School District 19
(Revelstoke)

School District No. 19 (Revelstoke)
Arrow Heights Elementary School
2011 – 2012 Goals
Numeracy

ARROW HEIGHTS ELEMENTARY
Cooperation Achievement Respect Enthusiasm Safety

Goal

Focus on a specific area of student achievement for all students:

2011 Goal:

To develop competency in math applications with emphasis in applying basic skills in problem solving.

2011 – 2012 Objectives:

1. Improve basic numeracy skills in all grades.
2. Improve students' application of math skills to solve problems.
3. Improve attitudes and perceptions toward success in numeracy.

Rationale

Evidence and information used to set this goal:

- In-class evaluations indicate concern with students' competency in basic skills (addition, subtraction, multiplication, division).
- Grade level focus areas as determined by results from Vancouver Island Diagnostic Math Assessment (DMA).
- DMA indentifies individual students' areas of need for targeted intervention.
- Importance identified in being able to apply appropriate skills to solve daily life problems (problem solving). Success here ensures a numerate student (literate in area of numeracy).
- Assessments indicate regular student errors in single and multi-step problems.
- Desire to creating opportunities to have fun with math in order to reduce anxiety felt by many in relation to math.
- Big Ideas should be the foundation for one's mathematics content knowledge. Grounding one's mathematical content knowledge on a relatively few Big Ideas establishes a robust understanding of mathematics. "We understand something if we see how it is related or connected to other things we know." (Hiebert 1997)
- Common practices and language help provide our students with a "tool kit" of strategies to accomplish a given task.

Data

Data considered (Provincial, District, School and Classroom)

1. Vancouver Island Net Diagnostic Math Assessment Grades 3-7 (September & June)
2. Analysis of school generated letter grades
3. Review of FSA results grade four and seven.
4. Provincial Satisfaction Survey

Success/Results

Data results shared with SPC, PAC, Parents and Staff in 2010-2011.

Diagnostic Math Assessment (DMA)
Number of students achieving at least 60% correct in multiple choice/computation section.

Grade	*Spring 2009*	*Fall 2009*	*Spring 2010*	*Fall 2010*	*Spring 2011*
3	19/20 (95%)	14/18 (78%)	16/18 (89%	77%	92%
4	12/20 (63%)	16/18 (89%)	15/18 (83%)	74%	90%
5	18/22 (82%)	12/17 (71%)	15/17 (88%)	75%	42%
6	22/26 (85%)	16/21 (76%)	18/21 (86%)	53%	53%
7	12/19 (63%)	17/27 (63%)	17/27 (63%)	69%	58%
average	78%	75%	83%	70%	67%

Math Final Mark: percent of students receiving C+ & better

Grade	June '08	June '09	June '10	June '11
4	91%	85%	89%	95%
5	92%	100%	94%	95%
6	74%	92%	90%	76%
7	90%	89%	85%	100%
average	87%	92%	90%	92%

FSA Results: Numeracy component**,** percent meeting or exceeded expectations (% exceeding)

Grade	Feb '08	Feb '09	Feb '10	Feb '11
4	95%	86% (19%)	82%* (12%)	69% (16%)
7	88%	80% (10%)	81%* (4%)	66% (11%)

*of students who wrote

Provincial Satisfaction Survey: *Are you getting better at Math?*
% responses: All the time, Many Times

Grade	Feb 2009	Feb 2010	Feb 2011
3	59%	73%	91%
4	53%	95%	76%
5	67%	94%	88%
6	73%	83%	75%
7	68%	84%	82%
Aver.	65%	86%	82%

Targets for 2011/2012

Expected results:

- That 85% of students in Grades three to seven fully meet or exceed expectations (>60%) as measured by the DMA multiple choice and computation components.
- That 90% (average) of students in Grades 4-7 achieve C+ or better for Math final mark
- That 90% of students who write the Foundation Skills Assessment in Grade 4 & 7 meet or exceed expectations.

Organizing for Improvement

Strategies and Structures

- Inform instruction through Diagnostic Math Assessment.
- Identify students struggling with basic skills and support these students with targeted interventions; i.e. Great Leaps in Math, Creative Mathematics (K. Sutton strategies).
- Celebrate math! Through bulletin boards, assembly presentations and newsletters we will show pictures of students doing math, share success stories, etc.
- Host a family math games evening for primary and early intermediate students.
- Continued support and encouragement for staff to expand strategies and knowledge to meet current Learning outcomes through professional development and networking.
- Encourage use of online web-sites to practice skills, i.e:
    - http://members.shaw.ca/teacherweb/TeacherHome.htm
    - http://members.shaw.ca/barongrodzki/home.htm
    - http://www.ronblond.com/MathGlossary/
- *Mathletics* interactive math games and learning activities Grades 4 to 7.
- Implement regular classroom Math Games in all grades.
- Share "The Number Framework" strategies.
- Staff to review progress and share numeracy/math lessons and ideas regularly through staff meetings.
- Practice a minimum average of 300 minutes of math instruction weekly.
- Support math contests.
- Incorporate the use of technology in math instruction.
- Provide families with support and materials. (e.g. HYPERLINK "http://www2.nzmaths.co.nz/frames/Families/Activities.aspx)
- Incorporate family math teasers in newsletters.
- Utilize PAC meetings to share family numeracy/math strategies.

Communication

- Publish results in school newsletter, also publish common language for Reading Powers and how to use them when reading with your child
- Presentations to SPC, PAC, students, staff, and Board
- Parent Conferences
- Classroom Displays