Curriculum Units by Fellows of the National Initiative 2014 Volume V: Place Value, Fractions, and Algebra: Improving Content Learning through the Practice Standards

Developing Mathematical Minds — Learning Fractions Through Career and Technical

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The unit will begin very basic, using appropriate fraction strategies (strips) according to the "build it, draw it and write it" method as recommended in Singapore Math. When students achieve the appropriate mastery, the teacher can begin adding area, set and linear models. Instruction will take into account Howard Gardner's theory of learning styles, in order to reach as many students as possible. Gardner's three general approaches to learning include visual, auditory, and kinesthetic. Student will also use manipulatives to build their understanding of fractions. The end goal will be to blend the separate topics into a unified knowledge of fractions and to apply this to career and technical education math. This lesson is designed to meet the need of students who possess general and special education needs. I have spent a great deal of time developing this lesson. My goal is to design a curriculum unit that would be easy for the teachers to deliver and comprehendible for all students. Adding the career and technical component to the curriculum unit will immediately grab the attention of the student because fractions are relatable in every field of study. I always have group games available for lessons which are taught. The games can be played during centers or at the teacher station. Playing games allows for learning through play and motivates the students to grow socially, which is vital to the student with special needs or social issues. Remember to introduce fractions with enthusiasm and to fun when teaching fractions.

(Developed for Mathematics, grades 6-8; recommended for Mathematics 6, grade 6; Mathematics 7, grade 7; Mathematics 8-Pre Algebra, grade 8; and Mathematics - General, grades 3-5)

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