

Northern Lights

Weekly News and Notes from Hanna,
Elk Mountain, and Medicine Bow Elementary Schools

Notes from the Principal

"I have never been good at Math."

"I don't understand this new Math. I can't even help my kids with their Math."

"I didn't learn Math that way and I don't know why my kids should either."

I have heard all of those statements from parents over the past few years, and I understand where they are coming from. I was one of those kids (a long time ago) who was "good at Math" and it served me well through high school. In fact, I did not miss a single problem in my high school Algebra class for the entire second semester. The teacher told me I didn't even need to take the final because I had already clinched the A for the class so I went fishing that day instead. There were, however, several big issues with my Math training.

First of all, I had no idea how any of the formulas I was being taught worked or when I might use them. I was taught to plug in the numbers to the formulas and solve for X, Y, or whatever the variable of the day was. Secondly, the "word problems" at the bottom of the page were optional and for extra credit. Had I done them, I might have learned a little about how to apply what I was learning. Most importantly, my success did not prepare me for what was to come. I struggled mightily in college Algebra because it was hard and I really was not prepared to learn from my mistakes because I never made any. Only when I was at the depths of failure and had to struggle to figure things out, talk to other people in the same class, and ask for help from the professor did I really begin to understand Math.

How does this relate to how Math is being taught now? Typically I walk into a classroom now and witness things like this:

- Students explaining how they are arriving at an answer. Sometimes I hear 3 or 4 different strategies, all arriving at the same "correct" answer.
- Students looking at a problem and scratching out a series of circles and hash marks and translating that to numbers to answer a question.
- Students showing a problem to a teacher and being asked to "think again" or "show me another way."

How does this help in the long run? One answer would be

that students who learn to do Math problems the same way over and over are being prepared for a life of repetitive tasks such as working in a factory or fast food restaurant. The problem is, those types of jobs don't pay that well and are rapidly being replaced by automation. The ones who figure out multiple and innovative ways to solve problems are the ones who are designing the machines to automate those processes or hiring the workers to run them. Also, the ones who persevere through the struggles and learn from their mistakes are the ones who learn to work independently and with others and become valuable employees because of that.

I know it's hard as a parent when you don't feel like you can help them. You **can** help by asking them to explain their thinking. You can also show them how you would solve a problem and then ask them how they solved it and discuss how both methods are valid. The important thing is that they grow and learn, and that you also show them that you are still learning.

It is a different world and Math instruction has changed.

The dashboard of your car or truck doesn't look the same as it did 10-15 years ago either. Most of those changes are for the better, and the rate of change is accelerating. Those who learn how to learn will be the ones who are most successful. Thanks for supporting your child in being successful now and in the future.

-Mr. Shipp

Students explore design and construction in the "maker space" in Medicine Bow



Next Week

•Monday

•Tuesday

•Wednesday

Mr. Shipp in Saratoga for administrators meeting

•Thursday

6:00 JHVB Game at HEM

•Friday

Regular School Day

HES Grades 1,4 and 5 to Elk Mountain for Native American Day