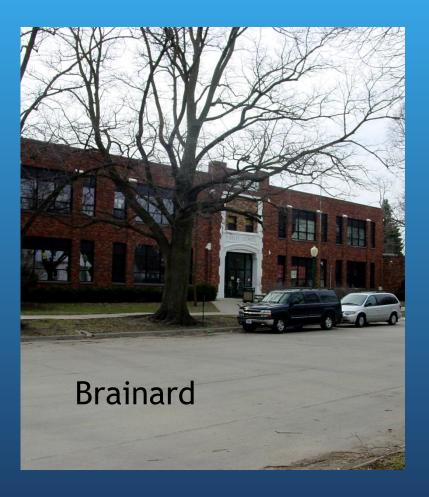
Encouraging Students to Demonstrate the Standards for Mathematical Practices

Saturday, October 22, 2011

East Butler Public Schools District Characteristics

- Rural School District
 - Small communities of Brainard, Dwight, Prague, Loma, Abie, Bruno, Bee, and a few others
 - Farming families and commuters
- NSAA Class C-2 school district
- Three K-6 elementary centers
 - Dwight(48), Prague(19) and Brainard(102) preschool
- 7-12 building in Brainard (170)
- 339 Total students

East Butler Educational Centers







Demonstrating Standards for Mathematical Practices

Kathy Bohac

- 5th and 6th grade mathematics teacher at Brainard Elementary
- 20th year teaching upper elementary students
- Graduate of the 4th cohort of Math in the Middle
- Masters in Special Education Behavior Disorder

Doug Glasshoff

- 7th through 12th grade mathematics teacher at High School in Brainard
- 11th year teaching junior high and high school students
- Graduate of the 1st cohort of Math in the Middle
- Graduate of the Nebraska Assessment Cohort (2003)

Mathematics Textbooks

- 5th and 6th grades
 - Mathematics: The Path to Math Success!
 - Silver, Burdett and Ginn
- 7th grade
 - Houghton Mifflin Mathematics Structure and Method Course 1
 - Dolciani, Sorgenfrey and Graham
- 8th grade
 - Houghton Mifflin Mathematics Structure and Method Course 2
 - Dolciani, Sorgenfrey and Graham
 - Houghton Mifflin Algebra Structure and Method Course 1
 - Brown, Dolciani, Sorgenfrey and Cole

5th and 6th Grade Math Classes

- Traditional approach to lessons
 - Reading and discussing lesson and objectives
 - Practice exercises led by students and teachers
- Problems of the day
 - Addresses the need for problem solving skills
 - "Habits of Mind" type problems
 - Presented by student volunteer *Promethean Boards*
 - Others present if they solved in a "different way"

Problem of the Day Examples 99 Remainder 98

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Problem of the Day Examples Fence Posts

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Problem of the Day Examples 5, 10, 20 Chart

Problem of the Day Examples 28 Steps

Problem of the Day Examples 28 Steps

2010 NeSA Mathematics Testing

- 5th grade
 - District: 72% meets/exceeds the standards (107 ave. scale score)
 - State: 66% meets/exceeds the standards (103 ave. scale score)
- 6th grade
 - District: 71% meets/exceeds the standards (105 ave. scale score)
 - State: 63% meets/exceeds the standards (100 ave. scale score)
- 7th Grade
 - District: 80% meets/exceeds the standards (109 ave. scale score)
 - State: 61% meets/exceeds the standards (99 ave. scale score)
- 8th Grade
 - District: 66% meets/exceeds the standards (102 ave. scale score)
 - State: 60% meets/exceeds the standards (98 ave. scale score)

Question and Answer

