Coghlan Fundamental Elementary

School Plan 2010-2011

Langley School District #35

Names and Signatures of School Planning Council

Parent: Sue Herman _____

Parent: Christie Hoos _____

Parent: Kristen Scott _____

Principal: Barb Dayco _____

School Profile

Coghlan Fundamental Elementary School is located in a rural setting on the western edge of Aldergrove. As a Fundamental "school of choice" our school emphasizes a consistent, structured approach to instruction and learning, within an environment enriched by active parent involvement and the establishment of a clearly defined standard of behavior. Character development is encouraged through the Virtues Project and Restorative Action is the basis for our conflict resolution process.

There has been consistent growth in our school population since adopting the Fundamental philosophy. Our population is 231 students for the 2010/2011 school year and there is a growing wait list particularly for the primary grades. There are 11 students of Aboriginal ancestry and 3 who receive ESL support. 16 students are identified as having special needs and an additional 41 receive learning assistance, direct behaviour support, speech and language, or Reading Recovery support.

As a school of choice, Coghlan does not have a local catchment area. Of the students who live in the Langley School District, 201 live East of 236 Street, while only 7 live West of 236 Street. 23 of our students live outside the district; 19 from Abbotsford, 2 from Chilliwack and 2 from Surrey. Our students' socio economic status is also diverse.

Board Approval

Cheryle Beaumont, Superintendent _____

Board Chairperson _____

Date Approved _____

Mission, Vision, Values

Mission:
Our mission as a school community is to provide a secure, positive and meaningful learning environment where students reach their intellectual and social potential. Coghlan Fundamental School is "a place of learning, a place of belonging."

Vision:
At Coghlan we provide an environment where our students will develop as empathetic, respectful, responsible and confident individuals, with strong communication skills, who are empowered to reach their full potential as learners and as citizens.

Values:
At Coghlan Fundamental Elementary School, we value:

1. Academic achievement and individual responsibility
2. A structured approach to learning and behaviour
3. A culture of respect, honesty and integrity
4. A philosophy based on parents as partner

Review of School Goals – 09/10

2009/10 Goal #1 - Numeracy
Or goal was to improve student performance in using approaches and strategies to solve word problems. Teachers reported that most students struggled with contextual use of mathematical concepts. Their data from classroom work indicated that students had difficulty comprehending and using information to solve word problems. This was the first year for this goal. We focused on learning more about our students and planning strategies to support their development in this area. Teachers have noticed that their students have difficulty identifying what the question is, what information has been provided, and how to use that information effectively to select effective strategies and approaches to solve the problem.

<u>Assessment/Instruction</u>

- We analyzed how students approached word problems and what aspects created the most difficulty for them.
- Assessments show that students are more competent using math concepts in isolation than in the context of a problem.
- Teachers reported that students have difficulty identifying what they are being asked to solve and they have difficulty using key vocabulary to assist them in sorting and using appropriate information effectively.
- Teachers have begun school wide instruction on reading word problems – meta-cognitive model
- They are using a set of graphic organizers developed by one of the teachers to help students identify, organize and use relevant information, as well as communicate their thinking.
- Teachers have been using technology such as the SMART Board to explore problems with their classes.

Staff Development

- We studied excerpts from Teaching Reading in Mathematics, 2nd Edition (A Supplement to Teaching Reading in the Content Areas, 2nd Edition) by Mary Lee Barton, Clare Heidema for a staff book club.
- Continued to explore and implement strategies for differentiating instruction through participation in "Whatever It Takes"
- Teachers have attended SMART Board workshops and collaborate on lessons development.

Parent Involvement

- Worked with parents to create opportunities for problem solving at home.
- Offered parent sessions related to problem solving.
- Continued "Games Club" to support goals.

2009/10 Goal #2 – Writing

Our goal was to improve student achievement in informational writing over the next 3 years. The first priority is to improve communication in numeracy in Grades 3 – 7. Teachers report that many students in Grades 3 to 7 struggle with selection of relevant information and organization when communicating their thinking. This goal is directly related to our Numeracy goal. Communication in Numeracy is a form of informational writing that is particularly challenging. The teachers' intuitive data is supported by the results of the 2008 and 2009 District Numeracy Assessments, where overall performance in Numeracy exceeded performance in Communication. We plan to combine our two goals into one goal for the time being. We have decided that it is too ambitious to try to improve informational reading and writing in more than one content area at a time. We have come to the conclusion that improvement in communication is directly related to improving students' ability to use concepts in contextual situations. At this time, we plan to focus on improving achievement in communication along with strategies and approaches within the Numeracy goal.

Assessment/Instruction

- Students tend to focus on explaining the calculation rather than thinking processes.
- Students have difficulty explaining why their solution is reasonable.
- Teachers have involved students in class discussions and vocabulary development in mathematic problem solving.
- Teachers have involved students in using technology such as the SMART Board to demonstrate and communicate their thinking orally in preparation for written communication.

Staff Development

- We have continued to explore and implement strategies for differentiating instruction through participation in "Whatever It Takes".
- Teachers have used Design and Assessment days to learn about and use Performance Standards for Numeracy (Representation and Communication).
- Teachers have encouraged students to use graphic organizers, diagrams, pictures and numeric equations to demonstrate and communicate their thinking.

Parent Involvement

- We have included a Math at Home section in each newsletter to help parents work with their children on numeracy at home.

- Instructional Services has assisted us by offering math information nights for the parents.
- We have continued the "Games Club" to support school goals.

GOAL # 1 – 10/11 (year 2)

Numeracy

Statement

To improve student performance in using approaches and strategies to solve word problems as well as their ability to communication in numeracy in Grades 3 – 7.

Rationale

Our long-term goal is to improve reading comprehension and communication in the content areas. Initially, we will focus on the area of numeracy. Our school has had a numeracy goal for several years and we have seen an improvement in the students' ability to understand and use concepts and skills in isolation; however, teachers report that most students struggle with contextual use of mathematical concepts. Students have difficulty comprehending and using information to solve word problems. Teachers report that their students have difficulty identifying what the question is, recognizing the information that has been provided, and knowing how to use that information to select effective strategies and approaches to solve the problem. Students are often unable to communicate their thinking as they develop a plan for solving problems. Similarly, they frequently struggle to respond to the question, "Is your answer reasonable?" The staff has also noticed that students frequently begin with an appropriate strategy, but become overwhelmed or confused when additional steps are required. The teachers' intuitive data was supported by the results of the 2008 District Numeracy Assessment (DNA). At both Grade 3 and 6, significantly fewer students were reported as fully meeting expectations in the categories of Communication and Strategies/Approaches than in the category of Overall Performance. DNA results for 2009 are better at the Grade 6 level in Strategies/Approaches but continue to show a significant weakness in the area of communication. More than half of the Grade 3 students were not yet meeting or minimally meeting expectations in all categories (see appendix II). 2010 DNA results continue to be stronger at the Grade 6 level than at the Grade 3 level; however, both groups performed significantly better on the problem that involved analyzing and extending patterns than they did when required to read, interpret, select and implement a strategy in order to solve the problem (see Appendix III). Using data from the second term reporting period for 2009/2010 we found that there was a considerable discrepancy between students who fully meet or exceed expectations when Numeracy concepts are considered in isolation compared to those who fully meet or exceed expectations when asked to use Numeracy concepts in context. Our goal for the students who have Individual Education Plans for numeracy is to have them meet their goals as stated in their IEP's.

Performance Indicators

1. School Based Assessments – The results show that only 31 of our Grade 3 to 7 students were fully meeting or exceeding expectations (C+ or higher) for solving word problems while 70 were meeting or exceeding expectations when combined numeracy learning outcomes were considered. Please see Appendix IV. We administered an

assessment using word problems in the fall and in the spring to students in grades 3 to 7. When we compared achievement in the fall with achievement in the spring we found improvement at every grade level except grade 7, where results were stable. Please see Appendix I.

2. Foundation Skills Assessments (FSA) Please see Appendix V. The results show that there are more Grade 4 students who are minimally meeting or not yet meeting expectations than those who are fully meeting or exceeding expectations in Numeracy. At the Grade 7 level, there are almost as many students minimally meeting expectations as those fully meeting expectations in numeracy.
3. District Numeracy Assessments – Please see Appendix II & III. The 2009 results show that only 10 of the 26 Grade 3 students were fully meeting or exceeding expectations on each of the categories on the numeracy assessment. At Grade 6 level, 8 out of 10 students were fully meeting or exceeding expectations on the holistic score, only 3 of them were fully meeting or exceeding expectations on the score for communications and representation. The 2010 results show that only 12 of the 35 Grade 3 students were fully meeting or exceeding expectations on the DNA, while at the Grade 6 level it 10 out of 13.

Targets

The target is to eliminate the difference between the number of students whose performance is fully meeting expectations on the holistic score of the District Numeracy Assessment and those who are fully meeting expectations in Communication and Strategies/Approaches. A second target is to have no students not yet meeting expectations and the majority of students fully meeting or exceeding expectations.

Strategies

Assessment/Instruction

- Administer a fall assessment to collect baseline data and also inform us about our students
- Assess students' ability to use math concepts in and out of contextual problems
- School wide instruction on reading word problems – meta-cognitive model
- Direct instruction for identifying, sorting and using relevant information when solving word problems
- Purposefully build students' numeracy vocabulary through direct instruction and discussion
- Continue to use the graphic organizers developed by our staff to assist students to comprehend the problem, identify relevant information, develop a plan, communicate thinking
- Students will be encouraged to use manipulatives, diagrams, and language, as well as equations to support their processing and assist them in communicating their thinking
- Use technology such as the SMART Board to explore problems in groups
- Administer a spring assessment to assess progress and adjust our plan
- Primary teachers will support the goal by solving word problems orally in groups, using manipulatives

Staff Development

- Continue to explore and implement strategies for differentiated instruction
- Request support from Instructional Services to improve our teaching of reading comprehension related to word problems.

- Use Teaching Reading in Mathematics, 2nd Edition (A Supplement to Teaching Reading in the Content Areas, 2nd Edition) by Mary Lee Barton, Clare Heidema as a resource.
- Teachers will attend SMART Board workshops and collaborate on lessons development
- Use collaboration time for teachers to learn about and use performance standards for numeracy.

Parent Involvement

- Work with parents to create opportunities for problem solving at home
- Provide an information package for parents including a copy of the graphic organizer we use and samples of problems for each grade level
- Provide strategies for practising number facts at home so that students can focus on conceptual understanding and processing at school
- Offer parent sessions related to problem solving in POPS, MILE, and Ready Set Learn
- Continue "Games Club" to support goals

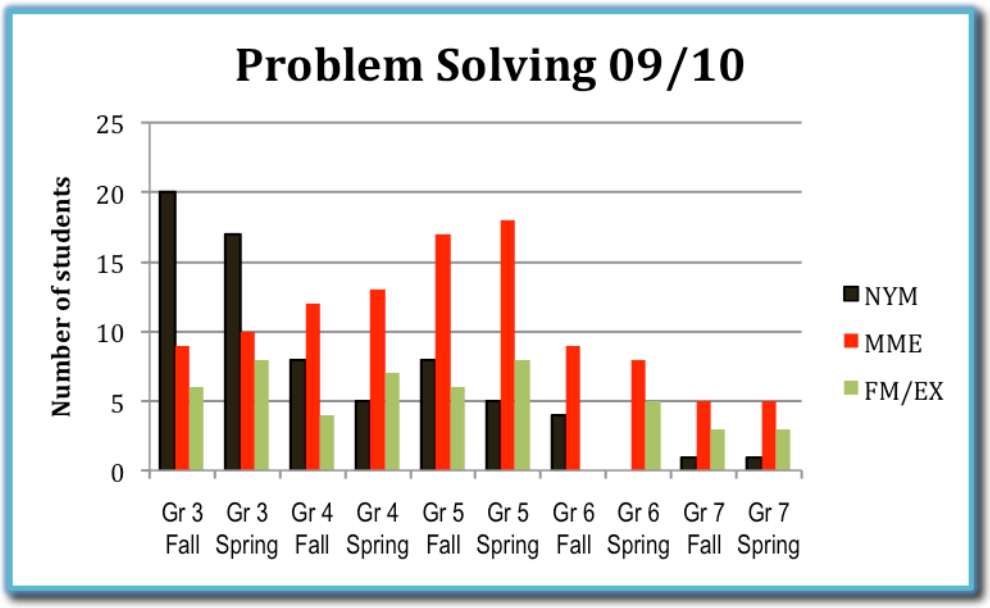
Structures

- Provide opportunities for collaboration through scheduling of common prep times where possible
- Set aside a portion of each staff meeting for monitoring, planning and adjusting

Monitoring and Adjusting

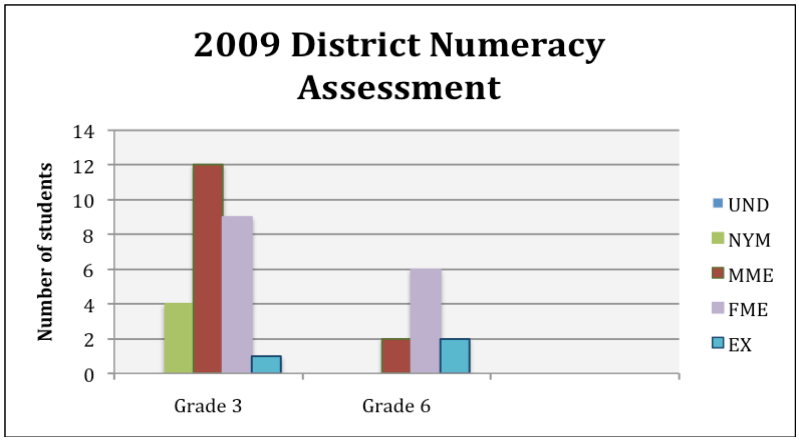
- Focus Design and Assessment Days and School Improvement Day on the numeracy goal
- Use information gathered from school based problem solving assessments to direct instruction
- Communicate to parents at PAC meetings, in school newsletters, at parent conferences and in report cards
- Use a portion of staff meetings for review and planning

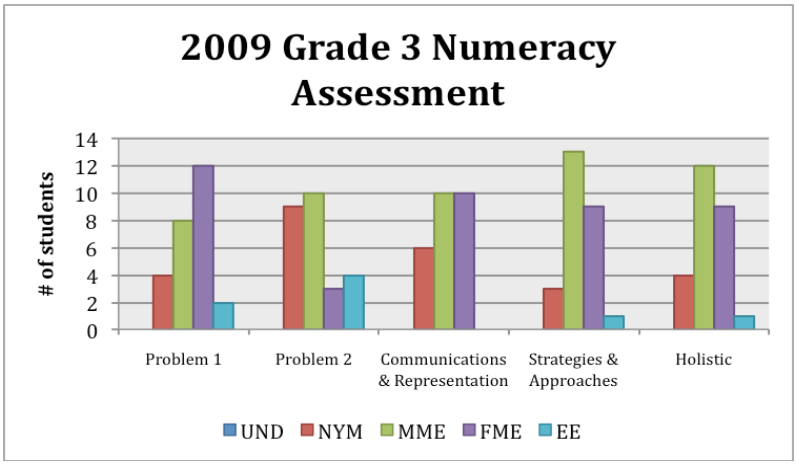
Appendix I

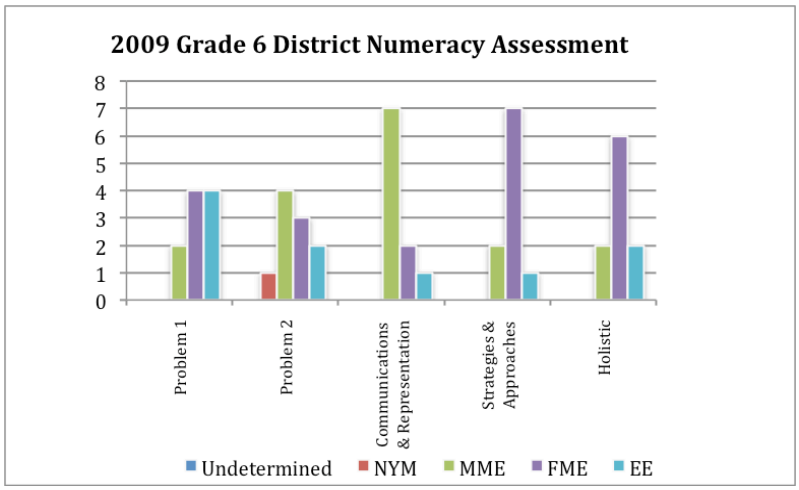


Grade 3	Fall	Spring
NYM	20	17
MME	9	10
FM/EX	6	8
Grade 4		
NYM	8	5
MME	12	13
FM/EX	4	7
Grade 5		
NYM	8	5
MME	17	18
FM/EX	6	8
Grade 6		
NYM	4	0
MME	9	8
FM/EX	0	5
Grade 7		
NYM	1	1
MME	5	5
FM/EX	3	3

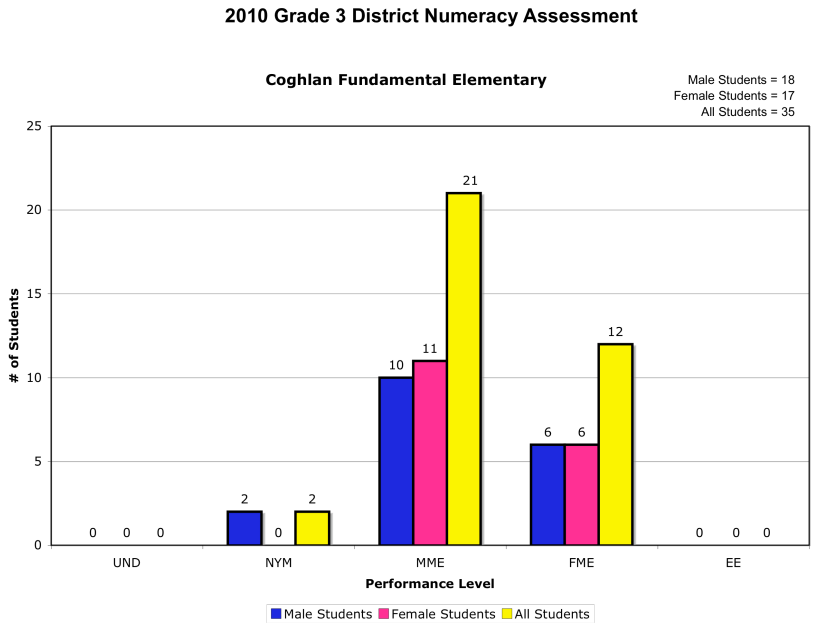
Appendix II

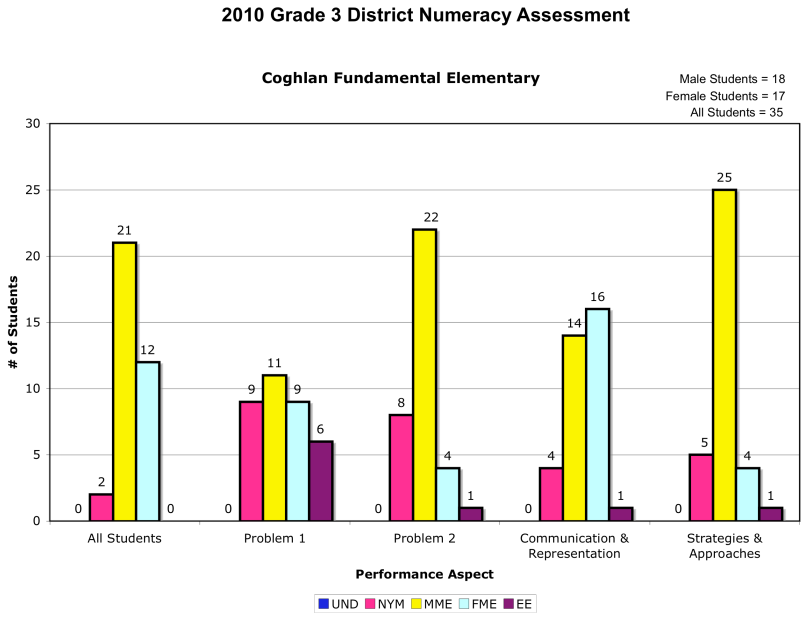

2009 District Numeracy Assessment
Number of students
14
12
10
8
6
4
2
0
Grade 3
Grade 6
UND
NYM
MME
FME
EX


2009 Grade 3 Numeracy Assessment
# of students
14
12
10
8
6
4
2
0
Problem 1
Problem 2
Communications & Representation
Strategies & Approaches
Holistic
UND
NYM
MME
FME
EE

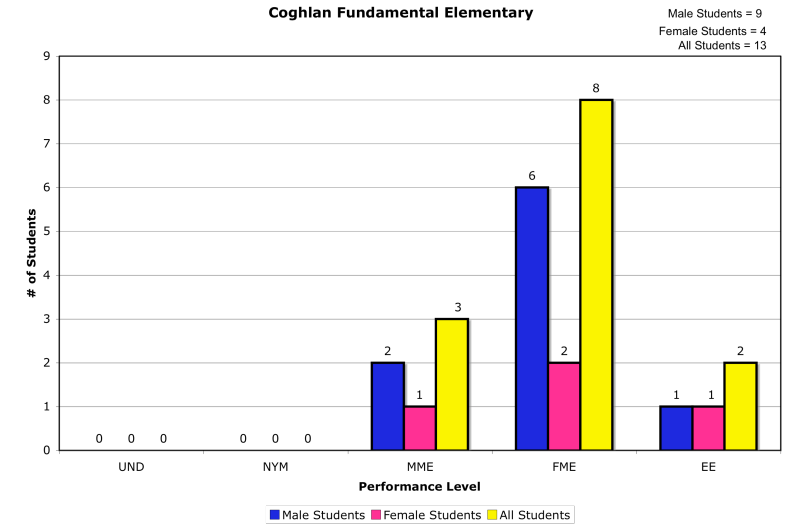

2009 Grade 6 District Numeracy Assessment
8
7
6
5
4
3
2
1
0
Problem 1
Problem 2
Communications & Representation
Strategies & Approaches
Holistic
Undetermined
NYM
MME
FME
EE

Appendix III

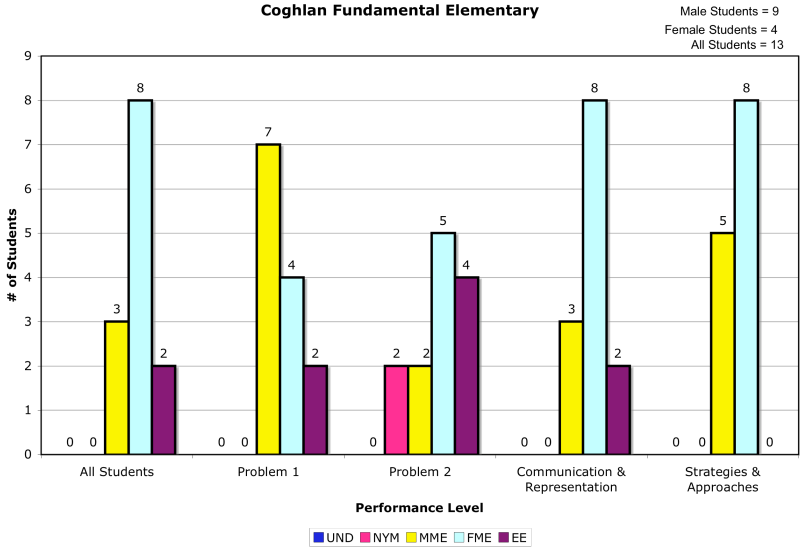




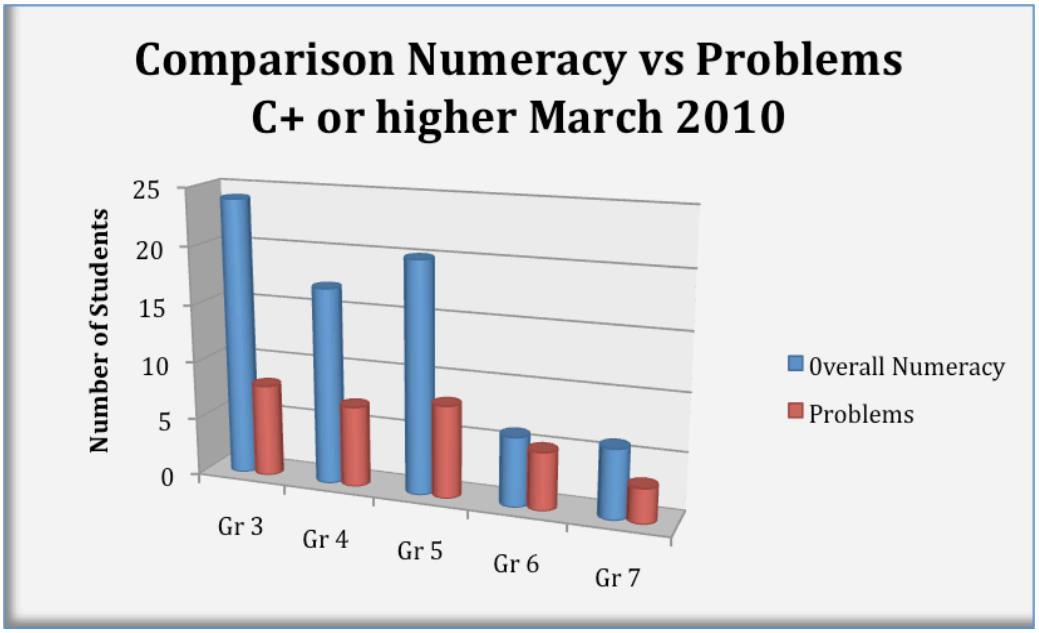
2010 Grade 6 District Numeracy Assessment



2010 Grade 6 District Numeracy Assessment



Appendix IV



Appendix V