Statement of Teaching Beliefs & Math Practices Statement

Beliefs and Practices

Beliefs Statement

I believe that to be a teacher of young students is a privilege, an honor, and a huge responsibility. The lessons that children learn today and the role models that they have in their lives will shape who they become as adults. Ultimately, who they become will determine the future of the world. I view teaching as an exciting challenge, filled with possibilities and opportunities to make a difference in the lives of children.

At the core of my teaching is the belief that each child is a unique and special individual, and should be treated as such. I will always strive to plan lesson that connect to students’ prior knowledge, experiences, and interests. Developing positive relationships with my students and their families, therefore, is a crucial step in my instructional planning. I believe that using multiple instructional strategies is also a key to reaching all students. This is includes teaching with manipulatives, visuals, kinesthetic activities, music, multimedia, and cooperative learning. In using these multiple instructional strategies, each student has the chance to learn in his or her most effective way on a regular basis. Also, using a variety of methods and materials is an effective way to maintain high levels of engagement in students.

I believe that the environment in which students work has a profound effect on their ability to learn. Young students need a balance of structure and freedom in the classroom. Expectations, procedures, and goals must be discussed, modeled, and revisited frequently. Within that structure, I believe that students should be given the freedom to construct their knowledge through inquiry-based activities. Also, whenever possible, students should have the freedom to make choices regarding their education. This could giving them the freedom to choose a book or a project topic that is of personal interest, or allowing them to use whichever method of computation in math makes the most sense to them, to name a few.

I believe that students need to feel safe in the classroom in order to reach their full potential. In order to create a safe environment, students must feel that they are part of a team or community of learners. It is a teacher’s responsibility to create this sense of community by treating all students with respect and care, and expecting the same from the students. Differences should be accepted, discussed, and celebrated, not ignored or used as labels.
I believe that in addition to content, teachers must teach students the life-long skills that they will need in order to be effective independent learners and contributors to society. An important part of this is helping students to become more aware of how they learn most effectively. Another important skill that we need to be teaching is how to navigate the wealth of information that advancements in technology (e.g. the Internet) have brought to us. The days of teacher as supplier and passer-on of knowledge have evolved into much more than that. We must be competent in the area of educational technology so that we can make good use of the possibilities it has opened up to students and teachers alike. We must also be active in guiding students toward quality resources, and teach them how to locate these resources independently.

I believe that assessment should not be viewed as a way to label students’ academic abilities. Rather, assessment should be seen as and used as a valuable tool for teachers, parents, and students to promote academic growth. Most assessments, I believe, should be narrative in nature, identifying both strengths and weaknesses. The assessment should then be used to set new goals and plan a future course of action that will benefit the student. Emphasis should always be placed on individual growth and effort, not comparisons to other students.

In order for a teacher to be effective, I believe that he or she must build strong professional relationships with other teachers, administrators, and school personnel. This creates a web of support for the teacher, and his or her students. Teachers should always be supportive of one another, providing mutual assistance and collaborating whenever possible. These positive relationships show the students how important it is to cooperate and help each other, and they make it possible to bring fresh ideas into the classroom. Also, teachers must never, ever stop learning. We must always be self-evaluating and pushing ourselves further to become better teachers by attending workshops, taking classes, collaborating, discussing, and studying. It is imperative that we remain open-minded and willing to change our practices in order to improve our teaching. We cannot expect our students to grow academically, socially, and physically, if we do not expect the same from ourselves.

My ultimate goal in teaching is to help students gain a better understanding of the world, other groups and individuals, and themselves. In doing so, I hope that my students will be able to discover what they are passionate about in life and lead fulfilling, purposeful lives that make a positive impact on the world. My beliefs as a teacher are all reflections of this goal.

**Practices**

Mathematics is all too often the most feared and avoided subject in schools, by students and teachers alike. I
believe that this can be avoided with a solid constructivist approach to teaching mathematics that emphasizes understanding rather than rote learning. This is the approach that I will use in my classroom.

I will implement the constructivist approach in a number of ways. I will begin teaching a new concept by making it as concrete as possible for students. The students will use manipulatives, (i.e., base-ten blocks, fraction pieces, real-life materials), as well as pictures, to explore, learn and understand math concepts on a deep level. I will use multiple instructional strategies so that all learning styles will be accommodated. The algorithm or abstract representation will not be addressed until the students have an understanding of the concept at the concrete level. When the abstract level, or "paper and pencil" level, is introduced, the underlying meaning will continue to be emphasized and connections will be made to the concrete level.

I will strive to make mathematics meaningful to students by connecting to real life whenever possible. Students will complete project-based learning tasks that require critical thinking, a variety of mathematical skills, and application to real life. Also, much of our daily classroom work and homework will consist of solving problems. The type of problems posed will help students connect math to the real world and push them toward a deeper understanding.

I believe that students should not be forced to solve problems in any one particular way. I will encourage them to try the methods that I demonstrate, as well as experiment with their own. What is most important is that the students understand the concept and are able to apply it accurately. Whole-class discussions will be held frequently so that the students may share their ideas and processes with each other. This sharing of discoveries is an important and powerful way to solidify the understanding of concepts; the "sharers" deepen their understanding by explaining their own thinking, and the listeners benefit from hearing another perspective and way of verbalizing the process or concept.

I will assess students formally and informally on an ongoing basis. Assessment will be used to help the student, the parents, and myself to better understand what the student does and does not grasp. I will give the students a short pre-test at the beginning of each new unit, as well as two to three “check-up” quizzes throughout each unit so that I can more accurately see what I should spend more time on with the students. Grades will not be given on these tests; they are only meant to give me a quick snap-shot of the status of the class. This will help me to decide what to teach (or re-teach) next. In addition to providing me with valuable information on the students’ progress, this method of frequent low-stakes testing is meant to help students become more comfortable with testing situations. In this age of high-stakes testing, I want to do everything in my power to make sure that test anxiety is not a factor for my students.

In addition, I will assess students through observation, homework assignments, and the project-based learning
tasks that were previously mentioned. Each student will have a math folder in which they will keep all of their assignments and tests. Students will be required to look through their folder once per week and write a short self-evaluation on what they are doing well, what they have improved on, and what still needs work. This practice promotes taking responsibility for their own learning, which is absolutely necessary for success in any academic area, and life in general.

In sum, my number-one goal in teaching mathematics is to help students succeed. Success, I feel, cannot be defined by a letter grade. If a student spends his/her math time seeking deep understanding through high-level, critical thinking, then that student has succeeded. This is what I will work towards in my math teaching practices.