simple use of the metric system I deduced that I needed 208 milliliters? It only took a "fraction" of the time to figure it out too!

Alternatively, I could have gone out and bought some 1/8th, 1/12th and 1/16th measuring cups and used a variety of measuring spoons and conversion charts, but why do that when one single graduated cylinder would have done the job? As an added benefit, I wouldn't need to have a huge pile of useless measuring cups! One cylinder, one math equation; the simple life is good.

In my college classes, through graduate school, the English system of measures was never used, ever. Why would we make calculations tougher than they already are? The greater part of the scientific world, minus NASA, uses the metric system for important calculations!

NASA has considered moving to the SI/metric system after having mathematical problems which caused them to have problems with spacecraft, orbiters and GPS tracking space devices. NASA is hung up on the cost of transferring systems, but what is the cost, monetary and otherwise, of misinterpreting the location of our spacecraft, our Mars observers and the like?

In medicine, your nurse will administer “X” medicine at a dose of 3.6 milligrams per kilogram of body weight in a 1 liter IV bag. You won’t see the nurse deal with ounces, pounds or quarts; that is because the chemists that make the drugs don’t use the English system. They use Avogadro’s number and stoichiometry and the metric system to perfect their measurements and thereby perfect the dose. The metric system is set up in levels of 10 making the calculations so much more simplistic which, in turn, frees up neuronal space in a scientist’s mind to create, discover and enrich the world in which we live in.

What more could we have learned from the Mars observer had we not lost data due to an Imperial Measurement miscalculation? (Google this: “NASA metric embarrassment mars observer” and note that the problem was a mix up between English and metric measurements.)

Depending on the report or the score or the area of learning, the USA ranks between 9th and 23rd (or worse) in the world regarding the educational status of our students compared to their counterparts in industrialized nations. We also spend the most, behind Switzerland, per student in our primary educational system. Certainly, not all the blame can be placed upon our reliance on the metric system; but, come on, if we make math and science even harder on ourselves, it doesn’t help.

It is quite fortunate that the Americans on the forefront of thought and science use the metric system, but, if we want to create a nation of erudite individuals we need to seriously consider dropping the use of the length of an “average” man’s foot and the weight of a random stone as our units of measure.

Since it hasn’t happened yet and I find myself here in this place and now at this time, consider this proposition Holyoke: Let our city, a tiny town of 2,000 folks, adopt the metric system. Let us be the change that I was promised in 1984. Let us stand up and be a sign of “progress” so perhaps we can catch up to where the rest of the world was decades ago. Let us be the city that embarrasses progressive cities like New York, L.A. and Chicago.

If this little blip of a town on a road map becomes the one that adopts the metric system, certainly Chicago dwellers will look like fools and will be forced to join in. Yeah, I’m talking to you, Chicago. If my town doesn’t catch on; I implore you, Chicago, New York and L.A.; let you folks be the ones who charge forth to become the new sign of American intelligence.

Change is difficult for anybody entrenched in an antiquated system, but our temporary confusion is well worth the alternative price. Consider this: right now your children and grandchildren cringe at the metric system much like you and I do when presented with it. They are not familiar with it and it confuses them. This confusion is only compounded when these kids try to learn a scientific idea.

If, however, they are already familiar with the language of science, the metric system, they will be better prepared to learn the important scientific concepts necessary to further their learning. Their understanding of the metric system will only improve their chances to adequately compete with a world composed of students who, at this time, are much better equipped to compete against them.

As long as nanometers and microns are foreign to our students and inches are familiar, our students, as a whole, will be easily outcompeted by the students of other nations.

I certainly have concerns as I see our worldwide educational rankings continue to drop. The metric system is definitely the dominant system in our ultra-competitive world; yet Americans refuse to learn it.

The English language is the most widely used language on earth. Educational systems in many, many foreign countries have recognized this and require that their students learn English as a second language so that their students can compete at a global level. These students learn an entirely new language to make themselves and their countries more competitive while America absolutely refuses to put forth any effort into the comparatively simple task of changing the way we measure mass, volume and distance.

If this is an indicator of our conviction to reverse the downward trend of our worldwide educational status then we are in trouble.

We absolutely need to be more passionate about becoming a more intelligent nation and metric proficiency is just the tip of the iceberg.

President Obama recognizes the need to create a highly intelligent nation; in the presidential debates, he pleaded with Americans to “put down the remote and get back to doing homework with your kids.” He could not have been more correct.

We need to work extremely hard at improving the educational potential of our children. If we don’t adhere to a strong conviction to learn and compete, we can forget about being relevant in the future and we may as well commit to living in the stone ages, and a stone, to my understanding weighs about 14 pounds, or 98,000 grains or 340 shillings; all of which should be irrelevant in this day and age.

My name is Steven McClellan; I hope this makes Americans think about change, think about adopting dominant ideas and systems that are created both locally and abroad, and to think about relentlessly striving toward improving learning in our country.

Hope is my present to you, Marlo. Happy birthday, I love you, Papa-Bear.

Steve McClellan