PUZZLES AND PROBLEMS IN THE K — 12 CLASSROOM

A partnership between Holy Spirit School Division and the University of Lethbridge
PREMISE OF PROJECT

- Desire to engage teachers in professional learning with respect to problem solving
- Partnership with Holy Spirit School Division
- Supporting teachers in developing their skills and confidence as problem solvers
- Bursary from Alberta Education
- Dr. Shelly Wismath
- Lorelie Lenaour
- Verna Mabin
- Michelle Campmans
- Lynn Suttie
- Alana Millard
VERNA MABIN

Grade 5 Teacher at The Children of St. Marth Elementary School
PEER MENTORSHIP

EDU 4850X~U of L
Why?

- Every year a new professional focus
- New teachers to collaborate with
- Valuable hands on experiences
- Classroom visits meaningful
- Connections made with colleagues
- Relationships built to support teaching and learning
EDU4850X

- Why I chose to take the course.
- Benefits I gained
- How it change my approach to teaching math.
How Peer Mentorship improved my teaching.

How I set up my math.

Problem example.

Discussion about its importance

Questions or comments
There are 2 ducks in front of 2 other ducks. There are 2 ducks behind 2 other ducks. There are 2 ducks beside 2 other ducks. How many ducks are there?
MICHELLE CAMPIONS

Kindergarten Teacher at Ecole St. Mary School
LYNN SUTTIE

Math Teacher at St. Francis Junior High
Pre-service Teacher in the Faculty of Education at the U of L
LORELIE LENAOUR

Director of Learning, Holy Spirit School Division
Average change in rating for survey question

Difference in Average ratings

-0.6
-0.4
-0.2
0
0.2
0.4
0.6
I like to work alone
I have good communication skills
I like to finish a problem once I start on it
I am good at finding creative solutions to problems
When I get frustrated with a problem, I tend to give up
I like to think about abstract ideas
I am good at explaining my ideas to others
I am a linear thinker
I quickly get "hooked" on it
I have good math skills
I like doing math word problems
I like breaking problems into smaller parts to work on
I am a logical thinker
I like doing math calculations
I am good at using math to solve problems
WHAT MAKES A GOOD PROBLEM SOLVER?

- Resilience, the drive to continue in the face of failure; Persistence; Tenacity
- Open-minded and the willingness to consider all possible solutions and weigh out which has the most benefits
- Flexibility – ability to look at different angles/viewpoints
- Being open to try
- Zoom out to see the forest. Get lay of the land. Then incrementally zoom in...when you get frustrated, walk away to engage in ‘diffuse mode’ thinking or switch to a different aspect or perspective
WHAT HAS CHANGED IN YOUR CLASSROOM PRACTICE?

- Being ok with slowing down my classes to allow the problem solving process to happen
- I have introduced techniques, methods, ideas into my class. It has brought some fun back into the sometimes dry environment
- I am doing the same things better. I have replaced some of my process with more effective ones.
- Gained courage to go outside of my walls to borrow ideas and thoughts from others – at all grade levels. Important to remember we as teachers are not an island
MAY/JUNE – EDUC 3700
MATH CURRICULUM AND
INSTRUCTION FOR IN-
SERVICE TEACHERS

Qualifies for bursary from Alberta Education
Tuesday/Thursday evenings 6 – 8:50pm
MUST apply for bursary first to get pre-approved
Richelle Marynowski
- Richelle.marynowski@uleth.ca
- 403-329-2269
- @rmarynow