

## *Philosophy of Math Instruction – Laura Weakland*

Mathematics instruction for students needs to be comprehensive, cross-curricular, well-articulated across the grades, connected to the real world, technology inclusive, and built on a solid foundation of problem-solving and number sense. All students need to be shown that they are capable of learning mathematics. As students move forward into the 21<sup>st</sup> century and the information age, it is becoming increasingly important for students to be fluent in the tools and language of problem-solving – mathematics.

The learning of mathematics by students is not a simple task composed only of memorizing facts and formulas. Students should be taught to think and problem-solve and to understand not only the “how” of mathematics, but the “why.” Students should be actively involved in their learning of mathematics with combined individual, small-group, and whole-class instruction. In addition, students should have lots of opportunities to learn mathematics in concrete, semi-concrete, and abstract representations; communicating to their peers and teacher what they understand and what they don’t. Students should have access to student-centered, differentiated mathematics instruction whereby students can build their own understanding and meaning of mathematics.

Teachers responsible for teaching mathematics need to have a mindset that is altruistic and student-centered, placing the needs of the student first. Teachers need to understand what their students know and what they need to learn. The teacher needs to seek out best practices on the teaching of mathematics and implement those practices in their classroom. The teacher needs to continually reflect on what is working and what isn’t and strive for improvement and excellence. The teacher also needs to support and have high expectations for all students. Teachers need to apply technology to improve teaching and learning as well. And lastly, the teacher needs to have a strong understanding of the mathematic concepts she teaches, as well as a positive and encouraging attitude about mathematics.

It is my personal goal to bring to my students the very best of mathematics instruction. I will continually strive to educate myself on what works and what doesn’t and to put the needs of my students first. It is my belief that a teacher is also a student and learning is a lifelong process. I look forward to the day I can share my enthusiasm and love of learning with my students.