

**SUMMARY
OF
PARTICIPANT FEEDBACK**

**ESSO FAMILY MATH
Year 3
(2002-2003)**

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EXECUTIVE SUMMARY

TRAINING WORKSHOPS

During 2002-03, the Esso Family Math staff delivered five training workshops. The purpose of the training was to prepare volunteers to facilitate the Family Math programs planned for the current year. The “Early Years” Workshops consisted of a one-day session while the “2 – 5 Years” Workshops were held over one full day and an evening. A total of 136 individuals participated as follows:

<i>Training Type</i>	<i>B.Ed. Students</i>	<i>College Students</i>	<i>Teachers</i>	<i>Community Reps</i>	<i>Others</i>	<i>Total Participants</i>
<i>Early Years</i>	12	6	5	45	17	85
<i>2 – 5 Years</i>	20	9	8	6	8	51
<i>Totals</i>	32	15	13	51	25	136

At the end of the training workshops, participants were asked to complete a two-page questionnaire to provide evaluative feedback. Seven individuals who work in an institutional setting did not participate due to the confidential nature of their work. The responses of the remaining 129 individuals are summarized below. See pages 17 – 41 for the actual feedback collected at each training workshop.

Most university students indicated that their reason for attending the training was to either gain experience working with families or to participate in a program that would help them become more effective educators. Several teachers reported that they had heard good things about the program and wanted to learn more. Teachers also expressed an interest in working with families. Many community representatives attended the training in preparation for delivery of Family Math programs at their place of employment (i.e., Ontario Early Years Centres).

Overall, the training was extremely well received with 55 participants reporting that the training met their expectations and 74 participants reporting that the training exceeded their expectations. There were no individuals who indicated that the training failed to meet their expectations.

While participants reported many helpful aspects of the training, the hands-on approach, the demonstrations and explanations, and the excellent resources /materials were mentioned most frequently. Participants also commented on how well the training was organized, and the expertise and enthusiasm of the trainers.

There were fewer aspects of training that were noted as needing change. The most frequently recommended changes were to refrain from going through each and every activity (Early Years) and decrease the instruction time on Saturday (2 - 5 Years).

The Family Math activities received high praise from almost all participants. They were described as excellent, fun, simple to implement and helpful in making real world connections to mathematics.

The large majority of participants (83%) reported that after attending the training they felt prepared to facilitate Family Math sessions. When asked what would help them feel even more prepared, they responded that they would have liked more time to practice and plan with their group and they would also have benefited from an opportunity to observe (either in person or via video) a Family Math session.

The overall success of the training was evident from the participants' additional comments made at the end of the questionnaires. These comments were overwhelmingly favorable in terms of both the Family Math Program and the Training Workshops. Participants were obviously appreciative of the Esso team's efforts to put forth a well organized and effective program. Perhaps most apparent to the participants was the team's enthusiasm for mathematics and for Family Math in particular.

FAMILY SESSIONS

During the 2002-2003 school year, the Esso Family Math Program was offered at seven London locations as well as at sites in Ingersoll, Kettle and Stony Point, St. Thomas, Tillsonburg, Wallaceburg and Woodstock. Ten of the thirteen sites delivered the Early Years Program while a total of nine sites delivered the 2 - 5 Years Program. A total of

approximately 164 families (including over 180 children) took part in the programs, attending a Family Math session one night a week, usually for six weeks. Across all thirteen sites, program delivery was the responsibility of 19 teacher leaders and approximately 129 teaching volunteers.

Teacher Leader/Teaching Volunteers Feedback

Throughout the fall and winter, feedback regarding the family sessions was collected from both teacher leaders and teaching volunteers. On the final night of the program at each site, these individuals were asked to complete a questionnaire regarding their experiences. As well, together as a group, they completed a questionnaire that encouraged discussion of the overall effectiveness of their particular program. The data collected is detailed on pages 42 – 66 and summarized below.

Teacher Leaders

During the year, thirteen teacher leaders completed feedback questionnaires. Nine of these individuals were leading programs for the first time while the remaining four had taken the role of teacher leader in previous programs. All of those who had attended Family Math training recently, reported that it had been effective in preparing them for program delivery.

All leaders indicated that they shared their leadership responsibilities with the teaching volunteers. They described it as a “team effort” with the teaching volunteers playing a very important role in each session; they displayed “initiative and flexibility” and “had a

genuine interest in improving the families' math skills". The teacher leaders reported that it was this dedication by the teaching volunteers that made the Family Math experience so positive and rewarding for everyone involved.

The leaders suggested some changes in regards to program delivery. One Early Years leader indicated that the program should be delivered in two groups of four sessions with a break in between. Another suggested that sessions be held on weekends rather than week nights. They also stated that new activities could be added to the program. The 2 – 5 Years leaders suggested giving families the game instructions to take home and having more explicit instructions for leaders to use when discussing "Where's the Math".

Overall, the teacher leaders described their Family Math experiences as "excellent" and "fantastic". Many leaders plan to use their Family Math facilitation skills in their own classrooms within the school system and in programming within their community.

Teaching Volunteers

A total of 46 teaching volunteers, the large majority participating in Family Math for the first time, completed questionnaires. Many of these individuals (50%) were attending a university education program at the time.

These teaching volunteers spoke positively about the training they received prior to their participation in family sessions. They felt it was "excellent", "very thorough" and "good preparation". However, a few individuals did feel that the training was too lengthy.

It was apparent that the teaching volunteers filled many roles in the delivery of the Family Math Program. Their primary responsibilities included: leading activities, reading stories, working one-on-one with families, and helping with the coordination of meals and materials. The teaching volunteers reported overwhelmingly that this was a positive learning experience for them. As one teacher education student stated, “it was wonderful – I gained experience communicating with families and I am now more comfortable with math instruction”.

When asked about the role their teacher leader played in program delivery, most of the volunteers responded with great enthusiasm. While at one site there were “issues in this area” and the leader was unable to complete the program, other teacher leaders were described as “amazing”, “extremely organized”, “supportive and approachable” and “very knowledgeable”. It was apparent that the teaching volunteers, especially those training to become teachers, appreciated the opportunity to work with leaders who were excellent mentors.

The teaching volunteers suggested several changes that may improve future Family Math programs. The most frequently suggested changes for the Early Years component was to remove the “Rock” story and to also reduce the number of family sessions in each program. The 2 – 5 Years teaching volunteers suggested that activities be explained to families on an individual basis and that families should be contacted between sessions to encourage them to attend.

Overall, the volunteers described their Family Math experiences as “awesome” and “very positive” and as one individual stated, “it widened my own view of math and I learned how to encourage mathematical thinking”. Many teaching volunteers plan to use their Family Math facilitation skills in future Family Math programs as well as in their own classrooms once they begin their teaching careers.

Group

Together, the leader and teaching volunteers of each Family Math group discussed the overall effectiveness of their program and completed a group questionnaire. Feedback was received from seven Early Years programs and seven 2 – 5 Years programs.

When asked how families responded to their program, all groups indicated that families participated enthusiastically. At most sites, the sessions proceeded as expected. One Early Years site reported that activities were too easy for some children and there were also behavioral problems. At a 2 – 5 Years site, there were few families enrolled so teaching volunteers were paired with individual families and activities were introduced on a one-to-one basis.

The groups reported many activities that worked well, in addition to several activities that need change. Both Early Years sites and 2 – 5 Years sites incorporated new activities into their programs.

When asked to rate different aspects of the family sessions, all sites indicated that the location, the meals and the support from the Family Math staff and the community was either good or excellent.

The groups had a great deal of advice for others who may be preparing to deliver Family Math programs. This included: be well organized, have everything set up and ready to go when families arrive, work as a team and be flexible.

The groups were also asked to identify positive and negative factors that affected the outcome of their programs. Positive factors were the comfortable environment, the teamwork, the social time shared over a meal, and the provided resources and materials. Negative factors were too few families or too few volunteers.

Parent Feedback

Feedback was also collected from parents, extended family members and guardians who attended the Family Math sessions with the children. Assisted by a teaching volunteer, an adult from each family completed two questionnaires and a family information sheet. Participation in this research was entirely voluntary. The data collected is detailed on pages 67 – 89 and summarized below. At one site, these questionnaires were replaced by in-depth telephone interviews with the parents over the duration of the program. The resulting case studies are presented on pages 90 - 98.

Questionnaires were completed as follows:

Questionnaire Type	No. Completed	
	Early Years	2 – 5 Years
Comments Before Sessions Began	57	48
Comments After Last Session	56	42
Family Information	49	42

Early Years

In most cases, questionnaires were completed by the children’s mothers. Only sixteen fathers (33%) participated in the Family Math sessions.

The majority of Early Years parents (80%) indicated that their children live in a two-parent home. English is a second language for some families (10%). The mothers’ education levels were reported to be relatively high with all but seven mothers completing high school. Fifty-two percent (52%) of the mothers have also completed college or university. Similarly, 40% of the fathers have completed college or university and only 23% failed to complete high school.

While some parents reported that math was a very enjoyable school subject for them, many others (51%) stated that they found math “difficult” and “hard to grasp”. Parents decided to attend the Family Math sessions to help their children understand math, and in

some cases, to ensure that their children do not continue to “struggle in school”. Eight-four percent (84%) of the parents expect their children to get at least passing marks in mathematics during their school years.

When asked how they use math in their daily life, most parents indicated that they use math at work and/or at home when taking care of the household finances. All parents reported that they do math activities with their children, mostly involving counting and games. While almost all of the parents said that they are comfortable talking to their children’s teachers, several parents indicated that they are “apprehensive”, “frustrated” and “uncertain” about helping their children with homework.

After attending the Ezzo Family Math sessions, the Early Years parents were very willing to share their opinions of the program. Most of them (93%) had attended at least five of the six sessions.

All parents expressed positive comments about their experiences. They especially enjoyed the “fun way to learn math”. When asked if they would change anything about Family Math, several parents stated that they would like the program to include more sessions. Others suggested that the Early Years program be divided into two or three age groups because of differing developmental levels.

Many parents indicated that they are now using the Family Math activities, such as estimating and patterning, at home. Some parents also reported that they feel “better”

about helping their children with math homework. One parent said that she “did not enjoy helping with math before but things have improved with participation in this program”. Other parents also commented that they feel more at ease talking to their children’s teachers about math.

Many of the Early Years parents were eager to share their new thoughts about math. They realize that “math is everywhere” and they are also more aware of mathematical concepts. As one parent summarized, “I have always thought of math as just numbers and formulas but now I see that geometry, measuring, patterns and especially graphing can be introduced to children at an early age”.

2 – 5 Years

As with parents in the Early Years Program, questionnaires in the 2 – 5 Years Program were most often completed by the children’s mothers. Twenty fathers (48%) participated in the Family Math sessions.

The majority of 2 - 5 Years parents (86%) indicated that their children live in a two-parent home. English is a second language for some families (12%). The mothers’ education levels were reported to be relatively high with all mothers completing high school. Fifty percent (50%) of the mothers have also completed college or university. Similarly, 93% of the fathers have completed high school with 62% also completing college or university.

While several parents reported liking math in school, over 50% of parents expressed negative comments about their math experiences in school. Some found the subject “very challenging”, “stressful”, and “frustrating”. Many decided to attend the Family Math sessions to help improve their children’s math skills. Seventeen percent (17%) of families were approached by school personnel or community representatives to attend.

Sixty-one percent (61%) of the parents expect their children to find mathematics like other school subjects and get at least passing marks during their school years. This is a significant drop from the 84% reported by parents of Early Years children.

When asked how they use math in their daily life, most parents indicated that they use math at work and/or at home when taking care of the household finances. All parents reported that they do math activities with their children at home, mostly involving games and homework. While almost all of the parents said that they are comfortable talking to their children’s teachers, several parents indicated that they “dread” helping their children with math homework as they find it “frustrating” and “difficult”.

After attending the Esso Family Math sessions, the 2 - 5 Years parents were very willing to share their opinions of the program. Most of them (90%) had attended at least five of the six sessions. All parents had positive comments about their experiences. They especially enjoyed the games and the meals. When asked if they would change anything about Family Math, several parents requested that the number of sessions be increased. Others stated that the age span within the 2 – 5 Years Program is too large.

Many parents indicated that they are now using the Family Math games, especially the estimating activities and the calculator, at home. Some parents also reported that they feel “more comfortable now” about helping their children with math homework.

Many of the 2 - 5 Years parents shared their new thoughts about math. They realize that “math is all around us” and “math can be fun”. As one parent concluded, “If you make math fun and approachable, children will find math much easier to learn”.

Concluding Remarks

The Esso Family Math Project has completed another highly successful year. Many more individuals have been trained to deliver Family Math programming and many new sites are providing programs for the families in their areas. As in the past two years, feedback from families and volunteers has been overwhelmingly positive. While there have been some suggestions for change, these recommendations will again assist the Esso Team in adapting and modifying the program to meet the needs of Ontario families.

Training Workshop - Early Years – August 26

Number of Completed Questionnaires: 28

- 28 Community Representatives

Why they wanted to learn more about Family Math:

- so I can facilitate sessions provided in my community (4)
- wanted exposure to the revised version of the program (3)
- to help parents overcome their math phobia (2)
- want to use it in child care settings so parents are more aware of math concepts (2)
- to better facilitate parent teaching and improve attitude, confidence and anticipation towards math learning
- believe strongly that children learn best with parent support/parents require new ways of looking at math and literacy learning/wanted to be involved in training that focuses on the family
- directly related to my job as I work with parents/the math concepts are fun and interesting/provides an excellent resource
- heard about the program from other child care workers in the community
- to further my training/to offer more to families
- heard the term “Family Math” and was interested in finding out more about it
- to get more training
- using course for parent/child education
- received information about the program at work
- very interested in the concept and feel ECEs could do more with children
- to assist families and support them in their parenting roles
- attended a one day workshop for Resource Consultant Network and was very interested because it will fit very easily into our program
- like the idea of making math fun
- interested in concept and value to community
- attended a short information session and found it very interesting
- to become more comfortable with math
- to become a presenter for my agency

How well did the training meet their expectations:

met expectations	17
exceeded expectations	11

Explanations:

- *why training met expectations*
 - demonstration and participation was great
 - the whole program was explained
 - training was well done
 - training was excellent like the first time
 - great revisions to the program
 - one day was sufficient
 - informative but repetitive
 - needed more info on how to seek volunteers
 - needed more info on how to decide on leaders' roles
 - needed more info about what to tell parents
 - role playing would have been beneficial
 - do not like participation in activities during training but expected it
- *why training exceeded expectations*
 - excellent hands-on training (2)
 - excellent organization of materials
 - material was relevant
 - very detailed explanations
 - very concise and easy to follow
 - well presented
 - pace was great with variety of hands-on and listening
 - feel very comfortable volunteering with the program now
 - resource book is very complete, easy to read and follow
 - resource book instructions are clear, concise and complete
 - felt like one of the parents learning with my child

Which aspects of training did they find most helpful:

- resource book (7)
- hands-on activities (6)
- going through the activities (4)
- learning how to show families how math is in everyday activities (2)
- demonstrations/explanations (2)
- talking about the different aspects of math and what skills they are addressing
- all of the training
- visual learning tools
- measuring using everyday items
- modeling of how to present to parents
- having the sessions already laid out
- group participation
- all senses were tapped so it addressed learning styles
- very thorough in concept and in application of teaching techniques
- the blend of literacy and math which is non-threatening, familiar and fun

Which aspects of training would they change:

- no need to read all of the books (8)
- too repetitious going through all sessions/highlight a few weeks since resource book is quite thorough (4)
- should be longer (3)
- the training space/seating arrangement (2)
- felt rushed (2)
- the presentation style – a lot of work went into the presentation but as professionals working with children we do not need to do the actual children’s activities/an explanation of goals and methods with brainstorming opportunities would be more appropriate for an adult group
- model the estimating one time only
- include more information on the background of the program and how it began

What were their first impressions of Family Math activities:

- excellent/great (9)
- fun (7)
- simple to implement (5)
- interesting (3)
- well thought out (2)
- exciting
- excellent variety
- clear instructions
- excellent approach to math
- great integration of concepts
- using every day items allows families of all backgrounds to become involved
- potential to change parents’ attitudes
- activities seem even better than last year
- more structure than I typically use

How would they improve upon the Family Math activities:

- will need to adapt as necessary like giving more time for some activities (3)
- include more open ended, creative opportunities (2)
- all families may not have access to a CD player
- the dice activity could be done a bit differently since the paper dice may be frustrating for some
- have more visual, concrete items (i.e., five rubber ducks)
- include a resource of multicultural songs and books/perhaps parents could bring examples of their own childhood experiences

Do they feel ready to participate in Family Math sessions as a leader:

Yes	21
No	7

What would help them feel more prepared:

- participating in a Family Math session (7)
- role playing in small groups (2)
- following a leader
- being less rushed during training
- have each group present an activity during training
- more practice
- having a co-worker take the training as well
- more exposure to the program
- know how to seek partners and work with OEYC

Other comments:

- thank you
 - the noise outside our room became very distracting at times
 - I'm excited about taking this further
 - thanks for giving me the opportunity to receive this training
 - great presenters – Linda and Judi were clear, relaxed and fun
 - revised materials are great/thanks
 - presenters were wonderful/a lot of obvious preparation involved/thank you
-

Training Workshop - Early Years – September 28

Number of Completed Questionnaires: **26**

- 4 B.Ed. students
- 3 college/university students
- 1 teacher
- 4 early childhood educators
- 8 community representatives
- 6 others

Why they wanted to learn more about Family Math:

B.Ed. Student Responses:

- to learn new methods to involve parents in learning
- to add another tool to my teaching skills
- very interested in community and family education programs
- to see how the program is run and to get some experience
- to get experience working with children from different backgrounds
- it is a worthy cause to donate some time towards
- to learn teaching techniques and to become more comfortable with math

College/University Student Responses:

- learned about it from a community advisory committee that I sit on
- to gain knowledge and experience
- required for my placement at the community centre

Teacher Responses:

- because I love to teach kids

Early Childhood Educator Responses:

- to help parents to understand that learning can be fun and that they can help their children with the learning process
- to continue parenting programs at our center
- to bring the program to our families and to further educate myself
- interested in teaching families how to utilize everyday surroundings to help learn math concepts

Community Representative Responses:

- participated in the program last year and really enjoyed it (3)
- encouraged through my workplace/heard positive information regarding previous session
- for the enjoyment, the great experience and to give back to my community
- enjoy showing families how to teach their children
- part of my job as community development worker
- would like to be a trainer and bring this to my community

Others Responses:

- to be able to offer new programs to the families who use our centre

- interested in program
- heard about it through a resource consultant who has taken the training
- interested in helping families and to add to my own career skills
- want to learn more so I can recommend it be adopted by our Board
- really excited about implementing the program in my community

How well did the training meet their expectations:

Group	Did Not Meet	Met	Exceeded
B.Ed Students			4
College/Univ Students		2	1
Teacher		1	
EC Educators		2	2
Community Reps		3	5
Others		2	4
Totals	0	10	16

Explanations:

- *why training met expectations*
 - received training before (2)
 - excellent resource book
 - hands-on
 - enjoyed the instructors' presentations and their humor
 - learned a lot
 - relates to Make and Take training program
- *why training exceeded expectations*
 - hands-on (5)
 - very thorough (4)
 - fun (4)
 - excellent resource book (2)
 - great instructors (2)
 - well organized
 - lots of enthusiasm
 - fast paced
 - made us feel appreciated as volunteers
 - feel confident I can deliver the program
 - stayed interesting over the whole day

Which aspects of training did they find most helpful:

- hands-on approach (10)
- watching the instructors model the activities (5)
- great instructors (2)
- visual examples – e.g., charts (2)
- resources (2)
- explanations of where to find the math and how to facilitate the activities (2)
- learning the math language (2)
- step-by-step approach (2)
- experiencing the sessions as the “family”
- going through the routines that will occur every night
- having all the materials at the training
- learning how simple it is to graph
- receiving the new and better organized resource book
- going over “table talk” with role playing
- provision of breakfast and lunch

Which aspects of training would they change:

- do not read every book (3)
- more time on the more complicated activities/do not need to go over estimating jar each time (3)
- provide water at each table and at lunch (3)
- more time to plan with others from my site
- more emphasis on us in our role as leaders
- link what you are saying to the relevant page in the resource guide
- lighter lunch
- provide location of training closer to the community
- allow brief opportunities for solitary moments and time to think

What were their first impressions of Family Math activities:

- fun (9)
- excellent/great (7)
- exciting (3)
- well thought out (3)
- very interesting (2)
- nice changes from last year (2)
- simple (2)
- easy to simplify or expand for different ages (2)
- short enough and easy enough to ensure success
- very relevant to curriculum
- all encompassing – kids listen to stories and actively participate

- new great math language
- wow
- engaging
- easy for families to grasp and get excited about
- full of learning
- friendly atmosphere
- I am extremely enthusiastic and cannot wait to start
- impressed with the volume of info supplied to us

How would they improve upon the Family Math activities:

- the home book should have larger pages
- for the “Ten in the Bed” activity use a shoebox lid for the bed and paper rolls for the people
- could show a variety of ways to “read” stories – felt boards, clotheslines, etc..
- include more group games

Do they feel ready to participate in Family Math sessions as a leader:

Group	Yes	No
B.Ed. Students	4	
College/Univ Students	3	
Teachers	1	
EC Educators	4	
Community Reps	8	
Others	5	1
Totals	25	1

What would help them feel more prepared:

- having time with my group to plan (3)
- more practice in the leader role
- doing the first session
- doing the program
- more time with the program
- reading all the stories and learning the songs
- meeting the families

Other comments:

- the day was well spent/I am sure this will benefit me when I become an educational assistant
 - nice size class for training
 - great fun and a learning opportunity
 - thanks for all your hard work
 - Judi and Linda's enthusiasm is contagious
 - thank you for your work to improve math skills for generations to come
 - thank you/I feel so fortunate to be a part of this
 - great program/I am looking forward to doing it again/I feel the revisions are an improvement
 - it would be good to hear the tapes or CD/I did this program before but due to lack of CD player I have yet had the opportunity to hear the music
 - the training was very well organized and flowed very smoothly/I think one day of training was enough
 - excellent resource/needs some adaptation for high ESL population
-

Training Workshop - 2-5 Years - September 28/30

Number of Completed Questionnaires

19

- 6 B.Ed. students
- 4 college/university students
- 1 teacher
- 4 community representatives
- 4 others

Why they wanted to learn more about Family Math:

B.Ed. Student Responses:

- sounded interesting/like the idea of making math fun for family
- to become more familiar with everyday activities that can be used to teach math/to see what activities children enjoy and are capable of doing
- great idea and sounded like fun
- way of getting additional training as a teacher, working with a subject I love, and working with families
- wanted to be involved in a community project/I enjoy math games and meeting new people
- to help out/it interests me

College/University Student Responses:

- to gain experience interacting with parents/for personal interest
- heard about it through a community agency
- love working with people, especially children/to help make a difference in a child's life by helping families
- my placement is at a site that is offering the program

Teacher Responses:

- wanted to learn more after hearing about program from a colleague

Community Representative Responses:

- to help my community (2)
- since our agency will be offering the program, I wanted to take the training so I can support the staff and the volunteers
- to provide my community with a program for parents and children

Others Responses:

- to learn more about teaching math to younger students since I normally tutor students in grades 6 – 10
- to help my community
- to improve my English skills and to get involved in the community
- to get involved in something more front line rather than administrative

How well did the training meet their expectations:

Group	Did Not Meet	Met	Exceeded
B.Ed Students		1	5
College/Univ Students			4
Teacher			1
Community Reps		2	2
Others		2	2
Totals	0	5	14

Explanations:

- *why training met expectations*
 - good program that is helpful and simple
 - explained fundamentals, history and purpose of program
 - interesting examples
 - learned something new about teaching by estimations
 - still need to see children participate
- *why training exceeded expectations*
 - very thorough (3)
 - hands-on (2)
 - wonderful activities (2)
 - fun
 - great instructors
 - good overview
 - helpful resource book
 - well organized
 - family based
 - each evening was presented and explained
 - enthusiasm for math displayed by instructors
 - covered a wide variety of math topics
 - activities encourage math thinking and are so much fun
 - avoided the usual boring ways to learn math
 - great program, examples and explanations
 - can use the ideas elsewhere

Which aspects of training did they find most helpful:

- hands-on approach (13)
- resource book (4)

- learning the math content of the activities (2)
- demos and explanations
- opportunity to dialogue
- going through the activities and resource book simultaneously
- high participation level by everyone
- going through the whole program
- learning how the activities fulfill curriculum requirements

Which aspects of training would they change:

- hold training over two shorter days (3)
- training session on Saturday was too long (2)
- training was too long
- hold training over longer period so nothing will be rushed
- have all training fit into one day
- do not read all the storybooks
- did not need so many examples of debriefing

What were their first impressions of Family Math activities:

- fun (7)
- excellent/awesome (5)
- good variety of activities (3)
- great ideas (2)
- easy to transfer to home environment
- easy to incorporate family differences
- amazing how even playing cards can be so educational
- well thought out
- very age appropriate
- innovative
- good balance of fun and learning
- easy to engage children with these activities
- expecting it to be more complicated
- very diverse
- helpful for anyone with children
- very educational
- great for children
- helpful
- goals are clear
- program will make tremendous impact if target families reached
- informative
- very family oriented
- does not feel like you are doing math
- great to see math component of each activity

How would they improve upon the Family Math activities:

- add further extensions to activities for home use
- some activities are a bit complicated and need more explanation

Do they feel ready to participate in Family Math sessions as a leader:

Group	Yes	No
B.Ed. Students	5	1
College/Univ Students	4	
Teacher	1	
Community Reps	4	
Others	4	
Totals	18	1

What would help them feel more prepared:

- more practice (7)
- observing or viewing a video of a Family Math session (2)
- role playing (2)
- reading the resource book again
- having teacher leaders who are more willing to take charge

Other comments:

- great program (2)
- good program that I would like to use
- thank you for assisting with the training/I look forward to being a part of this great experience
- the added meeting time after the training was really helpful
- Barry and Nancy are an incredible team/their enthusiasm for the program definitely has a contagious effect
- I really like the idea of having games that are not common/it is interesting to have games from other cultures
- excellent program/keep up the good work
- having never taught children before, I think this program is phenomenal
- I am looking forward to implementing this program/we have wanted to do this for some time and it is finally coming to fruition

- this program has a lot of good ideas that teachers can apply in the classroom to help students think mathematically
 - this was a great experience/this is a wonderful program to get people doing math and understanding the relationships between math and life
-

How well did the training meet their expectations:

Group	Did Not Meet	Met	Exceeded
B.Ed Students		1	7
College/Univ Students		3	
Teacher		3	1
Community Reps		2	3
Others		4	
Totals	0	13	11

Explanations:

- *why training met expectations*
 - satisfied that families will learn math skills
 - everything was well covered by the trainers
 - program makes math fun so children will not be turned off
 - feel well-prepared to facilitate the sessions
 - amazing program, package and activities
 - appropriate songs and games
 - moved along at a great pace
 - very long day and somewhat repetitive
- *why training exceeded expectations*
 - feel well prepared (2)
 - hands-on and fun (2)
 - removed any apprehensions I had regarding teaching math
 - not boring as training sessions usually are
 - fun and exciting day
 - step-by-step walk through was important for confidence
 - did not realize how many books are related to math
 - very thorough
 - math being fun would not have been my first reaction
 - trained in Berkeley method so thrilled to see modifications
 - fun and informative

Which aspects of training did they find most helpful:

- hands-on approach (7)
- Resource Book (4)
- walking through each session and learning the routine (3)
- Linda and Judi's expertise and enthusiasm (3)
- demonstration of all aspects of program (2)

- explanations of why each activity has been included in program (2)
- role modeling (2)
- organization of handouts and program materials
- defining the concepts
- all aspects of training were important
- using manipulatives
- learning there is no right or wrong answer
- trainers sharing how to teach parents and children
- learning key words at the beginning of each activity and having them reinforced throughout
- the variety in teaching methods
- the Math Walk, story reading, graphing and estimating

Which aspects of training would they change:

- invest in math education and leadership training for some teacher leaders (2)
- length of the day/hold over several evenings
- leave out repetitive songs and focus on the role of the facilitator
- went into great detail with the songs and stories but passed over details about how to run & facilitate the program
- need more time to discuss details within each group
- too repetitious/for example, once we have learned “Going on a Math Walk” it is unnecessary to repeat it in each unit/it is time consuming and imposes on our volunteer time
- these activities are designed for very young children and having us do each activity is quite dull/a few of the activities should just be demonstrated rather than active participation by the group
- do not need to do as much of the repeated activities like estimation and the math walk
- activities need to be explained at a slower pace so we can grasp how long they will actually take

What were their first impressions of Family Math activities:

- fun (7)
- excellent/great/very well done (4)
- looking forward to getting started (2)
- very helpful in making real world connections to math (2)
- enjoyable
- will incorporate some of this in my high school lessons, i.e., approaches and structures
- love the activities and can hardly wait to use them at the sessions and in my classroom
- good

- interactive, creative and proactive
- can be adapted to the setting and age group
- simple
- activities will allow children to see that math is all around us and they will experience math enjoyment through them
- engaging/kids will want to do them
- designed to keep children thinking about math
- may be too advanced for our population
- well planned and well described
- good way to get parents involved in their children's education
- tried the activities in my practicum and they worked very well

How would they improve upon the Family Math activities:

- include more outside activities
- survey families for interests and learning challenges ahead of time so that additional preparations can be made
- make it more active for the participants
- the cube should have tabs to make it easier to construct

Do they feel ready to participate in Family Math sessions as a leader:

Group	Yes	No
B.Ed. Students	8	
College/Univ Students	2	1
Teachers	4	
Community Reps	4	1
Others	1	3
Totals	19	5

What would help them feel more prepared:

- observing an actual session (3)
- practicing the activities before having to lead them (2)
- more time allowed for doing the activities
- more training
- knowing my team members better
- meeting with other leaders prior to the start of the program to go over roles

- provide the Resource Books before the training starts so participants can look at the activities and see how they are organized
- need to know more English

Other comments:

- would like to have a copy of the 2-5 Resource Book as well (2)
 - thanks for helping the communities
 - great program for the community and volunteers
 - great day/not too much sitting/I enjoyed standing up and participating in the songs and activities
 - thank you
 - realized that math is everywhere in daily life
 - thank you for providing such an opportunity and service to the community
 - would like to see a program like this developed for higher grades
-

Training Workshop - 2-5 Years – January 11/January 13

Number of Completed Questionnaires: 32

- 14 B.Ed. students
- 5 college/university student
- 6 teachers
- 1 retired teacher
- 2 community representatives
- 4 others

Why they wanted to learn more about Family Math:

B.Ed. Student Responses:

- gain experience working with families (2)
- enjoy math and seemed like a good program to support (2)
- enhance my math teaching skills (2)
- learn new strategies and learn about math resources
- program sounded interesting and helpful for the community
- learn how to make math fun so I can use the ideas when I teach
- always enjoyed tutoring math
- good volunteer experience
- get more comfortable in a teaching role and make some contacts
- learn more about presenting math/be involved in a community initiative for fostering math skills/would like to bring the program to another area
- want others to realize that math is not a scary monster and it is everywhere
- improve my own understanding and to help my community
- assess the need of community based education projects
- learn how parents interact with their children in terms of math
- great program that would give great hands-on experience
- gain experience with math, teaching and communicating with parents/learn more about London communities/assist others in becoming more comfortable with math

College/University Student Response:

- Dr. Onslow approached our First Nation's Board of Education
- increase my math knowledge and gain experience
- gain experience working with children and learn how to teach math
- expand my knowledge and comfort level of math/help children enjoy math
- gain experience and make me feel good as a person

Teacher Responses:

- interested in family and community involvement in the enhancement of learning
- hours for PLP and interested in program
- was invited to be a leader/extremely valuable program for the community

- my principal asked me to volunteer/very exciting initiative/a lot of families in our community will benefit
- sounded interesting
- to assist families whose children are having difficulty with math

Retired Teacher Response:

- want to get involved in education with the community

Community Representative Responses:

- to gain some teaching experience/may be a career choice
- to be more effective when administering the program
- to be more helpful to community volunteers

Others Responses:

- asked to attend by my principal (educational assistant)
- already volunteering at the community site
- sounded like an excellent program to get involved with
- recruited by another volunteer

How well did the training meet their expectations:

Group	Did Not Meet	Met	Exceeded
B.Ed Students		4	10
College/Univ Students		2	3
Teacher		1	5
Retired Teacher			1
Community Reps		2	
Others		1	3
Totals	0	10	22

Explanations:

- *why training met expectations*
 - training was brief but exciting
 - explained fully/gave suggestions on how to expand games
 - very hands-on although quite a bit to learn
 - feel more comfortable with the activities and concepts
 - learned games and teaching methods
 - lot of information was discussed and then practiced
- *why training exceeded expectations*
 - provided the hands-on experience extremely well (4)
 - sessions are well laid out (3)
 - explanations were detailed and well done (3)

organization of program is outstanding (2)
 relaxed atmosphere (2)
 games are simple yet effective (2)
 fun and did not feel like a training session
 very in-depth as we walked through the whole program
 not just given the book and told to teach
 step-by-step approach where questions were welcomed
 so many innovative ideas to make math fun
 clear, concise and complete
 lots of resources and opportunities to experiment
 informative session with relevant ideas and materials
 discussions of “Where’s the Math?”
 time given for planning was most helpful
 learned how to modify and extend activities
 free meals and resources
 enjoyable and realistic and taught me new things
 materials for families to take home

Which aspects of training did they find most helpful:

- hands-on approach (23)
- group discussions and problem solving (7)
- explanations of “Where is the Math?” (6)
- learning about potential problems (4)
- running through everything step-by-step (3)
- trainers were informal, funny, helpful and knowledgeable (3)
- getting the supplies (2)
- sharing by all participants (2)
- Resource Book (2)
- reading the books
- thorough explanation of the games
- learning how to explain and teach the activities
- brainstorming on variations of the games
- working with a team
- organization of each session and the stories
- seeing how math can be fun through the use of games
- being told to relax and not worry about making mistakes
- modeling of each activity

Which aspects of training would they change:

- hold over two days and cover half the material each day (3)
- have an agenda so we know what comes next (2)
- difficult to make it to both sessions, especially in an evening

- shorten to one day or 2 and ½ nights
- the last part of the Saturday training felt rushed/probably better to divide training over several evenings
- condense the training time
- distance to training location
- name tags for the second night
- more time spent on the games/Mancala was a little frustrating
- the Resource Book should include dialogue examples of questions to ask and ways to explain/should also address possible problems and challenges and how to solve them
- participants who do not have a teaching background were sometimes lost on mathematic concepts, particularly related to the curriculum
- should have opportunity after each activity to divide up the responsibilities and practice explaining the activity to the group
- Panda game was difficult so provide more time for it
- have groups share ideas on the activities and present best ideas to whole group
- include more extension activities
- provide an opportunity for our group to get to know each other a little better beforehand

What were their first impressions of Family Math activities:

- fun (12)
- excellent/great (5)
- Panda seemed too difficult (3)
- games can be modified (2)
- easy to understand with resources that everyone has access to
- excellent/wish I knew these games when I was still teaching
- good for small groups but not sure if able to integrate into classrooms
- easy to find the math applications/activities encourage thinking
- meaningful/helped me plan math for my classroom
- motivating/wanted to do them with my family as soon as I got home
- manageable, challenging and able to adapt to variety of levels
- let's do this/our kids will love it
- games were motivating
- very creative
- definite math concepts in each activity
- seemed like they would be entertaining to the 2-5 grade range
- great way to bring families together while practicing valuable math skills
- will motivate learners to look at math differently
- fantastic, interactive and engaging
- educational
- makes you see math in a whole new light
- very useful/demonstrates math is in everyday things
- not all activities have something to teach you about math

- liked the activities as well as the ideas that can be generated from them/it is definitely something that could grow
- cool/actual math stuff that is fun and pertinent
- easy to understand and full of math
- deceptively mathematically sophisticated/high interest for kids
- great experience for families
- very enjoyable and will create togetherness within each family
- wow/great ideas/I wish I could have learned this when I was young

How would they improve upon the Family Math activities:

- provide more options for extending and varying the activities (4)
- have more suggestions regarding ages, grades and difficulty levels
- have extra activities for families that need to be challenged
- some activities could be easier and relate more to actual math
- send home a copy of the game instructions in case families forget

Do they feel ready to participate in Family Math sessions as a leader:

Group	Yes	No
B.Ed. Students	14	
College/Univ Students	5	
Teacher	6	
Retired Teacher	1	
Community Reps	1	1
Others	3	1
Totals	30	2

What would help them feel more prepared:

- observing an actual session or a video of one (6)
- practice with our group (4)
- reading the material again (3)
- having more than one week to find families (2)
- a meeting with our team to go over the details (2)
- going over the activities at home (2)
- visit the community site and learn more about the families
- having a mentor
- having an experienced teacher leader and working as a team

- reading about the teaching aspects
- more time to prepare between training and the start date
- have materials on math skills to review

Other comments:

- see you at the Aboriginal Education Conference/let's do some recruiting
 - wonderful
 - great enthusiasm/great ideas/happy to be involved
 - bravo/hope your enthusiasm runs deep and the program continues
 - thank you for all your hard work/your team has really thoroughly thought and planned and played and worked hard
 - keep up the excellent work
 - Barry, Nancy and Linda – your enthusiasm and overt love of this program is infectious
 - feel very appreciated as a volunteer/felt very comfortable/excellent instructors
 - thanks/this is going to be great
 - great experience/looking forward to participating in program
 - quite beneficial and can't wait to carry it out
 - should discuss how people could start program in their community
 - presenters were very well prepared/resources were professional/all questions were answered and presenters were very knowledgeable of subject matter/presenters were open to new ideas
 - I'm really excited to get out there and see how it goes
 - I'm excited that the focus is on helping parents/I believe most parents want to help their children learn but may not know how
 - program seems great and well organized/all leaders were very enthusiastic
 - thanks so much for this opportunity
 - great program
-

Teacher Leader Feedback - Early Years

Number of completed questionnaires: **6**

Teacher leader's background:

- 2 teachers
- 1 retired teacher
- 2 community representatives
- 1 other

First experience as a Family Math teacher leader?

Yes 4
No 2

Did the teacher leader attend the Esso Family Math training sessions?

Yes 4
No 2

Teacher leaders' comments on the training:

- thorough/each session explained well
- prepared us well for the program/walking through the sessions helped us anticipate each week's activities
- attended last year before starting as a Family Math leader
- still great
- attended two of the training workshops – glad to see that the trainers have stopped reading each and every story and also that the training is done in just one day

Did the teacher leader take sole responsibility for leading the family sessions?

Yes
No 6

Teacher leaders' comments on help they received:

- whole team shared the responsibility (2)
- others helped to prepare the bin for each night/we all took turns presenting and facilitating the activities
- it was a group effort with everyone pitching in/occasionally I made decisions
- part of a group effort/assisted with 2 or 3 activities at each session
- volunteers did all of the activities/I merely organized the room and the materials/I explained the activities to the parents and kept the volunteers on track

How they feel about their experiences as a teacher leader of the sessions:

- not much different than last year/I prefer to work as a group
- very impressed with the curriculum and activities
- once again this is a well designed program
- very positive
- enjoyed working with peers, interacting with parents and playing with children
- exciting to see so many early years children displaying higher level thinking in so many areas

How they feel about the role the teaching volunteers filled in delivery of the program:

- most volunteers are more than capable of the role/having a teacher involved is not really necessary
- total team approach/the teaching volunteers are more like “coordinators”
- volunteers were great, on time and very involved in delivering the program/I trusted them to bring their own personalities to the program
- group worked well together/team effort
- our team was very cooperative/our group approach made the sessions go by quickly/activities were presented efficiently and the children quickly learned the routine as we became specialists, i.e., “Ruth Anne the Estimator”

Changes they would make to how the program is delivered in the future:

- shorten to four weeks, have a break and then four more weeks
- change time to perhaps a Saturday afternoon so no meal would be necessary
- try to stick to timelines
- add a few new activities and change one of the books (“Rocks”)
- include additional children’s activities for when parents are participating in discussion time

- need a version for the younger children - some activities were too long in length for the younger children

How the teacher leaders described their experiences overall:

- excellent (2)
- loved it/loads of fun
- proud to be a part of implementing this wonderful program/heard parents using math language when working with their children and the excitement in their voices and on their faces was rewarding
- enjoyed it/hopefully our centre will continue to offer the program
- as a primary teacher it gave me new insight into “crowd control” of young children

How teacher leaders see themselves using Family Math facilitation skills in the future:

- use in the classroom on a daily basis
 - use parts of the program in other children’s programs that I hold at the centre
 - will use some activities in the classroom when I substitute teach/will talk about the program when I am in the schools so hopefully it can be offered again
 - will volunteer for more Family Math sessions
 - every day in my work as an early childhood educator
 - have been doing it at our school for years – now I have more ammunition
-

Teacher Leader Feedback - 2 - 5 Years

Number of completed questionnaires: 7

Teacher leader's background:

- 5 teachers
- 2 community representatives

First experience as a Family Math teacher leader?

Yes 5
No 2

Did the teacher leader attend the Esso Family Math training sessions?

Yes 7
No

Teacher leaders' comments on the training:

- received my training in 2001 and a few things have changed/if I was to do this again, I would take the training again to refresh my memory
- training was excellent/provided the necessary information, resources and support to deliver a program effectively
- great but too short/hard to remember everything
- it was thorough
- very beneficial in preparing me for the program/modeling of the lessons by Barry and Nancy is top notch
- great hands-on practice of activities

Did the teacher leader take sole responsibility for leading the family sessions?

Yes
No 7

Teacher leaders' comments on help they received:

- it was a team effort (3)
- I did most of the prep work/student teachers demonstrated outstanding leadership skills during the sessions
- worked with an awesome team of volunteers who all contributed equally to the success of the Family Math Program
- a co-op student assisted me and I also gave the facilitators the opportunity to lead activities
- all activities were cooperatively led except for the discussion with parents which I did

How they feel about their experiences as a teacher leader of the sessions:

- very positive experience/everyone helped so much and we all got along
- wonderful/very rewarding to deliver such a fantastic program/feel as though we made a difference to those who participated
- felt good/everybody participated so that made it a good experience
- awesome/great team
- very rewarding/families gradually became more comfortable with the math activities/student teachers learned to team teach
- very positive/love to be part of the program again
- excellent professional development

How they feel about the role the teaching volunteers filled in delivery of the program:

- they play a very important role, especially in the way each evening is carried out/each person has a special role/we all worked so well together to make each session a successful one
- could not have been more fortunate/they are why this program was so successful/each teaching volunteer had a genuine interest in improving the families' math skills/they provided a warm, non-intimidating environment for families
- prepared their activities and had good ways to teach them to the children
- awesome
- they were professional at all times/took their role very seriously and prepared ahead for their lessons/they were very flexible if modifications were required
- they were key players/they were always willing to do whatever was asked of them/showed initiative and flexibility

Changes they would make to how the program is delivered in the future:

- give families game instructions so they can play them at home

- have more explicit instructions for leaders to use when emphasizing “Where’s the Math”

How the teacher leaders described their experiences overall:

- extremely positive (2)
- great/fantastic/excellent (2)
- amazing/it was inspiring to see how engaged and excited the parents and children were/the content and setup of activities was great
- indescribable/constant support from Esso team/Barry’s positive attitude is contagious/program is truly unique and it was a pleasure to be involved in such a fantastic program
- great/really good program/made new friends/children enjoyed it

How teacher leaders see themselves using Family Math facilitation skills in the future:

- as a supply teacher I have already used the challenges, some of the games and stories in my teaching and I will continue to do so in the future
 - constantly/already use many of the activities in our after school tutoring program/ community will continue to run Family Math in the future/I look forward to bringing Family Math to future employment opportunities
 - will continue with Family Math/will do the activities at home with my own children
 - will continue to use them with families at my school/will continue to support my colleagues when they wish to run Family Math evenings/will continue to train teachers at PD sessions/will continue to run Family Math at this site for at least another year
 - will volunteer again for Family Math/will use in other programs with children
 - will use many of the strategies and games in my classroom
-
-

Teaching Volunteer Feedback - Early Years

Number of completed questionnaires: 23

Teaching volunteer's background:

- 7 university/college students
- 4 community representatives
- 12 others

First experience as a Family Math teaching volunteer?

Yes 20
No 3

Did the teaching volunteer attend the Esso Family Math training sessions?

Yes 21
No 2

Teaching volunteers' comments on the training:

- excellent/great/well done/wonderful (6)
- sufficient/fine (3)
- great to go through the steps of the activities (4)
- very thorough (2)
- helpful (2)
- fun/would like more practice with the ZONE
- I learned a lot about children and the way they learn
- a little too long/do not need to read every book and go on every math walk
- loved it all/very appropriate
- great training but better if done locally
- introduced all of the activities and allowed us to work with the hands-on materials just like the kids do
- training was good/I remembered the activities well enough to get a start
- put me in a good position to deliver the program/there were no surprises

Teaching Volunteer's role in delivering the Family Math Program:

- took turns presenting activities (5)

- various roles (3)
- read stories/did table activities/estimating/sang songs (2)
- contacted schools and did presentations
- coordinated volunteers and equipment
- organized food
- had a specific role which provided continuity for the program and for me personally
- we divided up the activities and lead at least one activity each night/I particularly enjoyed telling the stories and working with families when they did the activities
- many roles/presented activities, helped families with activities/served supper/did the childcare one evening
- helped with dinner/interacted with families/lead activities/helped with children's time at the end of the session
- wide variety of roles/I was the community leader and organized a lot of the supplies for the program
- set up/did the group sessions/did the parents' session at the end
- interacted with families/lead different activities
- conducted assigned activities
- carried out activities and encouraged table talk
- lead activities/encouraged participation/engaged in discussion with the children and parents/was a role model for the kids
- did not have a large role because I did not attend the training

How teaching volunteers feel about their Family Math experience:

- great/awesome/wonderful (6)
- rewarding (3)
- good (3)
- fun (2)
- loved every minute of my time
- great way for me to enhance my relationships with our families
- loved it/had a really great time with the kids, parents and fellow volunteers
- very tiring and very positive as sometimes it was difficult to get the schools to make referrals
- hope I have the opportunity to do it again
- great working with different families/able to connect and help families
- enjoyed presenting the activities
- sad to see it end
- the children taught me a lot and I hope I taught them a lot
- enjoyed it/great learning experience
- good learning experience/perhaps too many leaders on nights when there were fewer families
- I loved the kids/it was interesting to see the parents interact with their children during the math activities/ I would recommend this experience to others

How teaching volunteers feel about the role the teacher leader played in program delivery:

- great (4)
- fine/good (2)
- she allowed us to do our own interpretation of the activities (2)
- our teacher leader did not stay with the program (2)
- she had everything organized/she was very friendly
- very supportive
- functioned as a part of the team
- well prepared/able to jump in and take over when someone was absent
- she was very good with the families and helped us to understand how to present the activities
- we had some issues in this area and the teacher leader we started with was unable to finish/we got another teacher leader and while she never took the role of teacher leader, she was amazing/she definitely knew what she was doing and lead activities so much better than the rest of us
- helpful/good guidance/easy going
- big support/had materials prepared ahead
- did a wonderful job organizing the meals
- she knew a lot more than we did since she wrote the book/wonderful job
- she was especially helpful when explaining activities
- she allowed us to take responsibility for the program
- I liked that we were able to independently organize our lessons
- very good job/she has a soothing voice that puts parents at ease
- very well organized

What teaching volunteers would change about how the program is delivered in the future:

- remove the “Rock” story (5)
- shorten the time frame to four weeks (2)
- gear it to appropriate age group – some activities too difficult (2)
- make the process of recruiting families easier
- offer it earlier in the fall or in the spring
- do not deliver program during a busy time of the year like December
- include more activities for the children during the parent discussion time
- the patterns and actions in the “Family Math Walk” can be confusing so just do the clapping and patterning
- allow more time for some of the activities/give the parents a short outline of what we did and what questions to ask after each session/include a more detailed description of each activity, especially the estimating activities
- some stories seemed to be a bit too much of a stretch for this age group (“The Mitten”)
- lessen the time between activities so that children do not lose their focus

- patterning was very difficult for children to understand and complete

How teaching volunteers feel about their overall experience with Esso Family Math:

- excellent/great/wonderful (12)
- very positive (4)
- magical
- good experience/children were great/I really enjoyed playing games with them
- positive, however, I would have liked to lead more activities each week
- loved working with the families/helping the parents become more comfortable teaching their children about math was a great experience
- very good/rewarding/learning experience
- good to see the families so invested in the program/having Barry and Judi join the program was beneficial to the parents and the leaders
- Judi and Barry are very supportive
- widened my view of math and I learned how to encourage mathematical thinking

How teaching volunteers see themselves using Family Math facilitation skills in the future:

- in future Family Math programs (7)
 - in my practicum classroom/as a future teacher (4)
 - in my work as an early childhood educator (2)
 - with my own children/will pass along the word regarding Family Math
 - will help when facilitating groups
 - using some of the ideas with the children, ECE staff and parents I work with
 - already find myself using some of the skills when working with children in other settings
 - would like to take the “Train the Trainer” session in April
 - as a babysitter and as a future parent
 - my first two career choices are museum curator and teacher – I may need this type of experience for either of these
 - no idea
 - help me in teaching young children
 - with my own children and I will also adapt the lessons for the older grades as a review of the concepts
 - with my nieces and nephews
 - with my own children/with special needs high school children/with mentally challenged adults
-

Teaching Volunteer Feedback - 2 - 5 Years

Number of completed questionnaires: 23

Teaching volunteer's background:

- 16 university or college students
- 2 teachers
- 4 community representative
- 1 other

First experience as a Family Math teaching volunteer?

Yes 22
No 1

Did the teaching volunteer attend the Esso Family Math training sessions?

Yes 23
No

Teaching volunteers' comments on the training:

- excellent (9)
- helpful to be exposed to the activities ahead of time (3)
- very thorough (2)
- helped us to understand the activities/all we had to do was refresh our memories before each session (2)
- good preparation (2)
- learned lots of facilitator skills above and beyond the math program
- training was awesome except it was too long
- very good/very well organized/great experience
- very good/shorten training time/not necessary to go through every activity
- very helpful as it was hands-on/a bit of time had elapsed between training and delivery so was not as confident as I would have liked

Teaching volunteer's role in delivering the Family Math Program:

- helped families learn together/lead different segments of the program (5)
- lead various activities/worked with an individual family (2)

- involved in everything/whatever was required (2)
- helped families, especially the children/read stories
- guided whole group and individual families/discussed curriculum connections with parents
- demonstrated activities/helped other leaders/provided parents with “Where’s the Math”
- helped facilitate/we divided the activities amongst us
- played games/explained games
- introduced and ran activities/read stories/ worked individually with families
- sat with families and explained game instructions/helped children get answers/encouraged families to figure out answers together
- mostly coordination of meals, supplies and babysitting/helped families when required/ read books and discussed them
- all team members were engaged in all aspects of the program/we had great chemistry in our group
- assisted families/lead some activities/debriefed families
- acted as a guide and resource aid
- did entry activity/read story/did all activities with my family
- read stories/explained “Where’s the Math”/home challenge
- community leader/planning, promoting and organizing/liaison to other community staff

How teaching volunteers feel about their Family Math experience:

- very rewarding (4)
- good (4)
- positive/very enriching for my own development as a teacher (3)
- great (2)
- great to see families working together (2)
- teaching and facilitating was the highlight of my week
- never forget this experience
- left me comfortable in leading the whole program
- positive/I saw the learning happening
- glad I had this experience
- gained valuable experience/received feedback on how well I lead activities
- wonderful/gained experience communicating with families/I am more comfortable with math
- enjoyable/nice to work closely with families
- generally positive/nights got better as they went along/would have been nice to have more families involved
- a lot of work
- enjoyed it and felt comfortable with the group

How teaching volunteers feel about the role the teacher leader played in program delivery:

- great/excellent/awesome (11)
- good job (2)
- good/leader was aware of roles we should play and guided us through the process
- amazing/she went above and beyond in preparing additional resources for each session/she provided good coaching and feedback
- we were extremely lucky to have such a wonderful and organized person
- she was very involved and very supportive
- she guided us and kept us on track with everything
- very helpful in assisting the leaders
- very well organized and great to approach, talk to and ask questions
- very knowledgeable about the program
- supportive and approachable/organized and positive/facilitated the sessions professionally but casually
- she was wonderful/positive and supportive
- extremely organized/very positive/did a lot of work to make program more enjoyable
- excellent leadership/open to suggestions
- always available to talk if I needed help
- always well organized and prepared/she incorporated additional ideas into sessions
- fantastic/always prepared/very energetic and encouraging
- always well-prepared and helpful
- highly skilled teacher

What teaching volunteers would change about how the program is delivered in the future:

- explain activities to families on an individual basis (3)
- contact families during the week to encourage them to attend (3)
- provide a little more time for the meal (2)
- more sessions/longer program (2)
- reduce number of activities (2)
- only one program running at a time
- maximum of eight families
- provide a more detailed manual
- program should be slightly less informal/while it is necessary to provide a warm and nurturing learning environment, a slightly more orderly program would have benefited the learning process
- found meals arduous in their delivery/concerned about funding and finding babysitters
- start program soon after training rather than waiting six weeks

How teaching volunteers feel about their overall experience with Esso Family Math:

- excellent/wonderful/fantastic/great/awesome (9)
- positive teaching and learning experience (3)
- very worthwhile and rewarding (2)
- enjoyable (2)
- good (2)
- time well spent
- beneficial/I learned so much/I am not afraid of teaching math anymore
- fun and unforgettable
- great leaders/great location/great program
- time well spent/would gladly do it again
- fun learning experience
- fantastic/as a new teacher I have learned some fun, engaging activities to use in my classroom

How teaching volunteers see themselves using Family Math facilitation skills in the future:

- as a future teacher (8)
 - in future Family Math Programs (8)
 - with my own children/family members (5)
 - when interacting with parents (3)
 - in my classroom
 - potentially as a group facilitator in my employment
 - teaching activities to other children that I mentor and tutor
 - in my job by allowing others to figure things out on their own/with my own family
 - in schools and Early Years Centres
 - in my classes in Central America
 - sharing the resource with teachers that I know
-

Group Feedback - Early Years

Number of completed questionnaires 7

How families responded to the Family Math Sessions:

- liked it/wished it could continue longer/wanted more/loved the food
- very enthusiastic/participated well in activities/looked forward to coming every night/when families did not come, it was due to illness
- enjoyed it and responded well
- really well/parents happy/all came back every week/parents asked when next program was going to be held/cried when leaving
- as the comfort level increased, the families participated and relaxed more/by the end, the families knew what was coming and were accepting of all activities
- responded positively/enjoyed the activities/appreciated take home items
- responded very well/positive experience

Did the sessions proceed as expected?

Yes 6
No 1

Why sessions were not as expected:

- evaluations hard to do on first night
- need to emphasize and clarify the rules more often
- need to modify activities for children who are above the others so that they do not get bored

Ratings of different aspects of sessions:

<i>Aspect</i>	<i>Rating</i>		
	<i>Poor</i>	<i>Good</i>	<i>Excellent</i>
Location		1	6
Meals		2	4
Support from FM Staff			7
Community Support		2	4

Explanation of “poor” ratings:

- there were some difficulties with school involvement when trying to recruit families

Did your group deliver the Family Math Program as outlined in the Resource Book?

Yes 6
No 1

Changes made to program delivery:

- turtle activity – we made the turtles, used stickers, limited the shapes to triangles, squares and circles (due to age of our group and time factor)
- the “which strand of math graph” was too advanced and group was too small to see on a graph

Activities that worked the best:

- stories (4)
- Math Walk (3)
- bubbles (2)
- hands-on activities
- estimating
- number line
- the 10, 9, 8, 7, 6, 5, 4, 3, 2, 1
- turtles
- rocks
- play dough
- water
- patterning with bears
- table activities

Activities that need change:

- children became bored with the story “Everybody Needs a Rock” – too long and not visually appealing (3)
- bubbles (2)
- transition from activity to activity
- need a routine goodbye song and a way to relay homework activities
- have more participation songs rather than books all the time
- “Math Walk” should just include clapping and not all the actions

- children climbing on chairs during measuring may be dangerous
- post-it notes did not stick to estimating line
- did not realize that the children did not know how to make check marks
- children had a hard time with the “Zone”
- cut down “Ten in the Bed” to “Five in the Bed”/change the format of the bed – landscape rather than portrait and have children just do quilt pattern
- “Ten in the Bed” is too long/not enough time to figure out pattern/too advanced
- relate “which strand of math do you like best” graph to the types of math in the “Math Walk”/strands are too complex
- incorporate the homework more – maybe children could show their homework book at the beginning of each night
- “Frog and Toad” not visual enough

New activities that were used:

- probability activity/using a Christmas stocking with different colored bells, the children had to think of the probability of picking a certain color bell
- newer version of the “Ten in the Bed” song
- use real party hats instead of making them

Advice to others who will be delivering Family Math sessions:

- work together as a team
- support activities done by others
- be organized
- shorten to four weeks
- have many volunteers
- stay open-minded and flexible
- tailor the program to your age group/adjust the activities to suit the needs of your families
- encourage everyone to collect rocks

Positive factors that affected the outcome of the program:

- location (2)
- socializing with families over dinner (2)
- meals (3)
- materials/resources (2)
- variety of activities
- themes
- math and literacy link
- training

- routine of each night
- staff familiar to families
- setting rules on first night
- enthusiasm of leaders
- ability to attract high needs families
- involvement of the parents
- nametags

Negative factors that affected the outcome of the program:

- low number of leaders on some evenings meant we did not work as closely with families as we would have liked
 - not enough space in one room to eat together
 - having to pay for parking
 - time – 3:30
 - nature of our population – student families
 - did not offer meal due to time frame
 - children who come to the centre on alternating days missed the program
 - the six week commitment
 - unknown family personalities
-

Group Feedback - 2 - 5 Years

Number of completed questionnaires

7

How families responded to the Family Math sessions:

- families participated well/positive feedback/games are being played at home/no behavior issues/people are looking for “Family Math – The Sequel”
- excellent/they loved it/enthusiastic
- all families participated in every activity and did their home challenges/they wanted to keep coming for more sessions
- they loved it
- they were positive and engaged
- positive and receptive to most activities/became more confident and comfortable as sessions progressed/families that continued to come every night did not want the program to end
- very positive as seen by their regular attendance/wanted more sessions

Did the sessions proceed as expected?

Yes 6

No 1

Why sessions were not as expected:

- less families than expected/teaching volunteers were paired up with families and taught the activities to families on an individual basis – worked well because we could work at individual pace

Ratings of different aspects of sessions:

<i>Aspect</i>	<i>Rating</i>		
	<i>Poor</i>	<i>Good</i>	<i>Excellent</i>
Location		2	5
Meals		2	5
Support from FM Staff			7
Community Support		2	4

Did your group deliver the Family Math Program as outlined in the Resource Book?

Yes 7

No

Changes made in program delivery:

- supplemented with spontaneous related activities, ideas or options/read half of book in middle of session and finished at end of session
- omitted some activities due to time constraints
- reduced some sessions

Activities that worked the best:

- games (5)
- stories (2)
- measuring
- geometry walk
- calculators
- the ones that were more visual like measuring volume
- hands on activities
- estimating
- rice

Activities that need change:

- Panda and Mancala – both great with grades four and five
- Panda is too difficult
- stick and penny game very similar
- activities using the calculator were hard to explain because the children were playing around with them
- Pluckrose books need to be replaced (insert One Grain of Rice instead)
- Village Round and Square needs a replacement
- limit the amount of homework each week (i.e., geometry homework)
- some calculator activities did not seem to be interesting to children
- the book “Length” did not keep the children’s attention
- use sand instead of rice or seed

New activities that were used:

- food is always a good addition to any activity

- sent home “Blue Frank” – each family takes home for a week if they do not have a pet/read “One Grain of Rice”
- added one additional game on last evening
- built 3D shapes with jube-jubes
- nightly organizer on the wall allowed families to see what was happening during the evening

Advice to others who will be delivering Family Math sessions:

- have everything set up and ready to go when families arrive (2)
- have the funding bugs worked out before you start
- plan for each session at the end of the previous
- be prepared to coach parents
- read the outline and be comfortable with the topic
- have fun
- work together
- keep your sense of humor
- lots of work/provide homemade food and lots of it
- have someone to take care of younger children in a separate room
- provide jugs of ice water
- laminate certificates, gameboards, etc....
- do not laminate number lines because post-its will not attach
- contact families by telephone if they do not attend
- collaboration and discussion amongst the teacher leader and the teaching volunteers every evening allows for reflection and review of teaching strategies
- consider explaining activities individually to families
- keep things on time
- make it mandatory that parents be with their children

Positive factors that affected the outcome of the program:

- comfortable environment (6)
- great team work and commitment (3)
- parents were enthusiastic (3)
- diversity of families
- few families allowed for comfortable small group setting
- terrific teacher leader
- parking
- kitchen
- meals
- washrooms
- white boards
- adult chairs and tables

- wall space
- kids made and decorated own name tags
- children wanted to learn
- leaders genuine interest in success of program
- training, resources and support provided
- everybody participated
- had everything we needed
- how rewarding the program is
- being organized
- student teachers worked as a team /volunteered to do any activities/showed a united front and were flexible
- humor
- professional but casual atmosphere

Negative factors that affected the outcome of the program:

- having two groups running at the same time (2)
 - difficulty recruiting families
 - few families/too many leaders
 - questioning whether we reached at-risk families
 - not having a babysitter for younger children
 - not all families came to all the sessions
 - need more money for food
-

Journal/Email Excerpts

Several teacher leaders and teaching volunteers volunteered to record their impressions of the Leader Training and Family Math Sessions in journal format. Excerpts from these journals are presented below. As well, there are excerpts from emails received during the year.

The training was very thorough and a lot of fun. It provided a great opportunity for our volunteers to meet and provide input into the planning and the delivery.

The one part of the training that I found challenging was the ZONE aspect. I think it was harder to grasp the concept due to the fact we were doing it on the floor and it was challenging to see...I heard a few other people in the group say they didn't quite get the concept as well.

The energy between Linda and Judi is fun and they do an excellent job of presenting the program.

The leaders met prior to week #1 to divide the tasks up for the first three weeks. We divided up all tasks in such a way that throughout the weeks, each leader will attempt to facilitate all the different areas. This will help to cross-train leaders and make them more versatile in the event that a leader is absent and someone else has to sub in.

The routine of the "estimating jar" seemed to really show success tonight. Families knew exactly how the zone and the number line fit together and they weren't discouraged if they didn't get an exact answer. Math really seemed to be fun tonight.

The wrap up with the parents was the best one yet. I finally learned! When asked what parents were noticing about their children and estimating, they spoke up together. They noticed how their children are looking for the activity as soon as they come in. They immediately start talking about their strategy and they are getting faster figuring it out...The parents seem to understand the importance of estimating...One parent said none of what we are doing is being done at school. Others agreed. One parent explained how her son's teacher has her child explain the Family Math activities at school so the kids can do them in class.

Tonight is our third class. We seem to be working very well as a team. The supper went well and it feels very comfortable sitting down with the parents now. The night went so fast tonight. The children loved the water play.

We had some really nice feedback during "Where's the Math?". One Mom actually said, "I don't know what I am going to do on Wednesday nights anymore." She explained that normally she is shy, but at Family Math she has felt very comfortable and she has enjoyed meeting the other parents. Another parent told us that other parents are calling her to find out about the math club. Her son has been showing the other kids at school the activities he learns at Family Math. These stories make me feel as though we've accomplished our goals.

Most parents said their children guessed tonight's estimating because they couldn't think of a strategy. When asked if guessing was okay, they reluctantly agreed. I assured them it was okay as long as they had tried and there was no other alternative. I also encouraged them to tell their children it was okay. Parents said their children started pointing out the probable way the pennies were going to fall. Most agreed it was a result of this program.

Barry gave us a compliment tonight and stated we had a great program and we worked well as a team. Coming from Barry that is very high praise. It makes me feel good to hear that.

There were many behavioral, parenting, and social problems that the group had to deal with. I was so impressed that they were able to do as much as they did. One of their reasons for success was the organized way the night was set up. Everything set up ahead of time. The leaders even had the party hats decorated with math shapes.

One Mom thanked us so much. She said the evening was terrific because she just spent \$100 on Sesame Street Math materials and our card games were much better.

Consensus among families this week is that they are disappointed that the sessions end next week. Why can't there be more sessions? Now that the

families have had a taste of it and seen success with their children, they'd like to maintain the standard.

Week 1 – boy and girl come without their parents

Week 2 – kids come with their mom but she mentions at the beginning that she has to leave at 6:20 that night

Week 3 – kids and mom come and stay for the whole session – mom brings a friend and her daughter to participate in the session with them

Week 4 – kids and mom come and participate

Week 5 – kids and mom and dad come and participate – the entire family is keen on coming to the final session – they ask if they can sign up for more sessions

I'd like to express a sincere thank you to the Esso Family Math Team. First, thanks for developing and delivering this wonderful program. You have taken learning and made it fun. Second, thanks for the continuous support we have received. You have guided and assisted us and also given the flexibility to ensure family, facilitator and agency success. We have all enjoyed participating in this program and we are proud to be associated with such a fantastic group!

Dear Early Years Staff,

I wanted to express how impressed I have been with this program. It is not only a whole lot of fun but very beneficial to a child's understanding of math. My daughter now sees math in everyday things unlike she did before the program. The program provides parents with excellent practical ideas of how to promote math skills. I would strongly encourage you to offer this program again. I have talked to other mothers who say they would be very interested in participating the next time around. Heather did a wonderful job of presenting this math program and made it interesting to the kids and parents.

Signed by a Parent

Parent Feedback - *Early Years* - Comments Before Sessions Began

Number of completed questionnaires: 57

<i>Completed by:</i>	Mother	46
	Father	10
	Other	5

What parents remember about learning math in school:

- fun/enjoyable/liked it (14)
- hard/difficult (9)
- did not like it/hated it (7)
- okay in early grades but difficult during later school (6)
- learning times tables (3)
- flash cards (3)
- not much/nothing (3)
- adding and subtracting (2)
- I was good at it (2)
- memorization (2)
- realized how math was an important part of daily life (2)
- most important subject I have learned
- could not see any real world applications
- math quizzes and competitions
- numbers/it was my least favorite subject
- hard to grasp some of the concepts/especially remember struggling with long division in grade three
- adding, subtracting, multiplying, dividing, fractions and square root
- I remember tapes of people singing the times tables and I remember my grade one teacher having us count by following a number chart (1-100)
- colorful counters/endless hours with my dad helping me/times tables

Why parents decided to come to these sessions:

- help my child understand math (12)
- spend time with my child and help him learn (8)
- to have fun and learn (7)
- to help my child who is struggling (3)
- I want math to be a subject that my child enjoys (3)
- my child likes math (2)
- to make learning fun/to learn how to help my child (2)
- everybody needs to learn math so we might as well have fun doing it

- focus on math rather than just on reading and writing
- to give my family, especially my daughter, a chance to have more friends while enhancing her math fundamentals
- interested to see what kind of activities are done
- to expose my child to math and to learn ways to help her
- help teach my children in a fun way/for the social interaction
- for a family fun night
- the library offers great programs and any help for children, especially in math, is well worth doing
- want to teach my children that math can be fun and give them a chance to do some work outside of school
- so my children can have a better knowledge of math at an early age
- support children at home, especially as child is in French Immersion
- my children's education is very important/my husband and I would like to learn ways to help our children
- for some extra help and to get my child interested
- important that my child knows I care and I am interested in her learning
- asked by my friend and want to give my children a head start
- was asked to/was curious/to help my child
- to give my son a chance to see what he will learn when he goes to JK
- because my child did not and does not go to JK or SK
- it sounded like an interesting program/my daughter has not shown any interest in math yet so I wanted to give her a little push by being in an environment that makes it fun
- to give my child every opportunity to succeed

How parents use math in their daily life:

- family finances (21)
- at work (21)
- cooking/baking (14)
- shopping (12)
- telling time (7)
- housecleaning
- television
- computer
- driving
- measuring
- adding
- activities with my child
- travel
- everywhere

The kinds of math activities the parents do with their children:

- counting (30)
- games (16)
- cooking/baking (7)
- homework (6)
- math workbooks/worksheets (5)
- read stories (5)
- sorting (4)
- adding/subtracting (4)
- writing numbers (3)
- measuring (3)
- telling time (3)
- flash cards (2)
- recognizing numbers (2)
- money (2)
- building (2)
- shopping
- fractions
- videos
- estimating
- patterning

How well parents expect their children to do in math during the school years:

- will find it hard and not complete high school math (2)
- will find it hard but will finish high school math (7)
- will find it like other subjects and get passing marks (22)
- will find it easy and do very well in all math courses (24)

How parents feel about helping their children with math homework:

- fine/good/okay (9)
- no problem (7)
- worried about later school years (5)
- enjoy it (5)
- excited/eager (4)
- comfortable (4)
- confident (3)
- apprehensive (2)
- try to help all the time (2)
- great
- very important
- usually do but would prefer a tutor

- part of my job as parent
- get frustrated easily but I really want to help her understand/do not know how to make it easier for her to learn
- uncertain due to the fact that both my daughters learn differently
- no qualms whatsoever however time is sometimes limited
- would like to help as much as possible
- would like to help but child is not always willing or wanting to do it
- nervous because I was never very good at math/I have forgotten a lot of things
- okay but unsure if the way I learned is the same method/I do not want to confuse my child by teaching using a different method
- will do my best but my husband is better at math than I am

How parents feel about talking with their children's teacher about math:

- fine/good/okay (14)
 - no problem (10)
 - comfortable (10)
 - confident (5)
 - great (2)
 - willing
 - like to talk with teacher
 - communicate well and often
 - uncomfortable
 - do not know exactly because they are in JK and SK
 - try to keep in contact with regards to all subjects
 - teachers are not very informative about the curriculum
 - will do so if we have problems
 - important to communicate with teacher
 - would like to
 - I ask everyday about my children
-

Parent Feedback - *Early Years* - Comments After Last Session

Number of completed questionnaires **56**

Completed by:	Mother	42
	Father	12
	Other	3

Number of Family Math Nights attended:

- 3 (1)
- 4 (3)
- 5 (21)
- 6 (30)

What parents liked best about Family Math Nights:

- fun way to learn math (9)
- activities (6)
- stories (5)
- spending time with my child (5)
- food/not having to cook (4)
- shapes/patterns (3)
- instructors' enthusiasm (3)
- everything (3)
- hands on approach
- songs and games
- estimating
- action songs
- reading and patterning
- building things
- creative crafts/estimating and the graphing process
- gave meaning to math
- all the different incentives to learn
- sharing
- warm friendly atmosphere
- very organized
- the format
- time spent with my child learning new things and watching my child develop over the six sessions
- activities were easy to duplicate at home/math kits were excellent
- inventive ways it made children think

- emphasizes the math in everyday life
- opportunity to see what we were doing right/opportunity to expand home math activities to fill in gaps (estimating, graphing, probability)
- parents involvement/children asked to be active/the way math is introduced through numbers, patterns and measuring/homework
- kept the children interested and gave adults a new outlook on math
- my child was very comfortable and participated more than I thought/she learned a lot about shapes and patterns
- observing my child and other children learning
- included different types of math concepts so children learned a bit of everything
- interacting with my children/being a part of my children's education
- spending one-on-one time with my child
- quality time at the tables for activities
- I liked the table work and the enthusiastic instructors/my husband liked the take-home games/my child liked the math walks, estimating and the snacks
- getting out with my children and having fun/spending time together and learning
- my child loved it/showed me that my child knows more than I thought
- atmosphere/one-on-one staff
- interaction and games to reinforce concepts/inclusion of parents
- the teachers used materials that the children liked

What parents would change about Family Math Nights:

- more sessions (5)
- start the sessions a little earlier for this age group (3)
- split group up into three smaller groups – JK/K, grade one and grade two (2)
- the concept of estimating was not always understood (2)
- offer it on the weekends (2)
- eliminate the meal
- offer a second level for those who have done the first level
- hold two or three sessions per week
- shorten the length of the sessions
- later hours
- my older child felt left out when he could not participate
- sometimes there was not enough time to complete the tasks
- grade one children should be in a separate group
- get the children to listen
- keep sessions in same room each week because kids like routine and consistency
- include more stories
- my child could not sit through it all

- encourage more dialogue between families/mix family groups so parents can see how other parents convey math information to their children and how their children respond

Since being a part of the Family Math Nights

The kinds of math activities parents do now with their children at home:

- counting (31)
- estimating (22)
- patterning (19)
- measuring (14)
- shape recognition (12)
- games (4)
- addition and subtraction (4)
- cooking (3)
- sorting (3)
- Family Math activities (2)
- graphing (2)
- telling time (2)
- use math language (2)
- read books (2)
- probability
- spatial relations
- predicting
- geometry
- talking about math for the first time
- workbooks
- reading numbers

How parents feel now about helping their children with math homework:

- fine/good/okay (15)
- enjoy it/love it (9)
- great/excellent (6)
- comfortable (4)
- confident for the early years/not sure about the later years (4)
- confident (3)
- do not mind it (2)
- no problem (2)
- better (2)
- like to help as much as I can but time is sometimes limited
- willing to help in any way I can

- she is gaining confidence so helping her is getting easier
- I got some valuable ideas from this program and will help my child according to what I learned here
- math is not easy for me/I can handle math for young children
- improved with participation in this program/I did not enjoy helping with math before/the number line is extremely handy

How parents feel now about talking with their children's teacher about math:

- fine/good/okay (12)
- no problem (10)
- comfortable (4)
- excellent/great (3)
- important (2)
- feel better about it (2)
- confident (2)
- confident during the early years
- very open
- definitely will do so
- has not changed/still easy to talk with the teacher
- any suggestion they give will be appreciated and implemented
- still feel a lack of exchange of information
- very useful/tells me about my child's strengths and areas where she needs work
- I will advise my child's teacher to talk with the Family Math teacher

Any new thoughts parents have about math:

- math is everywhere (11)
- math can be fun (6)
- no (5)
- math has a wider context than I realized/not just numbers (3)
- never thought patterns had anything to do with math (2)
- a lot easier and more fun than I previously thought
- more interesting/did not know that shapes and graphs were a part of math
- I have always thought of math as just numbers and formulas but now I see geometry, measuring, patterns and especially graphing can be introduced so early/I would have never thought of graphing with my children
- I now have an idea of what is expected of pre-school children
- we are doing more than we thought
- now aware of the simple math concepts around home
- excellent way to be included in the education of my child since there seem to be few opportunities to do this

- we overlook simple ideas in our daily lives that can be used to implement different math concepts
 - making it fun keeps the children's attention
 - it is more fun and not so strict and old-fashioned
 - remembering how much fun and how challenging math can be
 - something different for kids
 - Family Math should be delivered in other towns
 - program was different than we thought/opened our eyes to many ways that we use math
 - this program is a wonderful start to mathematics
 - we can sing songs with math ideas and read math-related books
 - I have new ideas
-

Parent Feedback - *Early Years* - Family Information

Number of completed questionnaires **49**

Family profiles:

two parent families	39
one parent family	9
younger siblings	14
older siblings	10

***Family members who took part in Family Math Nights
(other than Early Years children):***

mother	44
father	16
younger siblings	2
older siblings	5
extended family members	5

Mother's education:

completed some school	7
completed high school	15
completed college or university	24

Mother's occupation:

stay at home mother	14
accounting/bookkeeper	3
teacher	3
early childhood educator	2
educational assistant	2
food service	2
manufacturing	2
nurse	2
student	2
cashier	1
coordinator/adults with disabilities	1
dental hygienist	1
graphic artist	1

health care aide	1
lab clerk	1
legal assistant	1
medical secretary	1
personal support worker	1
police officer	1
researcher	1
respiratory technologist	1

Father's education:

completed some school	10
completed high school	16
completed college or university	17

Father's occupation:

automotives	5
construction	3
truck driver	3
accountant	2
business owner	2
manager	2
student	2
tile layer	2
business consultant	1
director of planning	1
electrician	1
engineer	1
grocery clerk	1
janitor	1
labourer	1
maintenance	1
mechanic	1
painter	1
police officer	1
retired	1
sales	1
service work	1
store manager	1
technical support	1
unemployed	1
vacuum technician	1
welder	1

Language spoken at home:

English	44
German	2
Arabic	1
Chinese	1
Croatian	1
Indonesian	1
Spanish	1

Parent Feedback - 2-5 Years - Comments Before Sessions Began

Number of completed questionnaires **48**

<i>Completed by:</i>	Mother	33
	Father	12
	Other	5

What parents remember about learning math in school:

- not very much/nothing (5)
- hard/difficult (5)
- enjoyed it (4)
- adding, subtracting, multiplication, division (4)
- the basics (3)
- very challenging/frustrating (2)
- memorizing facts (2)
- did not know how to apply it in everyday situations (2)
- was not my favorite subject
- very stressful
- very different from today
- it was okay
- did well and won math award
- playing with beans
- boring and complicated
- not very hard
- my favorite subject/I loved it
- not my favorite but I got passing marks
- fractions
- geometry
- repetition/tables, flashcards, etc...
- challenging but fun
- problem-solving/repetition
- worksheets
- having difficulty with algebra and needing a tutor during high school
- time tables/strict
- I was good at math/no fun/too serious
- did well at all levels but lost interest in higher grades

Why parents decided to come to these sessions:

- to help improve my child's math skills (11)

- have fun with math and expand my child's skills in math (8)
- approached by principal/teacher/school (4)
- to learn how to better help my child (4)
- invited to come (2)
- my child is having difficulty with math concepts (2)
- approached by community centre/willing to try it
- my children enjoy math/give them more practice
- wonderful opportunity for learning
- spend time with my grandchild
- want my child to learn and try her best in this class
- the push in school is on literacy but math is important too
- my child struggles at school and we were looking for a more exciting way to learn math in hopes of keeping her attention
- my wife's idea
- to help my child grasp the concepts of everyday math
- math is my weakest subject/helping my child is difficult so I came to learn different ways to help him
- heard it was excellent/curious/want my children to enjoy math
- enjoyed sessions with my younger child
- my child enjoys math/fun thing for us to do together
- so my child will enjoy learning math and not become immediately frustrated when she does not get the correct answer/so she can relate math concepts to solving problems in everyday life
- happened to be at the library on the first night and there was an opening

How parents use math in their daily life:

- at work (22)
- family finances (14)
- cooking (10)
- shopping (7)
- helping with homework (3)
- measuring (3)
- counting (2)
- crafts (2)
- calculating mileage (2)
- house renovations
- time management
- medication
- everywhere

The kinds of math activities parents do with their children:

- games (15)

- homework (14)
- addition and subtraction (8)
- counting (8)
- cooking/baking (5)
- flashcards (5)
- money (5)
- tell time (2)
- multiplication tables (2)
- shopping
- workbooks
- problem solving
- keeping track of allowance
- using an abacus
- drills
- piano practice
- measuring height on growth chart
- music and math CD
- television math show
- shape recognition

How well parents expect their children to do in math during the school years:

- will find it hard and not complete high school math (1)
- will find it hard but will finish high school math (18)
- will find it like other subjects and get passing marks (14)
- will find it easy and do very well in all math courses (16)

How parents feel about helping their children with math homework:

- fine/good/okay (12)
- enjoyable (8)
- no problem (4)
- confident now but not sure about higher grades (4)
- want to do as much as I can to make it interesting
- confident
- very important
- frustrated
- not too confident
- dreading it
- excited about it
- some anxiety as I try to find the easiest explanations
- difficult because of language barrier
- sometimes find it difficult to explain
- children find it easy so no need to help/sometimes father helps

- normally my spouse does but occasionally I help
- math homework is my husband's department since I tend to shy away from the subject
- can help as long as I understand how it is taught at school
- sharpen my own skills by helping my child
- help her to understand but let her come to her own conclusions
- hope I can help her see the practical side of her math homework without forcing her to do it the way that I learned

How parents feel about talking with their children's teacher about math:

- fine/good/okay (14)
 - comfortable (11)
 - no problem (9)
 - confident (2)
 - willing (2)
 - enjoyable
 - very open
 - my husband talks to the teachers because of my language barrier
 - in constant contact
 - not positive because teacher does not respond well to criticism
-

Parent Feedback - 2-5 Years - Comments After Last Session

Number of completed questionnaires **42**

<i>Completed by:</i>	Mother	28
	Father	12
	Other	4

Number of Family Math Nights attended:

- 3 (1)
- 4 (3)
- 5 (11)
- 6 (25)

What parents liked best about Family Math Nights:

- games/activities (21)
- food (5)
- learning different ways to help my child with math (4)
- getting together with other parents and children and learning new things (2)
- calculator (2)
- practical uses of math (2)
- fun (2)
- preliminary challenges like estimation (2)
- leaders' enthusiasm
- additional ideas and the presentation
- fun homework
- inclusion of parents
- the dynamic nature of the program allows children to be active
- the way things were explained
- much easier approach to getting a child to learn math
- the last night was best/more personal one-on-one time/counting money and converting to next larger denomination was good
- socializing with other families and one on one with my child
- stories/teachers and helpers
- very informative/short sessions
- social interaction with families/interaction with teachers/the focus on the applicability and relevance of math/working together to solve problems
- working together with my child/hands-on math
- taking math "outside the box"/making math fun and at the same time making us think

- children learn mathematics while enjoying all of the activities
- learning all of the ideas of things to do at home
- interaction with my children/increase in children's self-esteem/doing math without realizing it

What parents would change about Family Math Nights:

- make the program longer than six weeks (8)
- span between the years (grades 2 – 5) is too large (2)
- have programs for more levels
- eliminate story time
- eliminate the meeting sessions at the end
- have meal at the end of the session
- end the sessions closer to 7:30
- hold the sessions during the spring when walking is an option/there is no bus in our town
- start sessions earlier in the evening
- more direct teaching
- more time to spend on the games
- sometimes it was difficult to hear the volunteers explaining the games
- make this a permanent program available to everyone in the community
- really young children should not be present
- continue having the program but make it more advanced each time so we can have more tools to give to our children
- knowing the meal in advance

Since being a part of the Family Math Nights

The kinds of math activities parents do now with their children at home:

- games (19)
- estimating (9)
- Family Math activities (7)
- calculator (5)
- addition and subtraction (4)
- homework (4)
- money (3)
- counting (3)
- tell time (3)
- measuring (3)
- worksheets/math books (2)
- patterning (2)
- shapes (2)

- math facts
- read stories
- probability
- geometry
- cooking
- do not have time for many math activities but will try harder to use these neat Family Math games

How parents feel now about helping their children with math homework:

- enjoyable (7)
- fine/good/okay (4)
- okay now but not sure about higher grades (3)
- comfortable (3)
- confident (2)
- often help my child with math homework (2)
- more comfortable now (2)
- happy (2)
- I have a better understanding and I am more helpful
- best thing I can do for my child and myself
- more confident now
- still not confident
- very challenging
- frustrated
- absolutely essential
- prepared
- great/thank you for all the fun ideas to help at home
- I like my husband to help because math is his strong point
- love to help my child find easier ways to add and subtract
- feel pretty confident but I dislike math and usually have my spouse help
- depends on the homework since I have trouble with fractions and integers
- confident about doing the math but not confident about explaining math concepts

How parents feel now about talking with their children's teacher about math:

- comfortable (11)
- no problem (7)
- good/okay/fine (6)
- enthusiastic
- more secure and confident
- do so on an ongoing basis
- establishing and maintaining a good rapport with teachers enhances the teaching team

- the teacher is interested in the Family Math games we have learned
- depends on the teacher
- cannot communicate due to language differences
- frustrating because it is like talking to a brick wall

Any new thoughts parents have about math:

- no (5)
 - math is all around us (5)
 - math can be fun (3)
 - now have ideas on how to incorporate math into everyday life (3)
 - math will always confuse me
 - if you make math fun and approachable, children will find math much easier to learn
 - a lot more fun than the approach taken when we went to school
 - playing games that are fun for the whole family improve the children's math concepts
 - did not realize the many different ways to explain things
 - love the games/very pleased to have learned them and look forward to playing them
 - math can be fun/math is a very important tool for everyone regardless of occupation
 - have learned new concepts regarding teaching my child
 - the terminology is different in this new math
 - with a little work and imagination it can be made fun
 - we have developed a different attitude about math
 - love the new age appropriate calculators
 - the more fun we make math, the more children want to do it/the more children see their parents doing math, the more comfortable they are trying new concepts
 - nice to see attempt to look at how we can practically use math
 - mathematics is fundamental for all and at all points in life
 - important to enjoy and learn at the same time
 - math is not as scary
 - I am less intimidated
-

Parent Feedback - 2-5 Years - Family Information

Number of completed questionnaires: 42

Family profiles:

two parent families	37
one parent families	5
younger siblings	20
older siblings	12

*Family members who took part in Family Math Nights
(other than 2 – 5 Years children):*

mother	36
father	19
younger siblings	8
older siblings	3
other	2

Mother's education:

completed some school	0
completed high school	19
completed college or university	20

Mother's occupation:

stay at home mother	14
business owner	2
early childhood educator	2
educational assistant	2
factory worker	2
nurse	2
student	2
accounting clerk	1
dental assistant	1
graphic artist	1
health and safety trainer	1
home business	1
human resources consultant	1

personal support worker	1
police officer	1
retail manager	1
secretary	1
social worker	1
waitress	1

Father's education:

completed some school	3
completed high school	12
completed college or university	24

Father's occupation:

factory worker	4
labourer	2
manager	2
police officer	2
autobody repair	1
bricklayer	1
business owner	1
chef	1
correctional officer	1
custodian	1
editor	1
electrician	1
equipment operator	1
farm manager	1
funeral director	1
goldsmith	1
mechanical engineer	1
mechanical technology	1
mould maker	1
office manager	1
paint technician	1
plumber	1
police officer	1
printer	1
purchasing agent	1
student	1
supervisor	1
teacher	1
technician	1

unemployed	1
welder	1

Language spoken at home:

English	37
Spanish	6
Arabic	1
Persian	1

Case Studies

Case Study #1

Before the sessions began:

Judy, a mother of three boys, learned about Family Math from a pamphlet that one of her children brought home from school. Since two of her boys are struggling with math, she thinks it would be a good idea to participate. From her understanding of the program, she expects that she will do math activities together with the boys and she will also learn how the activities relate to what the children are doing in school. Judy is very eager to start the program. She has decided to bring all three of her boys even though one is not yet in grade two.

As a child, Judy enjoyed math in school and got good grades. However, she did find math more of a struggle in high school. She hopes her boys will do well in math too. She commented that “knowing their abilities now” she expects that they will “pass with B’s and C’s”. Judy is determined that her children will complete high school math even if she has to “search out different ways of helping them learn”.

Judy is comfortable doing the math she has to do in daily life. For her, that is primarily budgeting for the family. She also does some math activities with the boys. They count, they add and subtract, and they do math homework. Judy “feels good for the most part” when she is helping her children but she does get frustrated when the children do not think the way she does. She is also concerned about helping with homework when the children reach the higher grades.

Judy also feels comfortable when she speaks with her children’s teachers about math. “I don’t know a lot about their math programs but I ask for extra work when I think they are having trouble.”

After the first three Family Math sessions:

“The boys seem to be learning and they are excited about going to Family Math each week”, Judy said. She stated that the sessions have been fun and beneficial for the children. “I like that the program has offered a variety of activities.” However, Judy now realizes that the activities are not really appropriate for her youngest son. She has decided to keep bringing him because he does “pick up on some things”. He is well behaved and she gives him paper to draw on when the activity is too difficult for him.

Judy also complimented the Family Math leaders. “They are very friendly and helpful.” She also stated that the sessions are “fine as they are....you don’t need to make any changes.”

Judy reported that they are doing Family Math activities at home and “they have gone well...we follow the book and do the home challenges too.” Judy said that she now realizes that “math is incorporated in many different activities”.

After the final Family Math sessions:

Judy and her boys attended all six sessions. Judy’s husband attended three sessions and her sister attended one session. Judy remarked that “six sessions was the perfect number” and the sessions ended at a good time because “so many Christmas activities were beginning to happen”.

Again, Judy expressed her satisfaction with the program. She said no changes were needed. As a working mother, Judy was appreciative of the early start with supper provided. She said, “the meal was very inviting and made a nice atmosphere for getting to meet other families.” Judy also commented that it was “very important to finish by 7:30.”

The family continued to enjoy the variety of activities that were offered at the sessions. Judy also liked the take home materials that helped her “follow through with the activities at home”. Her boys especially liked the calculator and “the game with the beads”. The boys are still doing the estimating activities at home. Judy said that she now realizes how important estimating is, “it relates to all areas and the boys have become much better at it.”

Judy was very pleased to report that “math comes up in family conversations more and more...our family is much more excited about math”. According to Judy, the boys often refer to what they did at Family Math sessions. Judy has spread the word about Family Math to the boys’ teachers and they too are “very enthusiastic”.

Judy summarized Family Math as follows:

Family Math is a fun learning activity. You don’t need to be good at math to enjoy it. It is a relaxing evening out and you have the chance to learn something new every week. There is lots of variety. The meals are good. It is run by a great group of volunteers who put their heart into it. Our family appreciated the opportunity to take part because we know that enrollment was limited.

Case Study #2

Before the sessions began:

Debbie, a stay-at-home mother of three boys, received information about Family Math from a program leader at her neighbourhood community centre. One of her sons, who

needs help with basic math, already participates in a tutoring program there. Debbie decided to enroll in the Family Math Program for several reasons: she would like to have fun learning with her children; she wants to spend quality time with her children; and as she suffers from an anxiety disorder, she would like a chance to get out and meet new people in a comfortable environment.

Debbie plans to bring two of her three boys to the sessions, one is 8 years old and the other is 11 years old. She may have to bring a third child along because she cares for her after school. Debbie is most concerned about her 11 year old son. He currently finds school very difficult and he is overwhelmed by his homework. She would like to have him repeat a year of school but she has been unable to get the approval of school personnel. If this situation is not resolved, Debbie plans to move him to another school next year.

As a child, Debbie enjoyed math. She continued to like her math classes in school until grade twelve when she encountered a teacher who “did no teaching and just gave out assignments”. Debbie dropped out of math at that time. This has made her determined that her children will complete high school math. In fact, she has invested in RESPs for each child and told them that they must go to college or university. She said she “preaches to them that they must ask for help when they don’t understand something”.

Debbie is comfortable doing the math she has to do in daily life. For her, that is primarily calculating sewing measurements and shopping for the family. In the past, she performed math while working in a fabric department and also when working at Tim Horton’s. She also does some math activities with the boys. She purchased “the government standards book at Scholar’s Choice” and uses the activities contained in the book. She plans to also “make up problems on cards” since the children “need help with multiplication and division”. Debbie helps the boys with homework “if she understands the work”. Her eldest son, a high school student, also helps the younger boys with their math. When Debbie does not understand the homework, she feels very comfortable asking the school for help.

Debbie keeps in close contact with the boys’ school. She “reports to the school counselor on a regular basis”. Her youngest son has anxiety problems and her 11 year old son has learning disabilities.

After the first three Family Math sessions:

“Family Math can’t be any better - it is something to look forward to each week”, Debbie said. She stated that she loves the program and she is learning new things. At the time of the interview, Debbie said that the boys had just finished walking around the house looking for shapes. She said that the children are enthusiastic about doing the Family Math activities and the home challenges. “I don’t have to pull teeth to get them to do it”, she commented. The family has the math bag hanging up in the kitchen so that the boys can access it whenever they want. Debbie purchased stones at the Dollar Store and added them to the bag. She says the boys “often get the bag down and play games”. Her 11 year

old son took the checkers game to school and taught the other students in his class how to play. Debbie loves the calculator and asked where they can be purchased. “It is the best technology I have seen for math”, she said. Her boys do not use their calculator very much but Debbie thinks it is because they have to share it. She intends to buy one for each of her children.

Debbie indicated that her boys love to attend the Family Math sessions. However, “they are very picky eaters” so the family eats at home first. Debbie’s youngest son has been discouraged by some of the activities. He is in grade three and has not yet been exposed to multiplication and division. Debbie said, “at times he doesn’t have a clue what to do”. She feels that the multiplication and division activities are better suited to the older children, like her 11 year old son. She brought up this concern at the parent session at the end of one of the Family Math evenings.

While Debbie has seen little change in her 11 year old son’s performance in school (“he’s still not doing well despite tutoring and the Family Math program”), she is excited that he has been focusing more. He has difficulties with reading comprehension so she was very surprised when he answered a question about a story that was being read at Family Math. She said, “that tells me that he is really interested”.

Debbie was very complimentary of the Family Math leaders. She said that “the staff has such a positive attitude and their attitude lifts the whole group”. She added that “nobody is as good as the program leader who is so enthusiastic”. She concluded that the community centre is doing a great job and consequently her family has been enjoying their “night out”.

After the final Family Math sessions:

Debbie and her boys attended five of the six sessions. They missed one night due to illness. Debbie’s husband attended four sessions. Debbie remarked that the number of sessions was perfect and they ended at a good time because Christmas activities had begun. She did hear another family comment that there were too many sessions.

Again, Debbie expressed her satisfaction with the program and she commented that “it is great that the program is offered for free”. She said no program changes were needed. The family continued to enjoy the variety of activities that were offered at the sessions. Debbie liked the estimation activities the best since “it got the children thinking right away”. She said that the most helpful part of Family Math was “it got her children interested in math and they no longer have to be pushed to do math activities”. It also reinforced that “math is all around us”.

Debbie was excited to describe something new she had learned:

I learned something myself at Family Math. It was the activity where you see how water rises when you drop something in it. I feel good about learning that. I told my son’s teacher. Now I know I can help

my kids if they have problems learning that same thing.

Debbie reported that the boys have not done too many Family Math activities at home recently because they have so much homework. However, the Family Math bag is still readily available and they do pull it out on occasion. Debbie said she is most pleased with the fact that “math is easier for them now and it is much easier to get them to do their homework”. She wonders if they just understand math a little better given the following:

My older son, who has lots of difficulties with school is now getting his math homework done on his own. Homework goes faster and I don't have to push him.

My younger son had a math sheet to do on the weekend. He zoomed right through it even though it was new material. He picked it up much easier than I thought he would.

Despite these positive changes, Debbie said she still finds it difficult to show them how to do their math homework using the new approaches. She said, “I still teach them the way I learned and they can choose to do it whichever way they like”.

Debbie has encouraged other families to take part in Family Math. She described the program to them as follows:

Family Math is a night out for the family and a chance to spend quality time with your children. There are a variety of activities and you don't have to be good at math to do them. The program leader is wonderful and doesn't make you feel stupid. It is free and there is free food. You can be home by 7:30 and have the children in bed by 8:00. Everyone should take Family Math because it is so useful. Math changes so much.

Case Study #3

Before the sessions began:

Andrea, the mother of eight-year-old James, learned about Family Math from a friend. Since her son does not like doing homework, she thinks it would be a good program to attend. Andrea is not concerned about her son's ability to succeed in school. She expects him to complete high school and be successful in math.

Andrea is not sure what to expect from Family Math but she hopes it will “provide a chance to have fun while learning”. Andrea feels comfortable about participating and plans to attend all sessions.

As a child, Andrea remembers, “always needing more than one explanation before understanding math in school”. Despite these comprehension difficulties, Andrea got good marks in math.

As an adult, Andrea is not comfortable with math. She is able to carry out the math that is required in her job as a hairdresser but, in general, she does “as little math as possible”. She does do some math activities at home with her son, like telling time, but she relies on her husband to help with most activities, especially homework. Helping her son with homework “feels like a chore” and she thinks she would be more comfortable “if it could be more fun”.

After the first three Family Math sessions:

“Thank you for this program”, Andrea said. “I am really impressed because I am learning, and my mind is more open to math – it is fun!” She stated that the program is even better than she expected. Her son is “recognizing what multiplication really means” and her family is “now having regular conversations about math”. The latter is what impresses Andrea the most. Her family “talks together about math and it is pleasant, even homework sessions are more positive and fun”.

Andrea was most eager to share the following:

This week I took James to a doctor’s appointment. As we were walking up the stairs to the doctor’s office on the third floor, James said, “let’s estimate how many steps there are”. James started to count each step. There were nine steps in each staircase. When we were part way up, James asked me how many steps I thought there were. I told him I knew there were four staircases so four staircases times nine steps makes thirty-six steps all together. James became so excited as he thought about what I had said. “I get it...I get it...you multiplied!” he said. This was the first time that he actually understood what multiplying meant. It was so exciting for both of us.

Andrea also complimented the Family Math leaders. “The people are really nice,” she said. Andrea had no suggestions for changes to the program “because it is just right”.

After the final Family Math sessions:

Andrea and James attended three of the six sessions. Andrea’s husband attended two sessions. Andrea said they missed some sessions due to illness. She said if she had been at Family Math on the night the decision was made to extend the sessions to six nights, she would have expressed her opinion that “six sessions is too much and too long”. Andrea commented on how busy her family is and the fact that James is often sick so they do not like to commit to too many activities.

Andrea was quick to clarify that she did enjoy Family Math. “It was well-organized and it ran on schedule without feeling hurried.” She found the sessions to be “very creative” and it was “an opportunity to express ourselves through math”. Her family “enjoyed learning together”. James especially liked the games and he loved getting things to bring home. While Andrea was appreciative that meals were provided, James did not like the food choices.

Andrea reported that the family is doing a “little more math at home now”. She said that the biggest change is that James has a more positive attitude towards his math-related schoolwork. “He used to be negative about math but he isn’t anymore...he even enjoys me being around when he is doing his math.” In terms of homework, Andrea stated that she now feels “more positive” and “less discouraged”. She commented that “there is less criticism and more helping happening...Family Math has given me an opportunity to change my way of thinking.”

Andrea summarized Family Math as follows:

Family Math is an organized program. You get to eat a meal. Your family learns about estimating and finds out that there are other ways to learn math besides rote memory. The leaders are fun to be around. It is an opportunity for parents to learn how to talk to their children about math.

Case Study #4

Before the sessions began:

Margaret, mother of eight-year-old Suzanne, learned about Family Math from a program leader at the neighbourhood community centre. Since Suzanne has trouble with math, Margaret decided to enroll. She expects that Family Math will provide an opportunity for her to spend time with her daughter and for them to have fun learning together. Margaret feels comfortable about attending and plans to participate in all sessions.

Margaret found math easy when she was in school. “I did have some trouble in grade ten but that was due to a conflict with the teacher.” She continues to perform math-related activities with ease, both at work and at home. However, she does not “push” math activities with her daughter because “Suzanne gets really frustrated”. Trying to do homework creates even more frustration for both Margaret and Suzanne. Margaret describes it as follows:

It is an all around bad thing. I wish I understood how Suzanne thinks. I want learning to be fun for her. Right now it’s too much drill and she just doesn’t get it. If math could be more fun, maybe she would catch on. I have had to get outside help because this whole thing has been causing too much frustration for both of us. I spoke with Suzanne’s teacher and

she connected us with the community centre. Suzanne now has a tutor. The teacher and I stay in contact too. Suzanne has a planner that she brings home everyday and that's how we communicate between home and school.

After the first three Family Math sessions:

“Suzanne just loves Family Math and I am having fun too”, Margaret said. She stated that the sessions have been better than she expected. She especially enjoys “the involvement with other families” as she thought that each family would be “more isolated and working on their own”. “It has been fun to get together with other families and do the activities.”

Margaret said that Suzanne has enjoyed all the activities with the exception of the one where she had to “group by three's and four's”. At home, they do “all the activities in the booklet” and Suzanne wants to continue doing them “all the time”. Margaret remarked:

It can actually be fun to do math activities at home. Before it was too frustrating, but now we have fun. I can help Suzanne with math by playing the games with her. I see just a little bit of change in Suzanne's attitude towards math. She still gets discouraged at school and she seems to still have a lack of understanding but she finds Family Math totally enjoyable.

After the final Family Math sessions:

Margaret and Suzanne attended five of the six sessions. Margaret said the number of sessions was just right. “Three sessions wouldn't have been enough and more than six sessions would have been too many.” She also expressed her satisfaction with the program. “Family Math is really good and a lot of fun...I wouldn't change a thing about it.”

Margaret reported that Suzanne is “a lot more interested in math.” She said, “there is still an argument every time Suzanne has to do homework but play time is much better.” They both enjoy their time playing math games and “there is no yelling and screaming”. Margaret indicated that they “bought all of the stuff” they needed to play their favorite game, “Mancala”. They even found it on the computer. Margaret said that Suzanne got a new computer and she is always searching for new math games to play. Suzanne has also spent a lot of time playing with the Family Math calculator.

Family Math has also made a difference in the family's communication with Suzanne's school. According to Margaret, communication has increased. “I was comfortable before but I seem to keep in touch with the teacher more regularly now and we write back and forth in Suzanne's planner.”

Margaret said she has already encouraged a relative to sign up for the next Family Math sessions. She summarized Family Math as follows:

Family Math is a lot of fun. It makes you see that math can be a game and not all homework. The kids don't even realize that they are learning. Family Math is a great program and it's educational.