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EDTL 7100

**Statement of Purpose**

Individuals learn mathematics by doing mathematics, by using and connecting mathematical ideas, and by actively constructing their own understanding. The drill and kill, learn it because it is on the proficiency test approach, therefore, is failing in our schools today. Education should allow for the exploration of authentic mathematics to assist students in gaining mathematical power. The teacher has to provide a context for the content or the learning will be meaningless to the students (Chiarelott, 2006).

Students in the seventh grade are struggling to discover who they are and what interests them most. The way mathematics is presented to these students at this point is very critical. Mathematics must be seen, by the students, as the useful tool it is. It must show the students that mathematics allows them to function in everyday living. Heddens and Speers define an effective math program that offers mathematical power to the learner as being a healthy combination of skill and understanding (2001). The seventh grade mathematics course is in place to allow individuals to discover mathematics so they see the purpose of the skills and take away with them the knowledge to be successful in our fast-growing world. Students use mathematics to accomplish things that have been important to all people in all places and all times: to design and build, to predict and understand, to play and invent, and to systemize their knowledge.

This course is designed to help students recognize mathematics as a process that includes problem solving, reasoning and proof, communication, connections, and representation as outlined in NCTM’s *Principals and Standards in School Mathematics* (2000). This course will enable students to learn number and operations, algebra, geometry, measurement, and data analysis and probability, also outlined by NCTM’s *Principals and Standards in School Mathematics* (2000). Learning mathematics, however, extends, beyond learning concepts, procedures, and their applications. The course also includes the students developing a disposition toward mathematics and seeing mathematics as a powerful way for looking at daily situations in which the students encounter.

**References**

Chiarelott, L. (2006). *Curriculum in context: Designing curriculum and instruction for teaching and learning in context*. Belmont, CA: Wadsworth.

Heddens, J. & Speer, W. (2001). *Today’s mathematics: Part 1 Concepts and classroom methods.* New York, NY: John Wiley & Sons, Inc.

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