A STUDY IN RECIPROCITY:
Minimizing the Digital Divide and the Intergeneration Gap

Children Tutor Seniors at Computer and Internet Skills and Get a Lesson in History

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ABSTRACT: This paper describes an on going program initiated by Professor Edna Aphek and carried out at the Alon School in MateYehuda, in Israel. The program aims at minimizing the intergeneration gap and the digital divide by having elementary school children tutor seniors at computer and internet skills and at the same time write together with the seniors a digital "mini ebook" based on a chapter from the senior's personal history.

The Rationale of the Program

*T*he Hi -Tech information oriented society is a society, which places much emphasis on the new and the changing. In such a world the past looses its importance. The voices of past knowledge and experience become obsolete and the chasm between the generations, the old generation and the young ones, becomes insurmountable

The new technologies have created a new situation, rather unknown in human history. A situation wherein young children master a skill much needed by adults in general and seniors in particular. In the new Hi-Tech world, where children speak the new language of the Information

nologies as their mother tongue, it would be most fitting to put their mastery to good use and train them to teach this new language to Senior Citizens, those unacquainted with the language of the computer and the internet.

Knowledge endangered: the dire need for preserving knowledge at risk of disappearance. Precious knowledge is stored in the heads of senior citizens. Many seniors are "walking treasures" of history, of folk art (their art work) and of music about to disappear.

Project Objectives

The project aims at combining the vast experience and knowledge of the seniors with the mastery of computer and internet skills of the young ones, thus fostering new social interactions and minimizing the generation and digital divide.

Project History

The project started in 1998 at the Alon school, in Mate Yehuda. In this program children ages 9-13 tutor seniors at computer and internet skills, and together, the young teachers and their old learners write an electronic book describing a chapter in the personal history of the senior tutee. Thus, the element of reciprocity, wherein children tutor the seniors at computer and the IT and learn from the seniors about the past, becomes a key element in this project.

The Model

The Alon model, developed in light of our work 1998-2001 is a tri-stage model including the following: 1) The Preparatory Stage 2) Tutoring 3) Evaluation and Reassessment.

1. The Preparatory Stage

Young teachers: Training in tutoring skills: breaking down a topic into sub- topics, learning communication skills, acceptance of the other, distancing oneself from prejudice and stereotypes, being patient and

Techtolerant of lack of knowledge and slow pace, criticizing and encouraging a learner.

Seniors: A preparatory session with the seniors giving them some background about the history of the internet and its components.

2. Tutoring (10 weeks)

- Meeting once a week, for 3 consecutive hours.
- Five weeks: tutoring the seniors at computer and internet skills.
- Five weeks: writing together an E BOOK, a computerized version of a chapter in the personal history of the senior.
- This stage includes: searching the internet, encyclopedias, books.
- Scanning- pictures, documents, art work etc. all connected to the seniors past history
- Recording: recording what went on in the session by both the "young teacher" and his/her tutee.
- Reflecting over the session: each session ends with a discussion with all the participants as to their feelings and suggestions for improving the process

1. Evaluation and Reassessment

- On-going evaluation of the program
- Reassessment at the end of first 5 weeks
- Reassessment at the end of the entire program

Sample Ebooks Material

As previously mentioned, a key issue in the program is the co-writing of a"mini- ebook", based on a chapter in the personal history of the participating senior. All the seniors who participated in the project this year wrote "mini ebooks" based on their past history. Most of the seniors chose stories connected to major events in their lives. The children were learning history from living resources, and they were taking part in its recording. They were fascinated, captivated by the personal element of the stories and at times ecstatic about their new role as "history writers".

Sample 1: A chapter from an ebook written by "Zip" (AGE 65) and "Y" a boy in 6th grade.

Chapter I : The Nurse

Jerusalem, 1936. It's the time of the *MEORAOT* shootings and acts of terror.

We live in a southern neighborhood, not far from Beit Zafafa.

My mother went to a hospital in the city (Jerusalem) to have me delivered.

Inlight of the shooting, getting to Hadassa Hospital on Mount Scopus, was impossible.

A maternity ward was set up in the center of the city, and there I was born-MAZAL TOV (congratulations-Hebrew)

Fifteen minutes after my mother gave birth to me, a red headed baby girl, a terrorist's head appeared in the window.

My mother paniced. Her hands were paralyzed.

My father went looking for a nurse in Beith Zafafa.

Y who has been working with Zip was stupefied. "Why didn't they give you formula and that's it? He asked. "Why go and look for a nursing woman?" Zip gave Y a lesson in history. She told him about the very many things that abound nowadays, but which didn't exist sixty-some years ago.

Sample II: An excerpt from Shaul's digital book.

Shaul was born in Argentine in 1930. Here is the first chapter from his digital ebook written together with A, a 6th grader.

It's 1936, my first day in first grade ; I am going out of my parent's home, walking for about 500 meters and now I am waiting for the tram to take me to school. The distance is 4 kms. My father is taking me to school, on my first day.

My father is teaching me how to get on the tram, how to pay and where to get off.

The ride lasts 25 minutes.

On the second day I am doing the same, only this time I am riding alone.

I keep looking through the window in great fear : lest I'll get off at the wrong stop.

But then as I am looking out of the window I see my father riding his bike just behind the tram. I am relieved. I arrive at my school.

Today , its very different. My grandchildren don't have to worry about a thing. A bus comes to pick them up and a twenty kms. The ride lasts no longer than 20 minutes. Life on the whole now a days is much faster, much more stressful. I wonder whether today's generation enjoys the beautiful things I used to enjoy when I was young. I used to watch the huge locomotives let out the black smoke unto the sky and whistle...

Well, I do think they'll (my grandchildren) will be successful as they have better tools than those we had.

Mid-Project Comments from Participants

About half way through the project this year, we held a special meeting where we recorded *older learners'* and *young teachers'* comments. Though a short recording session was held at the end of every session, we felt that more time should be devoted to this process. A sample of the comments and suggestions follows:

YOUNG TEACHERS	OLDER LEARNERS
I learned a lot from R's story. I learnted things I never knew about Israel's war of Independence. I never knew that the Kibbutz' s Children had to be evacuated. Writing together was most interesting. *M. 6th grade*	*I hoped to get more as far as internet skills are concerned. But writing my own personal story and searching the internet got me very involved. I am getting things I never thought I would know.* *R .60+*
I got to know J. better through her personal history and the story we are writing together. *N.5th grade*	*My intellectual abilities aren't as good as they used to be. I am learning sort of slowly. Because of these meetings my understanding is getting better. My teacher (5th grade) has much patience. She "opened my head" (a Hebrew expression, meaning she "got my brains working") Though I don't own a computer, I know now how to digest it.* *J. 75*

YOUNG TEACHERS	OLDER LEARNERS
I learnt much more about R. through her story. *N. 5th grade*	*I don't compete with the other learners and I don't compare myself with their progress. I am working at my own pace. I have a computer at home but I don't even touch it. I did expect to be able to type on my own...* *R 55+*
Grandma's personal story is most interesting. I have never heard it before. We are making great progress. *K. granddaughter* *5th grade*	*At this stage I am feeling much better. I know how to use the mouse and feel I gained mastery over it. I have made much progress but still lack much knowledge* *M.65+*
I know more about the Kibbutz and its history. I am learning about my family as my tutee is my grandmother's neighbor *P. 8th grade*	*From one meeting to another I am more and more satisfied. I feel good. I enjoy the work greatly. I still don't know everything. I would like to know more I would like to master the Office package better.* *Sh. 65+*

YOUNG TEACHERS	OLDER LEARNERS
Today we concentrated on her personal history. We wrote it using PowerPoint. *It's so very interesting as if one was reading a thriller. I wanted to know more and more. She is using terms and words I have never heard and when I ask her what they mean, she says: "wait" [and thus suspension is built]. I am right handed and she is left-handed. She keeps moving everything to the left side and I keep moving things to the right side. In short we are having a great time.* *Y. 6th grade*	*I find it so very interesting learning about how " my teacher" perceives me.* *His perception of me is of a totally different dimension. I would like to get a written summary of the work we have done in the internet. Right now I am so absorbed in writing my story that I can't concentrate on internet skills.* *Z. 65+*
She was so busy writing her story all the time, that I felt useless. *I hardly had a chance to help. Because of her I learnt how to use a scanner and download pictures.* *D. 5th grade*	*I enjoy so much the story I am typing. The very fact that I discovered that I can type... what a discovery! However, apart from typing nothing really attracts me. I am not interested in anything else, including the internet.* *I enjoy so much writing my story, the "then" story. I find it so exciting. I felt time was flying by. I wanted to print the pictures, but had to stop..* *A. 70+*

YOUNG TEACHERS	OLDER LEARNERS
These meetings, two hours each are too short! *A. 6th grade*	*When we started planning the e book, "my teacher" and I, we decided to write the story of a real group of youngsters in my time, when I was at these youngsters age. The problem is that we are nearing the end of the course and there is still so much to be done, we mustn't stop.* *M. 70+*
Sh. didn't bring her work on the story as requested, but we discussed the situation today and from that point we went to discuss the situation in those days *S. 6th grade*	*Those amongst us, who underwent the very difficult times prior to the establishment of the State of Israel, find it very difficult to pass on this chapter in our history to the young ones. I find coming here and learning fantastic. But remembering those days I find most difficult. Teachers like those who are tutoring us are hard to find.* *These youngsters are so patient and teach us as if they were qualified and experienced teachers.* *Sh. 70*

YOUNG TEACHERS	OLDER LEARNERS
It has been really great. His story... how his parents came here... very interesting... I also learnt about myself that I am really great... *D. 5th grade* *Sh. really knows a lot. I think he could really teach his wife.* *G. 5th grade*	*I agree with most of the comments made so far. I wrote, by hand, my life story at home and my wife typed it for me. When I came here my teacher asked me to continue typing it. Part of it, he, the young one typed and then prompted me to continue and each time I touched the keyboard I felt I was typing faster. Today I finished typing the story. It's a great feeling.* *A. 60+*
	I feel I have joined the Global Village, this is a great feeling. Now its all up to me, no more excuses. When I watch the TV and see WWW written I don't fret. Now I have to teach my wife. *Sh. 70+*

Debunking Prejudice

The work of the children with the seniors helps debunk unfounded myth and prejudice. The Israeli society is a very torn society. It is torn between religious and non-religious Jews, Jews and non–Jews, Ashkenazi and Sepharadic Jews, young and old and the very young ones and seniors. In such a deep situation of rift and alienation, there is a danger that each party will close itself to the other parties, become intolerant and prejudiced of other parties. Volunteering and giving to other segments in population, helps to mend the rift and prevent the growth of prejudices. Getting to know others through giving and receiving—learning from the Third Agers about their personal history—helped in creating a common denominator and a real dialogue as well as to the debunking of prejudices.

We asked the "young teachers" what they thought about the Third Agers prior to working with them and how their view of the seniors changed in light of their work. Here are some of their comments:

- I thought seniors aren't interested in the same things I am. I found that they do. Both Sh. And myself are into mysticism and baking. —P.(girl) 8th grade.
- We share the same areas of interest : we enjoyed surfing the internet and reading material we searched. I thought all seniors were interested in is knitting. —Z. (boy) 5th grade.
- I thought they (the seniors) aren't interested in computers and the internet but it so turns out that they are. —N. (girl) 6th grade.
- I thought they were terribly boring. But they aren't. They can work a computer. —A. (boy) 6th grade

The Advantages of Learning from Children

We wanted to learn from the seniors whether there was any advantage in learning computer and internet skills from young children, or it was just a nice gimmick. We decided to ask our "old learners" what was the advantage of having children as tutors. Here are some of their responses:

using PowerPoint she said that she would like to start the second

- The self confidence of the children and their satisfaction as they succeed in teaching us, the adults. —J. 70+
- Its easier to open up to children. —M. (65)
- The children is born from the computer… they give themselves totally… —Z. 65+
- If we were to be tutored by a trained teacher I would not come.. the spontaneity of the children…their flow…these are great things… but it also has its disadvantages : the children aren't that skilled in clarifying concepts. But this adds interest and fun. Besides there are always two trained teachers (grown ups) supervising the whole operation, so if there is a need we could always ask for their help. –R 55+
- There is much tenderness in the young child. I feel so relaxed working with a young child its great. I don't fret when I make a mistake. I tell my "young teacher" I don't know and the child simply accepts it. –A. 70+

Problems and Difficulties Encountered

Even though on the whole the program was very successful we encountered a few difficulties:

- **Tiredness on the part of the young teachers:** As previously mentioned, we have lengthened the course duration, from 5 meetings to 10. It seems that for some of the young children this was a bit tiring. In the 7th session, two of the "teachers" were absent. One of the learners (A) whose teacher didn't arrive was very upset and expressed her disappointment quite loudly.

- **Over familiarity:** These meetings between the very old and the very young brought forth an atmosphere of closeness and familiarity. It so happens that after some time a youngster or two misconstrued this "family atmosphere" and forgot their manners, using too familiar language. The following is an example of such instance: A learner finished her first chapter

chapter, in sort of a "just kidding " mood her "young teacher" said: "I hope you'll do it with someone else".

- **Less structured method of teaching and the ability to clarify concepts and terms:** The "young teachers "had some difficulty explaining and clarifying terms and concepts. Doing rather than speaking and explaining is the youngsters strong point. Another problem related to the one mentioned above, is the pace at which the youngsters taught. Very often they went too fast over the material and had difficultly restraining themselves.

- **Giving homework assignments:** Giving preparatory assignments for the "young teachers" and assignments to practice what was learned in the session to the old learners. There was too much satisfaction about the way the course was conducted, that the two teachers, who supervised the entire operation, didn't at times realize the need for the aforementioned assignments.

- **Lack of consistency of recording:** At the end of the first 5 meetings the two supervising teachers demanded that the participants both children and seniors record their work and impressions on weekly basis. From the 6th session on, the teachers were less demanding and not all the participants bothered to write a detailed description of the work done and their reflections.

- **Meaningful reflective processes:** The young teachers had some difficulty fully understanding the reflective process and its importance. Very often they resorted to summarizing what was taught or learned instead of describing inner processes they underwent.

Summary and Discussion

The success of this program stems from the following guiding principles:

- **Mindful use of technology:** When a new technology becomes prevailing it brings about many changes: changes in ways of thinking, in methods and tools for thinking and in social processes and structures. We often hear that the new Information Technologies are responsible for the digital divide and as such increase the ever- widening gaps in society.

  This paper describes the opportunity to minimize the gaps in society by using these very technologies. I maintain that mindful use of the IT, based upon value oriented pedagogic approach focusing upon volunteering, cooperation and the acceptance of the other, will give us the tools to bridge societal gaps, create new caring communities and establish innovative models of closeness as opposed to individualism and alienation.

- **Careful preparation work:** From our work 1998-2001, we learned that there was much need for thorough and careful preparation work, to be done with the "young teachers" prior to the actual teaching itself, during the teaching and an in depth summation session.

- **Reciprocity is a key element:** A good program is a program in which people are both giving and receiving. Both parties, children and seniors, function both as teachers and as learners. The children tutor the seniors at computer and Internet skills and the seniors teach the young ones a lesson in history. The children and the seniors write **together** a computerized chapter based on the personal history of the senior tutored. **Together** they surfed the Internet in their quest for information. **Together**

they scanned pictures from albums and documents archives, related to the senior's life story.

The seniors don't function only as receivers of technological skills mastered by the young ones, but they are also contributors to the "young teachers" from their vast knowledge and experience. Reciprocity was and is manifested in many ways in this program.

Conclusion

M. a fifth grade pupil, had the following to say: "I had a lot of emotional difficulties this year. But my "old lady" listened to me and "fixed" my head. Each meeting with her was like walking into a beautiful land."

When we started out the project in 1998 we thought that the main beneficiaries from the project would be the seniors: they would be tutored at computer and Internet skills. For two first years 1998-2000 we limited the scope of the program to teaching by the children of these aforementioned skills. After the first two years we realized how much the children were to gain from this program and we expanded its scope to include a lesson in history and a lesson in reciprocity.

A folk saying maintains, and I am quoting rather freely, that when an old man dies, an entire library is set on fire. In this program libraries are saved and the young children become the curators of libraries endangered.

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