

Selecting New Math Activities

Great Math Activities Are Terrible in the Wrong Hands

By Mark Tully, Published 9/19/2006

Finding Math Treasures

Every school year I search for, create, or stumble upon fantastic math activities that will faithfully cover the prescribed mathematics curriculum and bring a sense of excitement to my classroom. As a middle school math teacher for nearly 20 years, the challenge for me is not in the math content itself, but in presenting this content in a way that is engaging and relevant to students. A few factors to consider when selecting new mathematics activities are addressed below.

Analyze the Mathematics

Before getting too excited about a new math project or activity, take the time to carefully analyze the underlying mathematics. Don't fall in love with a neat activity that does not cover content that you are responsible for teaching. Ask yourself if the activity you are considering covers the required math standards in a powerful and interesting way. If not, look for another more relevant lesson.

A second factor to look at when analyzing the mathematics of an activity is the time involved in successfully completing it relative to the mathematics learned. Spending three class days to finish an activity that only addresses the mathematics of equilateral triangles is not a profitable use of your time. The concepts are too simple to justify the use of such a large block of time.

Make the Activity Your Own

I do not believe that all great math lessons, projects, or activities can be used successfully by all teachers. In fact some "great" activities are downright terrible in the hands of the wrong teachers. Your interests, personality, teaching style, vision for, and understanding of the math activity all play a significant part in the potential success of your lesson.

Suffice it to say that you must have confidence that you can effectively teach a certain lesson and commit to it wholeheartedly, knowing that it will be successful from the start. If you do not have the confidence that you can effectively use a specific activity then you should either do whatever it takes (more preparation, understanding, etc.) to gain that confidence or you should avoid the activity altogether.

You must **own** the math lesson or project. Make it your own. Tweak it, change it, do whatever it takes to make it a positive, productive exercise for the students. Teachers who do not own their activities are the same ones who are always saying, "I tried that project, but it didn't work." Of course it didn't work. Those teachers are missing the confidence, vision, or understanding necessary to teach the lesson well or it simply does not fit their interests, personality, or teaching style.

Make Math Come Alive

Hands-on lessons and math projects are a fantastic way to make math come alive for your students. These activities can be interesting, fun, and can demonstrate the relevance of mathematics to students' lives. They can also help the students to escape the textbook doldrums for a time.

This school year add to your repertoire of exciting math lessons and projects. Look for activities that cover the math standards that you are responsible for teaching and match your teaching style. Find projects that will have your students talking about what a great time they are having in your math class. They might not even notice how much math they are learning!

*Mark Tully is the founder of www.DigitalLesson.com. His website offers math lesson and project downloads, free printable math games, the free **Middle School Math Treasures** e-newsletter, and many other resources for the middle school math teacher. Mark has taught middle school math for nearly 20 years.*