**Rationale**

According to the Common Core State Standards – Mathematics Learning Progressions (2010), Geometry is a course commonly considered a high school course, however the basis for Geometry begins as early as kindergarten when students identify and draw basic shapes. As students progress through the grades, they begin to count sides and angles, divide shapes, understand parallel and perpendicular, and determine attributes that don’t define a shape, such as color or size. Students at the 5th grade level encounter standards that place an emphasis on classification of shapes into hierarchies and use of the coordinate plane to solve problems. Using these standards as a guide, the unit on 5th grade geometry has been developed. The skills learned during this unit will provide a foundation in the geometry skills needed as the students advance through the grade levels and continue on into the real world after graduation.

For the purpose of this instructional unit, the Inductive Model will be utilized. The students will be investigating similarities and differences between shapes and classifying the shapes into a variety of hierarchies based on these differences, which fits nicely with the Inductive Model pioneered by Hilda Taba (Chiarelott, 2006) The Inductive Model utilizes a combination of behaviorist and teacher directed learning while also allowing students the opportunity to construct meaning on their own. Even though lessons could be completed in one day, the Inductive Model often requires several days of lessons to effectively use the whole model. Since the Geometry unit will involve many vocabulary words, having several days to allow students to make connections will give the students in the class more time to let the information sink in and hopefully be more fully retained for future reference. This is especially important for the students with learning disabilities in the course. The Inductive Model fits nicely with my current teaching style and is a style with which I am comfortable. As the text, *Curriculum in Context* (2006), has stated, students need to be connect content to hands-on, real life learning experiences, with some ability to direct their own learning. Because the Inductive Model contains both teacher directed and student directed learning, it will work well in an environment supporting contextualized teaching and learning. Through out the unit students will utilize multiple, real-life examples to construct a better understanding of shapes and the coordinate plane.

References

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

Ohio Department of Education. (2010). *Common Core State Standards – Mathematics Learning Progressions.* Retrieved March 15, 2011 from <http://www.ode.state.oh.us/GD/Templates/Pages/ODE/ODEDetail.aspx?page=3> &TopicRelationID=1704&ContentID=83475