Math and Literacy

Sustainable Educational Programs and Research documentation for the community of Rancho al Medio, Dominican Republic

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ABSTRACT

The Literacy program aims to inspire both young adults as well as the children of Rancho al Medio to actively engage in educational endeavors. The purpose for this motivation is to encourage them to experience alternative occupational opportunities by pursuing further schooling. At the same time, the Literacy module aspires to promote community empowerment through a program that inquires the young adults to take on the responsibility of tutoring the children when the teacher is unavailable. Through various researches done via the internet, worksheets were collected and modified. The worksheets primarily stress three areas of mathematics: number basics, addition and subtraction, as well as multiplication and division. The students successfully took on leadership roles, though the organization of strict tutor sessions was harder to administer. Although all goals were not met, the program did promote leadership skills as well as get the children excited and interested in their education. The data collected here unfortunately was not as complete as intended, though it still offers important insight into the community. The program this year will hopefully serve as a launching pad for improved programs to come.

INTRODUCTION

In previous years, the Literacy fraction of Health in Action had focused largely on Spanish literacy. However, during our volunteering last year, we started writing out simple math problems on white boards when we would have spare time, which included addition, subtraction, multiplication and division. We found that the children of Rancho al Medio not only have a lot to offer mathematically, but there also exists a genuine interest on the subject. Therefore, we took this discovery into consideration and were determined to return to Rancho al Medio with the kind of education that the children crave.

However, the project required more thought than we had originally anticipated. The first problem that we ran into was that it is simply too easy to put together math worksheets and have the students work mindlessly on them; we always aim for a meaningful learning experience while making the education aspect as sustainable as possible. Secondly, we were trying to figure out the best way to make education and knowledge as self-empowering for the students as possible, because it is through this self-empowerment that sustainability of our program comes from. To solve our problems, we came up with a tutoring program that consists of training the young adults of Rancho al Medio to take the initiative in helping the younger children to learn when the teacher is off-duty.

Lastly, we further improved our literacy program this year by launching a creative writing course where the students get a chance to express themselves. This activity consisted of writing about laminated pictures provided to them as well as the world around them.

METHODS

A. Group I: Number Basics

We want to provide a solid background for children who are just starting to learn math. This section teaches the children what numbers are, as well as the order that they come in.

B. Group II: Addition & Subtraction

For students who cannot solve multiplication and division problems just yet. We found wide-range of worksheets that focus on addition and subtraction.

C. Group III: Multiplication & Division

This is intended for more advanced math learners. A wide-range of worksheets is also available for multiplication and division problems.

D. Word Problems

Aside from simply doing problems, we came up with some word problems that include real-life experiences so the students can get a closer look at what having math skills can bring for their future.

E. Creative Writing.

This program includes activities where the kids finish writing sentences that we have started, or write a short paragraph upon a given subject. The purpose of this program is to allow the children to express themselves through reading and writing. This is done on white boards with dry erase markers.

F. Community Diagnostic Questions

By finding out the real situation regarding education in Rancho al Medio, we can better our programs for next year and come up with a curriculum that stimulates the students.

Note: See Appendix for Diagnostic Questions, Budget, and Intended Practical Aims

RESULTS

Community Diagnosis Results

The community diagnostic questions were directed at the children in Rancho el Medio. Not every child was capable of answering every question hence some surveys were not completed entirely. Below are the questions that were answered more consistently. Listed beneath the survey questions are the total replies to each question (the amount of replies varies from question to question).

1. How often do you attend classes?

Every day (5 days a week)	9
4 days a week	1

2. What kinds of games do you like to play?

Baseball	4
Mathematics (one gave specific game of dominoes)	4
Sing	1
Hand Clapping	1
Playing with dolls	2

3. How comfortable do you feel in the school setting?

Very	1
Yes, does feel comfortable	3
Not at all	0
Unsure	2

4. Do you enjoy lessons at schools?

Yes	8
No	1

5. What does a library mean to you?

It's a great thing/Something very important	3
Lots of books	5
Unsure (doesn't know)	1

6. Would you use a library if available?

Yes	8
No	0

7. How often do you have trouble completing your homework?

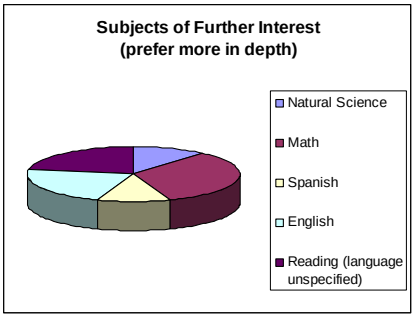
Often	1
Sometimes	3
Once a day	1
Never	1

8. What topics are troublesome or why is it troublesome?

Math	1
Spanish	1
Has no book	1

9. How often do you feel bored in school?

Never	2
1 day a week	1
Sometimes	2



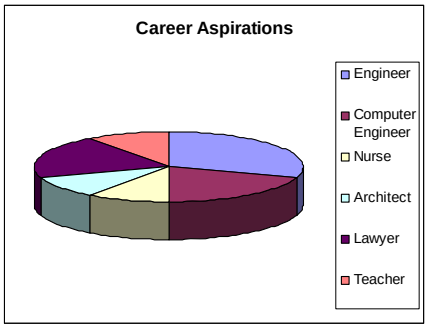
Graph 1.

10. What would you like to learn in school?

Natural Science	1
Math	3
Spanish	1
English	2
Reading (language unspecified)	2

11. Do you feel you have easy access to books/education?

Yes	8
No	0



Graph 2.

12. What do you want to be when you grow up?

Engineer	3
Computer Engineer	2
Nurse	1
Architect	1
Lawyer	2
Teacher	1

13. What would you like to learn in school?

Natural Science	1
Math	3
Spanish	1
English	2
Reading (language unspecified)	2

14. Do your parents help you with your homework?

Yes	6
No	1

15. What do you do when you cannot complete your homework?

Look for someone who understands	1
Ask a sibling	1
I don't finish it	2

16. Is the teacher able to answer your questions prior to when the assignment is due?

Yes	4
No	3

17. Do you ever seek help from older kids?

Yes	5
No	1

18. Would you seek help from the older kids?

Yes	4
No	2
No, the older kids are not willing to help	1

19. Have tutoring programs been implemented here before?

Yes, several	1
Yes	4
No	1

20. Are you interested in math?

Yes	7
No	0

30. How many hours per week do you read a book?

1 hour	3
2 hours	2

31. What kinds of books do you like to read?

Spanish	4
Natural Science	2
Social	2
Baseball	2
Magazines	2
Math	1
Art	1

32. Have you ever wanted to read a book but been unable to get it?

Yes	5
No	2

33. Do you keep a journal?

Yes	2
No	5

34. Do you know what poetry is?

Yes	5
no	2

35. Do you know what short stories are?

Yes	5
No	2

36. What kinds of math would you be interested in learning?

- Calculus, algebra
- Multiplication, division

37. What kinds of improvements would you suggest regarding education?

- More language courses (English and Spanish)
- More frequent attendance of school children
- Cessation of stealing from school house

Community Observations

One particular student (around the age of fifteen) expressed particular interest in learning English, and stated that the community as a whole was working towards becoming more familiar with the language in order to speak more thoroughly with organizational incomers. This student approached an HIA member with an English packet and requested assistance with it (which endured for over three hours).

According to one student, six different teachers go to the school house every day. The subjects taught by each teacher include English, Spanish, Math, Natural Science, and Social Science.

Several students corrected and guided one student struggling with printing numbers for roughly two hours. Initially the group received supervision from an HIA member who suggested helping one other. The students continued working together unsupervised for over an hour.

Throughout a three hour period, students worked in pairs reading children's books in Spanish. Initially, students were asked to help one another. Afterwards, students worked with each other on their own, without any requests from and HIA member.

A student stated that previous tutoring programs had been helpful.

DISCUSSION

The information gathered from the diagnostic questions are pretty accurate, however, the language barrier could have caused some fluctuations. The residents of Rancho speak with an accent where the 's' is excluded, making it difficult for HIA members to get a clear and concise response (although the best of efforts were put forth). Furthermore, not all members are completely fluent in the Spanish, compounding the barrier. Even after the member inferred the child's response, it then was recorded (in either Spanish or English) on paper. The recorded responses then had to be read and often translated by a member who was also not fluent in the language when gathering and categorizing. Although these barriers probably did not cause major fluctuations in overall trends, they should be noted when such a small group was targeted.

The lack of well rounded and thorough data collection presents another complication regarding the diagnostic questions. Due to lack of personnel, only thirteen children were questioned (out of approximately thirty or forty) and often the questionnaires were left not even half way completed. Observed trends still exist, but off of incomplete data. In further studies, it would be best to ask more children more questions. Also, perhaps the teachers and parents could be contacted.

Due to the time constraints of one week, the goal of providing understanding of deep mathematical concepts was not satisfactorily fulfilled. The language barrier as well as the small age and attention span of children also inhibited reaching this goal. Also, the

tools brought could be improved from worksheets and games to building blocks or base ten blocks. The best way to begin to cultivate conceptual thinking in this way would be to help guide abstract and spatial thinking. Tools that they can use and touch with their hands would probably work better.

Although the specific goals for math and literacy were not entirely met, the students did get excited about their education. Throughout the math tutoring program, the students were very excited about the problems. They listened well and participated actively in all activities. Students frequently asked for more problems after they had finished a previous worksheet. Books and other tools were requested, showing that the students definitely have the interest in learning.

Furthermore, students began to successfully take on leadership roles. Initially the students were interested in doing their own projects (reading books by themselves, doing math problems on their own, etc.) or simply wanted to play games. At this point, HIA members suggested working together and helping those who worked at a different level. Although it had to be suggested several times over, eventually the students did know how to work on their own and with each other. For example, a project within the math program was to practice printing the numbers 1 through 100. One student particularly struggled in this aspect and worked alone. An HIA member suggested to the kids to help the student, and several volunteered. Once on the right track, the HIA member left, and returned to find the students still helping one another. The leaders, or students who were actively helping others and offering suggestions to the others, continued to help not just the student struggling with printing numbers, but several others.

Although initially the act seems miniscule, implanting the idea of helping each other and leading one another sets grounds for empowering the community to create their own change and promote their own health. The challenge is begin to foster that idea at as young an age as possible so that in years to come the students actively take roles in their community. Here the goal of stressing the importance of teamwork and leadership was met. The students actively provided suggestions to one another and put forth effort into relating to one another's ideas.

The students reported they have sufficient resources, which, although more resources are available than initially estimated, they still do not suffice. As reported in the diagnostic questions, several tutoring programs have been implemented before. Rather than one teacher, they report they have six (and are helpful) and rather than having no access to books, they feel they have ready access. However, five out of seven students have desired books they said they could not find access to. Although the students seem to feel they have sufficient resources and are excited about their education, one should bear in mind that that perhaps they feel they have sufficient resources because they do not know what resources are out there. Clearly if their education stops at the third grade, the available educational resources are not sufficient.

Compared to previous years, changes in career goals were observed. In previous years, students reported a desire to pursue a career as a movie star or someone famous. This

year they reported careers such as computer engineering or law school. This reflects education as a value as well as a belief that they these goals could be met. Both beliefs are extremely important for growing as a community. Furthermore, the suggestion of computer engineering also reflects their awareness of technology.

The community as a whole demonstrated a desire to improve and to work with organizational incomers. The most obvious demonstration of this is their obvious interest in learning English. Rather than relying on incomers to learn their language, the community shows interest in stepping out of their own comfort zone to actively communicate and participate with the world around them. Although right now it is merely an interest, it still exhibits the beginning stepping stones to forming leadership roles that would enable the community to help themselves.

In the preliminary months of module formulation, several ideas were tossed back and forth between HIA members, as well as input sought from professionals to help maximize the effectiveness of the program. Cherice Montgomery, a former Spanish teacher who currently is a doctoral candidate at Michigan State University's College of Education generously provided excellent ideas about the proposed math and literacy program. Dr. Montgomery was recommended by Cindy Kendall, the Technology and Media Coordinator from the Capital Area Career Center Ingham Intermediate School District. Unfortunately lots of the ideas discussed were not brought into action this year due to an extreme loss of personnel within the program, but they still offer tremendous potential for future programs. Any HIA member looking into future math and literacy programs are highly recommended to thoroughly read these ideas and suggestions. Please view Appendix D for details.

CONCLUSION

The program did not meet all of its goals; however, the students did get excited about their education and readily took on leadership roles. Although the sustainability of these accomplishments is questionable, the project of 2007 created an initial launching pad for future math and literacy programs. Clearly the students are driven and want to learn. Hopefully future projects can benefit from the ideas generated as well as accomplishments and errors of this one.

APPENDIX A

Community Diagnosis Questions

SCHOOL/EDUCATION
La Escuela & La Educación

1. How often do you attend classes?
¿Con qué frecuencia asistes a tus clases?

2. How many days a week does the teacher usually show up?
¿Cuántas días cada semana viene la profesora a tu clase?

3. What kinds of games do you like to play? Do these games involve reading or writing or math?
¿Qué tipos de juegos te gusta jugar? ¿Consisten los juegos escribiendo, leyendo, o matemáticas?

4. How often do you ask your teacher questions? How comfortable do you feel in the school setting?
¿Con qué frecuencia te pregunta a tu profesora las preguntas?

5. Do you enjoy the lessons in school?
¿Te gustan las lecciónes en la escuela?

6. What would you like to learn in school?
¿Qué te gustaría aprender en la escuela?

7. What often do you feel bored in school?
¿Con qué frecuencia estás aburrido en escuela?

8. What do you want to be when you grow up? What do you see yourself doing in 10 years? In 20 years?
¿Qué quieres hacer cuando maduras? ¿Qué te ves hacer en diez años? ¿En veinte años?

9. Do you feel as if you have easy access to books/education?
¿Pienas que tú puedes conseguir los libros y una educación facílamente?

10. What improvements regarding education do you want to see within the community?
¿Qué mejoras en educación quieres ver en tu comunidad?

11. What does a library mean to you?
¿Qué te significa una biblioteca?

12. Would you use the library if one was available within the community?
¿Usarías una biblioteca si una biblioteca estaba disponible en tu comunidad?

13. How often do you have trouble completing your homework?
¿Con qué frecuencia tienes problemas completar tu tarea?

14. Do your parents help you with your homework when you have questions?
¿Te ayudan tus padres con tu tarea cuando tú tienes preguntas?

15. What do you do when you are unable to finish your homework assignments?
¿Qué haces cuando no puedes completar tu tarea?

16. Is the teacher able to answer your questions on the homework prior to when the assignments are due?
¿Puede contester tu profesora tus preguntas en tu tarea antes de que la tarea necesite completar?

17. Do you ever seek help from the older kids when you have questions on the homework?
¿Preguntas a los niños viejos para ayuda con tarea cuando tú tienes preguntas?

18. Who do you seek help from when you are unable to finish your homework assignments?
¿Quién pregunta ayuda cuando no puedes completar tu tarea?

19. Would you seek help from the older kids if they offered to answer your questions?
¿Preguntas ayuda de los niños viejos si ellos ofreceieron contestar tus preguntas?

20. Do you see education as a big factor in your future?
¿Piensas que tu educación será un factor grande en tu futuro?

21. Have tutoring programs been implemented before?
¿Has tenido las clases particulares antes?

MATH
22. How often do you use math in real life? (Ask in the beginning and at the end.)
¿Con qué frecuencia usas la matemática en tu vida?

23. Are you interested in math? Would you like to learn more math outside of school? What kind of math would you like to learn?
¿Te interesan las matemáticas? ¿Te gustaría aprender más matemáticas afuera de escuela? ¿Qué tipa de matemática te gustaría aprender?

READING
24. For how many hours per week do you read a book?
¿Cuántas horas cada semana lees un libro?

25. What kind of books/stories do you like to read?
¿Qué tipos de libros te gusta leer?

26. How often do your parents read? Do they read with you?
¿Con qué frecuencia te leen tus padres? ¿Leen tus padres contigo?

27. Have you ever wanted to read a certain book but could not gain access to it?
¿Alguna vez has querido leer un libro que tú no pudiste conseguir?

WRITING
28. How often do you write down your thoughts? Do you keep a journal?
¿Con qué frecuencia escribes tus pensamientos? ¿Tienes un diario?

29. Do you know what poetry is? Have you ever attempted to write poetry? What do you think poetry is?
¿Sabes qué es poesía? ¿Alguna vez has tratado escribir la poesía? ¿Qué piensas es la poesía?

Do you know what short stories are? Have you ever attempted to write short stories? What do you think short stories are?
¿Sabes qué los cuentos son? ¿Alguna vez has tratado escribir los cuentos? ¿Qué piensas son los cuentos?

FOR EVERY QUESTION THAT THEY ANSWER “NO”, ASK THEM WHAT SOLUTIONS THEY PROPOSE/WHY NOT?/WHAT IS THE COMMUNITY¡¦S GOAL IN SOLVING THESE PROBLEMS & OFFERING SOLUTIONS?

APPENDIX B

Budget

Lamination: 350$
Expo markers: 125$
Expo marker cleaning solution: 30$
Paper: 20$
(Shelves: 200$)
Board games: 50$

- Candyland
- High Ho Cherry O
- Chutes and Ladders
- Connect Four

White boards: 100$
Name Tags: 40$
Copies: 100$

TOTAL: 1015$

APPENDIX C

Specific Goals & Practical Aims

1. The first practical aim proposed is to provide an understanding of the theory behind mathematics. For example, why does three times three equal nine? Rather than just memorizing numbers, the students should understand the more abstract concepts. To check for comprehension, word problems could be provided.

2. The students should also gain more comfort in seeking help from others and to build teamwork skills. Here we want them to see that resources such as books and the older kids are able to help and guide them.

3. To stimulate excitement about literacy, motivate the students to use their imaginations through story writing and poems. The objective to this aim is to get students more comfortable with writing to hopefully implement the idea that writing is a useful tool for communication and expressing ideas.

4. Realization of the importance of math to everyday life. Good examples include counting money and building stable structures.

APPENDIX D

Analysis of Cherice Montgomery
PhD Student in Curriculum, Teaching, & Educational Policy

Primary communication via email
Dr. Montgomery's response to proposed ideas in italics

Document 1: Initial Email

Cherice Montgomery

PhD Student in Curriculum, Teaching, & Educational Policy

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301-E Erickson Hall

East Lansing, MI 48824

chericem@msu.edu

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The main things we're attempting to do right now, is 1) Set up a library (there's a small room in the back of the schoolhouse we would *use)*

Okay, one way to accomplish this would be to contact National Spanish Honor Society Chapters in this area. Explain the goal, ask them if they'd like to collaborate. My students put on fundraisers and used the money to buy books in Spanish from Scholastic that we then shipped to a school in Guatemala (or sent in suitcases with people traveling there) so that they could begin to stock the library that volunteers in country built. We also had a book drive at school and people could donate children's books in good condition in English (we got boxes full). We also sent these since many students were learning English.

Checkout procedures could be a major issue. In Guatemala, they found they couldn't check things out because the kids would tear the pictures out of the books, etc. It wasn't like the US where you could charge fines—the families barely had money to send the kids to school, the school relied on donations to function, etc. So it became sort of a "special

collections" type library. People in the community could come and sit at the tables and look at the books, but couldn't take them home.

2) Create a tutoring program (maybe -- not sure if it would work)

Tutoring for what purposes? In Guatemala, most of the children attending the school were doing so for the first time (I realize this could be a totally different situation), so I think it is important to think about what kind of tutoring you mean. I doubt it would be like the US, where you are helping kids who are struggling with a particular subject in school (although it could be). I'm guessing this would be more effective if you planned it as more of a basic skills clinic. A place where people who want to acquire some basic literacy skills could do so.

In talking with a Dr. friend of mine who just finished a trip to Honduras, she found that families didn't have access to simple school supplies—paper, pens or pencils, crayons. People found out that the Drs. had brought that stuff with them, so they would pretend to be sick and wait in line for 8 hours just to get to take a little notebook of paper home! Ditto in Guatemala—12 to 20-year-olds who had never even SEEN crayons, much less used them. So one other thought would be to have the National Spanish Honor Society groups in high schools do a school supplies drive. My point here is that what literacy and tutoring mean in the US is completely off-base when you start to realize the circumstances in a lot of countries in Central and South America. Obviously, much of the work I'm describing was occurring in rural areas.

I also read an article a while ago about the issue of street children. This was a huge social issue in Guatemala as well. Parents would take very young children (5-year-olds) in to the city and have them sell things all day, try to get tourists to give them money, etc. The family used this money to live on. As a result, parents were resistant to sending their children to school because to do so would mean a major loss of income that they depended on in order to sustain the family. So, there was a group of people who started taking school to the streets. They put little "tutoring" programs together, but would then look for the children in the streets and sort of set up standing appointments with them to meet them at a certain corner at a certain time of day. The tutoring programs worked on basic skills—teaching them to read, count, etc. I'll have to see if I saved the link to the article.

3) Run just some fun activities throughout the week involving math games/problems and creative writing projects

I think this sounds like a great idea. However, it is hard to advise without more info. regarding the situation and what has been done in past years. At first glance, this sounds pretty Americanized. I would encourage you to think about what will be culturally familiar to the kids as you prepare these activities.

The library is kind of tricky because the younger kids like to tear out the pages, but we were considering just giving several books(5 to 6 -- in spanish) to the older kids,

For what purpose? Giving them the books to keep or to borrow (like libraries here) or to read to the younger kids, or what?

and then finding someone in the community (perhaps the teacher?)

But if the teacher isn't even responsible enough to show up to teach class, perhaps not?

to manange the library (basically hold the key).

Good idea. Someone will need to be in charge and it is better if you can prepare someone in the community to do this so that the initiatives you attempt while you are there can become self-sustaining and can empower the community to improve itself. On the other hand, what incentive would this person have to volunteer their time? Not to sell or trade the books for other items they might need, etc. Again, I'm just imagining based on other accounts, not because that is necessarily the situation here.

The tutoring program is kind of difficult because we're not sure if the older kids will want to keep tutoring once we're gone.

So will you be teaching the older kids to tutor the younger ones, or are you providing the tutoring to the whole group? Is this supposed to be a way of compensating for the fact that there is no formal schooling offered in the area, or is it to serve as an enrichment or supplement to school, or is it targeted to a specific population that doesn't attend school or is underserved by the schools?

I guess the biggest obstacle is getting them to want to further their own education once we're gone...we're planning on talking to them about the value of education for an hour or two. What do you think about this?

I'm thinking even the most powerful of talks wears off much more quickly than a powerful experience that would show them the value of education. What kinds of compelling experiences could you create for them that would stimulate in them an appetite to continue to learn on their own? These could be simple things—helping them to explore things in their own environment and the world that surrounds them. I think you have to start by finding out what they perceive as major problems or needs in their lives, then use "education" to help them address whatever those immediate concerns are. In this way, they have the opportunity to see the education as a tool for accomplishing "real" and "important" things that make their lives better instead of some dream or fantasy that a "rich person" from an "alien" world pretends could be possible for them. Sorry, don't mean to sound too cynical, but I guess my advice is to keep whatever you do REALLY concrete and practical. You can do this and still engage their imaginations.

The activities are really just to sort of expose them to math and writing in hopes it will spark someone's interest and someone will keep at it when we're gone.

Okay, so it sounds like they don't have access to primary schooling?

We've got several worksheets that we're laminating for them to use. (Alice, one of girls in our group who has been down there before, said that it wasn't a good idea to bring just regular paper because they have somewhat of a trash problem, and bringing in tons of paper would just create more trash for them.)

Excellent observation! One of the other things that has worked well for humanitarian aid organizations in my church are school kits. They prepare small chalkboards by cutting them and then finishing or taping the edges (you could involve the Boy Scouts, industrial arts classes at Vocational Schools, women's groups, or other volunteer organizations) in doing this. They make erasers (I forget what pattern we used, but I can get it offline for you if you decide to do this) and sew drawstring bags to keep all of the stuff together. They put other basic school supplies in the bags with the slates. These work very well in areas where paper is scarce (or too abundant).

We'll probably leave those in the library if we can. They're mostly just connect the dots (with numbers), number tracing, math problems (anywhere from one digit to three digits, adding, subtracting, multiplying, etc.). We were going to run different activities at different times....for example we were going to split up the kids into three different math groups (the first day we'd give them a worksheet to fill out to see what they could and couldn't do) an work with them that way.

I think you'll find that manipulatives work better—especially if these kids don't generally have access to paper and such. I would still use the laminated worksheets, but consider having the kids work with real objects instead of just writing when teaching the math—using beans or rocks or bingo chips or other small counters, having the kids make number lines, organizing themselves by height, working with sizes and shapes, sorting and patterning, etc. Even here in the US, the elementary aged children won't stay focused for very long unless I involve them physically in some way—they can hop the numbers, jump rope to the numbers, blow bubbles while they recite times tables (goal is to be done before the bubbles hit the ground), etc.

If you have time, it would be worth it to visit a Kindergarten or first-grade classroom or two here in an elementary school to see what kinds of manipulatives they use and how they use them. These even work well for grown-ups.

The community diagnostic questions are just questions we have people

in the group go around in the community and ask whoever just to get some data on how to do things better throughout the week and give us something to work with when we get back (so maybe for next year?).

SUPER idea!

I'll take a look at the documents now.

Document 2: Timeline and Budget

TIMELINE

11.6.06-11.12.06

1- Email Manos a Tiempo about library → LAUREN
   a. Is it possible to set up shelves in the school house as a library before we arrive at the end of February?
2- Look for 10 pictures of anything to spark creative writing → EVERYONE (sun)
   a. print and bring pictures *If you slip these into clear heavy plastic sheet protectors they'll last longer and store well in a 3-ring binder*
3- Number tracing worksheets → CHELSEA Same story as above—slip them into sheet protectors and put them in a 3-ring binder. You can also put the Vis-à-vis markers in one of those pencil cases with the 3 holes designed to fit inside the 3-ring binders so they can be stored together
4- Connect the dots
5- Meet again to look at websites and pick games we want- Sun 5:30 pm-7pm UgLi

11.13.06-11.18.06

1- Alphabet tracing worksheets → ALICE will contact Nicole
2- Fundraisers: (a) Zubair: Function dinner
   (b) Alice: Studio 4
   (c) Party at Caitlin's place
   (d) Lauren/Chelsea: Pizza cards from Papa John's
3- Have Group 1 of the Math Program printed out & ready for lamination
   (a) Translation: LAUREN
   (b) Tracing worksheets: CHELSEA
   (c) Lamination: ALICE
4- Research poetry & short stories → LAUREN

http://www.glencoe.com/sites/common_assets/worldlang/web_explore_sp.php

Skip to the literature section for a nice list of sites in Spanish . . . you may have to do a little investigating to find what is specific to the DR

5- Presentations on how to tutor/teach & the importance of education → ZUBAIR

How to tutor presentations will be important. I would recommend a workshop format in which you SHOW more than tell. So I'd do some role playing with you guys where you MODEL what to do. Then I'd give them a task and have them pair up with a peer and try to practice what you showed them. Have them work with the actual activities they'll be using with "students" later when they are "really" tutoring. After you MODEL, they ROLE PLAY, then you need to DEBRIEF what problems they encountered, questions they hand, and how to handle those. The most important part of this workshop should be helping them to see that what they want to teach is much less important than how their student feels. They should work hard to think about everything they're doing from the

perspective of their student. The better they get at doing this, the easier it will be for them to teach and help the students they are tutoring. It is NOT about the content they want to teach! ☺

11.19.06-11.25.06

1- Have Group 2 of the Math Program printed out & ready for lamination
(a) Translation: LAUREN
(c) Lamination: ALICE
2- Continue raising money & sending out donation letter/supply list
3- "What is Poetry/Short Stories?" presentation done in English → EVERYONE

11.26.06-12.2.06

1- Collect old socks for erasing white boards. *Caution—white board markers are extremely expensive, even here in the US. If you are just planning to take these as tools while you are there, fine. If you are looking for long-term usage, chalkboards might be a better option unless you have a way of replenishing the white board markers. Be sure to take the low odor ones if you do use them.*
2- "How to Tutor & Importance of Education" presentation done in English → EVERYONE
3- Have Group 3 of the Math Program printed out & ready for lamination
(a) Translation: LAUREN
(c) Lamination: ALICE
4- Collect/gather all creative writing material for lamination → ALICE *I like the props and pictures ideas you mentioned in another document.*

12.3.06-12.9.06

1- "What is Poetry/Short Stories?" presentation translated to Spanish → LAUREN
2- "How to Tutor & Importance of Education" presentation translated to Spanish → LAUREN
3- Have all programs laminated! → ALICE
4- Shop for necessary supplies in order to run programs → EVERYONE

BUDGET

- Lamination: 300$
- Expo markers: 125$
- Expo marker cleaning solution: 30$
- Paper: 20$
- (Shelves: 200$)
- Board games: 50$
  - Candyland
  - High Ho Cherry O
  - Chutes and Ladders
  - Connect Four

    - *You can also make folder games—laminated folders with the game boards inside them.*
- White boards: 100$
- Name Tags: 40$ *Show them that for future tutoring, they could use masking tape (cheaper than buying the name tag labels)*
- Copies: 50$

TOTAL: 915$

Document 3: Specific Goals

Community Organizing
Specific Goals

1) Understand the theory behind mathematics. Why is 3x3=9. Want them to understand that 3 groups with 3 things in it equal 9. Just do not want them to know the answers, but understand the concepts. Evaluate through words problems. Test done when we first get there and same test the last day.

2) Want them to understand inter-dependence. Want them to see that resources such as books and the older kids are able to help and guide them when they need help. Working together can benefit everyone. When we are no longer there, we want the younger children to be able to ask the older children for help. Also, being about to use the library will give them resources to learn while we are gone. Rely on the older children to maintain library and tutoring program. Pick 2 or 3 specific/brightest kids.

3) We want the children to appreciate the! Books that are in the library. Have them understand that books are a form of entertainment that needs to be valued. Reading times while children interact with the books, *Would be good to have a set story time where older kids read to younger ones like they do at libraries here.*

4) and take them away if they are tampered with. *Important to find out why the tampering occurs. What were kids thinking when they did what they did. Might reveal some interesting ideas and understandings that you could then address. (This was the case in Guatemala.)*

5) Have them use their imaginations through story writing and poems. Be able to expand their minds outside of what they already know. Understand that expressing your mind through words can be important to the learning process. Evaluate- can't exactly through if they only write or not. Actively participating. *Important to see imagination as a tool for making life better—sometimes you can make an awful situation feel better if you can imagine stories for yourself, imagination can provide comfort, imagination can help you envision a better life for yourself. Find some good children's books about people who use their imaginations for different purposes. Read the stories aloud during a story time (like elementary librarians do),then discuss how the characters in the story used their imaginations and what benefits they derived from doing so. Then let kids tell you about times when they have used their imaginations for similar purposes.*

Have them realize that math is important to everyday life and you can use it in everyday life. Evaluate through how they apply these mathematical theories in "real life", day to day experiences written by children. *Math is a language. We can use this special language to describe things and to help others understand things. Math and music are heavily connected. I would recommend using music to teach math too.*

For example, help them to see how they can make musical instruments out of common things in their environment, (like we do drums with Oatmeal boxes, whistles from paper or tubes, here, etc.) Have them beat and count various rhythms. Show them how notes and fractions match.

Document 4: Tutoring Program

Tutor Program: Initial Ideas

Reading

- Set up reading buddies (stronger reader w/ weaker reader)
- Weaker reader can both listen to other person read & read him/herself – *Scholastic also has cassettes that come with lots of books in Spanish. If they have access to power, etc.*
- Stronger reader asks comprehension questions: (in the workshop, would need to provide examples of these to the community members w/ a particular book) *YES!*
  - Stop periodically throughout text to ask the weaker to tell what is happening in the story (events) *So you mean have weaker paraphrase what the stronger has read? Or the weaker reads and then summarizes to the stronger? Both strategies are good ones.*
  - Ask weaker to make predictions about what he/she thinks will happen next – would need to provide a good example in a book of where would be a good place to make a prediction *SUPER!*
  - Ask weaker to make a connection from an event in the book to his/her own life
  - *Also good. This may be difficult for them, though, if you are using books in translation instead of culturally authentic ones*
  - Ask weaker if can explain the meaning of a word & if cannot, guide the weaker to figure it out/take a guess by re-reading the sentence. If still cannot, tell the student the definition of the word.
  - *This is going to take some training—the key is to help the weaker one learn what clues to look for to help—context, pictures, other nouns in the sentence, etc. Doing this successfully is tied to the ability to make predictions, to recognize the links between causal events and effects, and to make inferences—all skills that struggling readers often lack*
  - When the stronger reads, he/she can wait to show the pictures until *after* reading the text on the page. This helps readers listen & comprehend on their own without the aid of pictures. Sometimes listeners will just look at the pictures & not rely on the actual text to tell the story. *This is true, however you need an intervention in between these steps. For example, maybe the stronger reads aloud while the weaker puts pictures from the story in order (If You Give a Mouse a Cookie—there is a key item on each page. Weaker student listens and finds the picture of the object that is being discussed in the story and puts it next in order, etc.)*
  - Ask weaker to draw own picture of what's happening in the story (a particular selection of text or event)- for example the reader can imagine a particular scene in the book & draw what they think is going on – *GREAT idea. This engages both halves of the brain in the comprehension process and forces the weaker student to make meaning out of the words instead of just hearing them as discrete sounds.*

- Act out the events of a story – *GREAT—very successful with children ages 3-10. Younger ones need you to stop the story periodically, act that part out, and they mimic. So for example, "Then the wolf knocked on the door. Knock! Knock! Knock!" Okay everybody, let's knock on the door! Then you pretend to knock while they do. Once everyone is doing it, then you move to the next thing in the story, then act it out and they do it with you. You can draw the kids in by having them help tell the story too. So, for example, "Then the pigs cried, "Help me! Help me!" (Okay everyone, run like the pigs did. Now what did the pigs say?! Everyone runs in place while they cry, "Help me! Help me!") This allows you to reinforce oral language and its connection to meaning via physical action.*
- Before begin reading, "activate background knowledge" or ask reader questions about what he/she might already know about the topic of a book – this gets the readers ideas rolling & helps the reader to understand the book
- *VERY important—crucial in fact. This will also help you to see what you might need to do to help them be ready to understand the book if they aren't familiar with certain objects or concepts in the story.*

Math

- Create activities where community members are working together
  Examples:
  - In partners, practice counting by 1, 2, 5, 10, 100s etc (depending on level of child): Person 1 says 2, Person 2 says 4, Person 1 says 6 etc, can also toss, roll, bounce an object back & forth (i.e. small ball or bouncy ball) as do it *Yep, works well and is fun.*
  - In partners, quiz on another orally on multiplication facts, i.e. "What is 2 times 2?" *Can add reading in here too by using the "I have, who has" game. Give each kid a flashcard. Sit kids in a circle. The kid with Card 1 stands and reads his or her card aloud. The kid with the card that answers the question stands and reads his or her card aloud, and so forth until everyone has participated. Example: Card 1: I have 2x2. Card 2: I have 4. Who has 6x3? Card 3: I have 18. Who has 5x5? Card 4: I have 25. Who has 8x6? You get the idea.*
  - Work together in groups to solve a word problem
  - Have a stronger child help a struggling child
- Math activities should work towards conceptual understanding of the math, not just procedural *EXTREMELY important!*
  Examples:
  - Have children work with objects or draw pictures to show addition, subtraction, multiplication, division
    i.e. 2 x 3 = 2 groups of 3 objects *BOTH strategies are great.*

Writing

- Focus activities on USES of writing, rather than writing sentences or words *YES!*

- Writing stories in partners or groups: may be based on a picture or a beginning sentence they are given, can have students act it out for others after have written it
- *Can also have them write the first part of a story, then pass to the next person, who adds a sentence, then passes to the next person. Can do this orally too by taking a big ball of yarn and putting knots in it. I talk until I come to a knot, then pass the ball to someone else, who continues the story I've started.*
- *Important to have them tell stories first, then move to writing. Have kids sit in a horseshoe/semi-circle. One kid sits facing the group and tells a story about some experience in his or her life. Teacher writes on chart paper or posterboard as the kid tells the story. Stories have to be pretty short. Now teacher asks class who has a question that might signal the need for a detail the child could add. Child gets to decide whether to add the detail or not. Teacher can also make deliberate mistakes in punctuation or spelling while writing the story then ask the kids to correct.*
- Write songs
- Write letters:
    -To teacher about what like to learn in school
    -Letters to parents about what learn in school
    -Goodbye letters to us on last day
    Fill in the blank scaffolding will be helpful here. You write sentence starters and they finish the sentences or fill in the blanks (depending on how strong their skills are). You can also give them menus of choices and then write using the laminated menu. Example:
- Talk about examples of Dominican writers & read their poems, etc. (for Dominican Pride & motivation) YES.
- *Clone poems or stories. Find simple poems that adhere to a strong pattern. Read and discuss. Then give the kids a template that uses the same structure and have them write their own.*
- *Example: If You Give a Mouse a Cookie*
- *If you give a mouse a cookie, he will ask you for a glass of milk. When you give him a glass of milk, he will ask you for a straw. When you give him a straw, he will ask you for a napkin.*
- *Then they write their own. If you give a dog a bone, he will ask you for a place to bury it. When he buries it, then he will ask you for a bath. When he takes a bath, then he will ask you for a place to run and dry off . . . etc.*