

Statement of Teaching Philosophy

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One of my favorite aspects of teaching middle school math is helping students understand the “why” of mathematics, instead of just the “how”. I ask them to never be satisfied with being told what to do to solve a problem. Instead, they should demand of me and their future teachers that they be given the opportunity to understand why the solution works the way it does. In fact, students should demand of me and all of their teachers an education that provides for personal growth and self-improvement, an opportunity to develop as a global citizen, and provides occupational preparation as well. (Adler, 1982)

Mathematics is fun, challenging, beautiful, and artistic. In teaching mathematics, there is no greater feeling than a lesson gone well, or seeing the light in students’ eyes as they begin to see a mathematical concept unfold before them. Of course the best of all is hearing the “Oh! Now I get it!” I have found that helping students build both their conceptual knowledge, the why, and procedural skills, the how, with engaging and interactive lessons brings the curriculum and the classroom to life and increases the number of lessons that are especially effective. It is vital that students constantly take part in the process of their own learning by seeing, hearing, speaking, writing, thinking, creating, and doing mathematics. In order for students to be fully and actively engaged, they must feel that it is safe to take academic risks. Therefore, I spend a great deal of time developing relationships with students so that they understand that making mistakes is both accepted and expected in a classroom that is alive with learning.

In our living classroom, learning is intense, loud, messy, challenging, and fun. The expectations are high because I believe that my students are capable of great things. I view my role as a teacher as one that guides and facilitates learning, constantly interacting with students in a give and take environment. Even when I may be in a presenter role for a part of a lesson, I am constantly asking questions of students to engage them in the thought processes involved in the knowledge or skill they are developing. I have found that building this interactive environment requires time and patience. Especially for those students that do not like to actively participate in

a whole class discussion, opportunities for small group interactions and check-ins allow me to engage with each and every student at some point in the lesson. This year I've also incorporated reflective journal entries into our classroom routines so that students that prefer to write instead of speaking directly to me have a chance to develop a learning dialogue with me as their guide and facilitator. This is a process that has allowed me to discover unique aspects of my students thinking that I would not have otherwise known in just speaking to students. My only regret is that I hadn't figured out that reflective journal writing is an effective means to develop this critical dialogue earlier!

In our classroom, students are assessed continually through both informal and formal means. Each student is unique. Therefore, everything that a student says or does, or doesn't say or do is valuable information for an informal assessment. As a facilitator of learning, reading a student's responses or non-responses is a call to action! In an effort to build confidence in taking academic risks, I encourage students to try to answer a question even when they aren't sure they are right. More than likely, someone else in the room has the same or similar thought, so I tell them they are probably not alone. For a middle school student, managing their peers' opinions are of utmost importance. I'm constantly aware of the courage it takes for a student in the 7th grade to raise their hand when they are uncertain. It is always a confidence booster when a student can respond with an answer that is correct or partially correct, and I give praise to the effort of answering the question and to the accuracy as well. It is always a bit more challenging when a student gives an incorrect answer. It is here, in this moment, that a student's willingness to risk something again is at stake. To save face, I validate the effort made and to further the learning, say that they have simply provided an answer to a different question. We'll then further explore what questions it was they may have answered in error. All of these informal assessments happening through the day lead them to readiness for a formal (summative) assessment. Improvement opportunities still exist after formal assessment as well. Learning never stops!

Asking questions is essential to building conceptual understanding and procedural knowledge, but most importantly learning how to ask questions is an essential part of life inside and outside of school. I like to help middle school students move beyond their preset thinking that questions are a sign of weakness. To do this, I've created the "I wonder" statement that students can put in front of any question they have. I have found that this immediately lessens the perception that one "doesn't get it", and instead provides a feeling of being curious and inquisitive. Students feel much more comfortable coming from this place than one of not knowing something that their peers do. Another way I engage all students in learning to be confident in asking questions is to have them practice asking questions first by brainstorming their questions on a piece of paper first, then pairing with a partner to practice speaking as well as hearing and understanding what another student may be thinking, and then finally, sharing a question that they may out-loud in class.

Providing opportunities for concrete discovery and connection is at the heart of every lesson that I plan. The students that I teach are in between Piaget's Concrete Operational Phase and Formal Operational Stage and therefore need to observe things before they can reason about mathematics in the abstract. (verywellmind.com) I believe each student is both discoverer and explorer at heart and will rise to a challenge of approaching mathematics as something that can be understood through action. We use assistive technology frequently in the classroom is a part of this discovery, or it may even be used to "flip" the classroom from time to time.

I absolutely love teaching math and never view teaching the same subject year after year as boring or redundant. How could I when the students in front of me are wonderfully different from each other and from year to year.