**Statement of Purpose**

The infamous math question, “Why do I need to know this?” is one of the most common questions asked in most math courses. I remember asking this question myself and I have heard it on the other end of the spectrum as the teacher. The fact that students are not given a reason as to learning mathematics makes it difficult for them to want to learn mathematics. There is a challenge that students are not interesting in math and therefore it makes it difficult to get students to understand and learn the subject. Being in an era of high-stake testing and public accountability, students and teachers are trying to find ways to meet these new challenges. Math is one of the most challenging subjects for students to grasp and understand. In 2008, on the Ohio Math Achievement tests, an average of 68% of seventh grade students passed with a proficient rating or higher. This percentage is lower than the reading and writing scores. According the NCLB Act, schools are required to have a 100% passing rate in reading and math scores by the year 2012. That means an average of a 10% increase a year (Ohio Department of Education, 2008). This goal seems quite unreachable to many teachers in the state of Ohio. There is definitely a need to for change in the way that math is being taught to students. Schools are struggling with trying to find a way to meet the needs of their students, while improving test scores. With schools trying to reform their math curricula to mimic the state tests, what is happening is that this reform is becoming more teaching to the test. This reform is basically a rote memorization of facts and formulas. While it may look a little better on paper, this material only stays with students for a short period of time. Students tend to lose it and as fast as they receive it and therefore it is almost like a new starting point for the next grade level of teachers. For students to become lifelong learners, they need to learn math in a way that helps them to relate it to their everyday lives. Schools need to develop a reform that includes a development of cognitive processes, which teaches students to become skilled at using the scientific method, problem-solving and decision-making strategies, and critical thinking skills (Chiarelott, 2006).

One possible change that could help students to understand the purpose of learning math concepts and its relation to the real world is a process that takes time. Time is an issue in a current forty minute math class. One problem with math curricula is that teachers are feeling rushed to prepare students for the standardized state tests. Therefore, we as teachers are trying to shove a whole year of math concepts into a 7-8 month time period in order to get the concepts taught in time for these tests. What is happening is that students are missing out on the concept of discovery learning and problem solving skills that is necessary in order to continuity of previous knowledge to build upon. This time crunch is hindering our students learning, rather than creating life-long learners. Students are not being provided the time for hands-on activities that will aid in the learning process for mathematics. Students must have time to become engaged in mathematics that promotes reasoning and fosters communication between teachers and students and among students. Students need time to develop and practice skills and procedures for solving a wide range of problems. According to the NCTM (National council of Teachers of Mathematics), it is essential that middle school not be a time of short-duration mathematics classes because what was once considered high school mathematics content is increasingly found now in the middle school, where courses in algebra and geometry are now commonplace (Math Takes Time, 2006).

Therefore I am proposing to create a double-block math course that will take place each school day for the seventh grade math curriculum at Fassett Middle School in Oregon, OH. According to the NCTM an hour of mathematics instruction each day gives students 50 percent more times with mathematics than 40-minute periods do, therefore receiving nearly 180 hours of instruction a year. In the Oregon City School District, only an average of 69% of students in the seventh grade passed with a proficient rating or higher. We have been looking at ways to improve this score, as it is our lowest score each year out of the Reading, Writing, and Math Achievement Tests. At Fassett Middle School, our middle school language arts classes are double blocked. Reading and Writing are the two essential parts of the language arts curriculum and go hand-in-hand with each other, which is why it is integrated into one class, that is double blocked. Our reading and writing scores are predominantly much higher than our math scores. I feel that if we mimic this idea in our math classes, then students will be provided with more class time. Students will be able to get a deeper understanding of concepts and skills that are required and would be provided adequate time to teach and learn. In a study reported in the NASSP Bulletin, approximately a little over 8,000 sixth grade students in five middle schools over a six year time period participated in this study. The study that was conducted was the transition of a traditional middle school schedule into a block schedule, which students had double blocks of math either every other day, or every day. Many factors were taken into account and proved that there weren’t any other significant changes that could affect the study. The study results showed that in all five middle schools, students achieved much better after the transition from a traditional schedule to a block schedule (Mattox, Hancock, & Queen, 2005; Mattox, Hancock, & Queen, 2005). I think that an implementation of an everyday double block mathematics course will help students to become better learners and will provide an opportunity of discovery learning.

# References

Chiarelott, L. (2006). *Curriculum in context.* Belmont: Thompson Watdsworth.

Math Takes Time. (2006). *NCTM* , 1.

Mattox, K., Hancock, D. R., & Queen, J. A. (2005, March). The Effect of Block Scheduling on Middle School Students' Mathematics Achievement. *NASSP Bulletin* , pp. 1-12.

Mickelson, R. A., Nkomo, M., & Smith, S. S. (2001). Focus on Gender in Comparative Education Education, Ethnicity, Gender, and Social Transformation in Israel and South Africa. *Comparative Education Review* *, 45* (1), 1-14.

*Ohio Department of Education*. (2008, December 8). Retrieved May 3, 2009, from Testing: http://www.ode.state.oh.us/GD/Templates/Pages/ODE/ODEDetail.aspx?page=3&TopicRelationID=263&ContentID=15606&Content=60192