Department of Commerce
Technology Opportunities Program

Technology Goes Home

Evaluation Reports

Center for Social Policy
John W. McCormack Graduate School of Policy Studies
University of Massachusetts Boston

December 2003

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Mr. Don Druker
TOP, Room 4096
1401 Constitution Avenue, NW
Washington, DC 20230

December 11, 2003

Dear Mr. Druker

It has been our pleasure to serve as evaluators of the Boston Digital Bridge Foundation's Technology Goes Home program for the past two years.

Center for Social Policy (CSP) staff have been engaged in a comprehensive evaluation of the program since the spring of 2002. In addition to working closely with TGH staff to refine methods and implement lessons from the findings, evaluation methods utilized thus far have included the following:

- Site observations at both neighborhood and school-based programs;
- Focus groups with front-line providers from both models (TGH and TGH@school);
- Focus groups with former program participants, adults and children;
- Analysis of feedback data collected from participants during class sessions;
- Pre- and post-program participation skills assessments; and
- Pre-, post-, and follow-up questionnaires assessing program goals, achievements, and satisfaction.

All of these methods are designed to assess achievement of program goals, as well as to ensure successful service delivery approaches. Enclosed please find copies of all of the prepared as the product of our ongoing assessment. The attached contains the following:

- Executive Summary, November 2003, providing a brief overview of evaluation results thus far.
- Appendix A: Neighborhood Coordinators' Focus Group Summary, November 2002
- Appendix B: Class Observations Report, March 2003
- Appendix C: TGH@School Satisfaction Check Summary, May 2003
- Appendix D: Satisfaction Check Summary, May 2003
- Appendix E: Teachers' Focus Group Summary, May 2003
- Appendix F: Annual Report, June 2003
- Appendix G: Participant Focus Groups, Summary, September 2003
- Appendix H: Report on Follow-Up Interviews with Participants, October 2003
- Appendix I: Class Observations Report, December 2003

Appendices A and E are the results of focus groups with those implementing TGH one the front lines. Appendices B and I report on site observations conducted in TGH classrooms. Appendices C and D provide feedback gathered from participants during informal class sessions. Appendix F is an annual report containing pre- and post-participation quantitative data. Appendix G provides information gathered directly from participants, in three focus groups. Finally, Appendix H presents quantitative data gathered during follow-up interviews conducted six months after participants completed the program.

As detailed in the reports, TGH is effectively training families. The program successfully builds parents' and children's computer knowledge, and families interact and change through TGH participation. Participants expand their knowledge of computer technology, and strengthen relationships within their family, with other families, and within their communities. Program participants are overwhelmingly satisfied with the training. The program environment is conducive to both learning and building connections within and between families. Teachers offer students a great deal of individual attention, patience, and ongoing encouragement, and are able to teach to a variety of skill levels.

As you will see in the attached reports, the outcomes and evaluation methods originally proposed in the TOP grant application have evolved with the program. When we first became familiar with the program in the summer of 2001, we conducted some initial explorations of program content, goals, and results. Through that process, we developed an evaluation design proposal that became the blueprint for our work. During the course of the evaluation, our learning has also resulted in changes to that plan. As the program matures and our findings become clear, we shift methods to ensure that we are gathering information on the most current and relevant issues, as well as overall outcome achievement.

Please feel free to contact me if you have any questions about the enclosed material, or the overall evaluation process.

Sincerely,

Donna Haig Friedman, Ph.D.
Director
Center for Social Policy
McCormack Graduate School of Policy Studies

Technology Goes Home Evaluation – Executive Summary

Technology Goes Home (TGH) is an innovative program designed to bridge the digital divide by bringing technology into low-income families' homes. This Boston Digital Bridge Foundation (BDBF) program strives to prepare adults for employment opportunities and to help children improve academic performance by offering computer training and equipment to families in Boston neighborhoods and schools. Classes are offered in groups, with parents and children learning together in order to strengthen families and build community as well as skills. Neighborhood programs are operated in six communities through Neighborhood Technology Collaboratives, coalitions of community-based organizations. These coalitions select participating families, and provide training, practice lab space and ongoing support. The TGH@school program uses a similar model through which parents and their children participate in technology training delivered by fourth-grade teachers.

For the past year, the Center for Social Policy (CSP) staff have been engaged in a comprehensive evaluation of the program. In addition to working closely with TGH staff to refine methods and implement lessons from findings, evaluation methods utilized thus far have included the following:

- Site observations at both neighborhood and school-based programs;
- Focus groups with front-line providers from both models (TGH and TGH@School);
- Focus groups with former program participants, adults and children;
- Analysis of feedback data collected from participants during class sessions;
- Pre- and post-program participation skills assessments;
- Pre-, post- and follow-up questionnaires assessing program goals, achievements and satisfaction.

This summary report outlines CSP's evaluation findings thus far.

PROGRAM GOALS

TGH's original goals included developing and implementing an effective program to select and train low-income families for distribution of computers to homes in a manner that encourages:

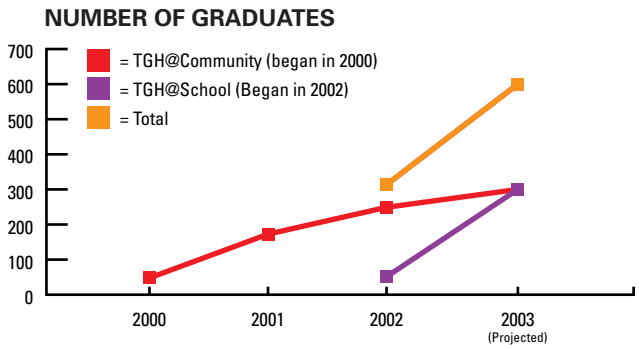
- Increased Community Collaboration and Cooperation;
- Enhanced Employment Opportunities for Adults; and
- Improved Academic Performance for Children.

FINDINGS

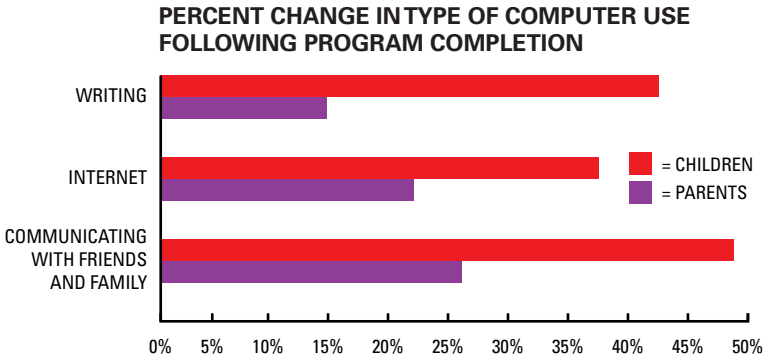
Evidence collected thus far in the evaluation process clearly demonstrates that:

- **Families are interacting and changing through TGH participation.** Participants are expanding their knowledge of computer technology, and strengthening relationships within their family, with other families, and within their communities.
- **The program environment is conducive to both learning and building connections** within and between families. Teachers offer students a great deal of individual attention, patience, and ongoing encouragement, and are able to teach to a variety of skill levels.
- **Families become closer through the shared experience of learning together.**
- **Families also develop strong connections with community agencies,** seeking support from TGH Coordinators even after program completion. Some participants report forming community with the other TGH graduates.

PARTICIPANT NUMBERS



TECHNOLOGY UTILIZATION



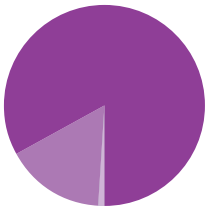
PARTICIPANT DEMOGRAPHICS

- **92% Women**
- **On Average Children Are 12 Years Of Age**
- **60% African American, 25% Latino**
- **55% With High School Diploma Or Less**
- **60% Employed**
- **65% Earn Less Than $20,000 Per Year**

PROGRAM SATISFACTION

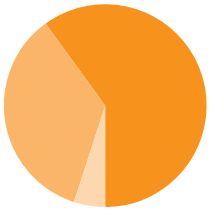
Participants rated the program and its impact in various areas:

Program Satisfaction



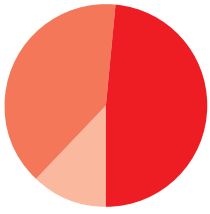
Very Satisfied	84%
Satisfied	15%
Other	1%

Effect on Computer Skills



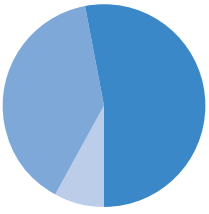
Very Strong	60%
Strong	35%
Other	5%

Influence on Connection to Community



Very Strong	48%
Strong	39%
Other	12%

Effect on Child's School Performance



Very Strong	53%
Strong	39%
Other	8%

RECOMMENDATIONS

We encourage the BDBF to build upon this success in order to meet the program's longer term goals of impacting work and school performance, by:

1) **Decreasing the administrative burden** on Coordinators and Teaches so that they can focus most of their energy on teaching and building relationships;
2) **Providing alumnae support** through funded Alumnae Coordinator positions to work with TGH graduates on career planning and child academic supports;
3) **Creating structured follow-up programs** through which TGH graduates can continue to build skills and link with community supports as they improve their lives.

Through these programmatic changes, TGH will achieve its long-term goals of improving the lives of low-income families and the community as a whole.

"The program gives hope to the residents and the community." – A TGH participant.

APPENDIX A

Neighborhood Coordinators' Focus Group

November 5, 2002

Center for Social Policy
McCormack Institute, University of Massachusetts Boston

Technology Goes Home
Neighborhood Coordinators' Focus Group
November 5, 2002

Summary

Introduction

The following report presents the Coordinators' perceptions of the program, including their impressions of the components that are working well and those that could be improved. During the meeting, Coordinators discussed the program's impact on participants; programmatic concerns; and relationships, within communities, between communities, and with the Boston office. As these staff represent and implement the program on the front-lines, their views are important to the success of TGH. The following summary analyzes the data gathered at this focus group, toward our goal of assisting TGH to best achieve its mission.

Participants:

The focus group was attended by representatives from most TGH communities. Attendees represented:

- Allston/Brighton,
- Codman Square,
- Grove Hall,
- Lower Roxbury; and
- Mission Hill.

The only community not represented was:

- Uphams Corner.

Themes:

Overarching Themes

- Families are gaining a great deal from the program – not only computer knowledge but also community integration. The training is working.
- There are numerous concerns around issues of communication and resource availability. These administrative matters will need to be addressed as the program goes to scale.

Impact on Families

- Families are interacting and changing through their participation. They are relating to and supporting one another. Parents and children are growing closer to each other. As one Coordinator stated, "some parents do it for their kids, but in the end realize that they learned more than they had expected."
- Families are also developing strong connections with community agencies. They seek support from Coordinators even after program completion.

- Upon completion, families want to give back to the program. There is active alumni participation. Most families complete the volunteer requirement. As one Coordinator stated, "volunteering adds validity to the program. Former participants are the program's best recruiters."
- As the program continues to grow and the number of alumni expands exponentially, Coordinators find it difficult to provide ongoing support. Following up on volunteer commitments and creating meaningful volunteer opportunities is challenging in this environment.
- While Coordinators are committed to working closely with program participants and alumni, time is not available to provide substantive support. Although many families need case management and Coordinators would like to provide it, they do not have the capacity to offer this level of assistance.
- In some cases, program changes have resulted in decreasing resources for families. For example, in past years families received unlimited Internet access for an entire year. Currently they receive a limited number of hours; while this allocation may last some families the whole year, they no longer have the freedom to explore the web without concern for time limitations. This point was also made in regard to the age of the computers the families are receiving. Students receive computers using past versions of software, after learning current versions in class. In some cases, these changes have led to decreased trust among families as a result of their expectations not being met. Resource and capacity cuts negatively impact families.

<u>Programmatic Issues</u>

- The training itself works wonderfully.
- Community building aspects of the program are also working well.
- Participant diversity adds to the learning experience. As one Coordinator said, "differences among participants enrich classes."
- Participants are seeking ongoing, post-TGH training. The growth in this area is necessary and positive.
- Coordinators and communities benefit from autonomy at the collaborative level.
- All Coordinators report that they feel extremely overburdened. As a group, they reported that they require additional time and resources in order to do their jobs well. Due to limited resources, they cannot provide individual support while working with an ever-growing pool of participants and alumni. At the current resource level, it is difficult to maintain intimate connections with families, particularly after program completion.
- Issues around inconsistent provision of resources (see last bullet under Impact on Families) have also impacted Coordinators' confidence in the program.

<u>Relationships</u>

Within Communities

- Through TGH, families are getting involved with local organizations. In some cases this involvement has been at the board level.
- Collaboratives work best when they were in existence prior to TGH. Those set up to respond to the TGH RFP seem to be struggling more than those that have been in place for longer.
- Collaborative meetings are productive when attended by service provider, rather than management, staff. Managers tend to get caught up in turf issues, while staff can more often focus on famlies' needs overall.
- One community's lead agency is very supportive. In several other cases, however, this is not the case. At times, participation is scarce.

- Some collaborative members participate, as one Coordinator said, “for show rather than substance.” Funding raised doesn't always trickle down to the program. Due to competition and politics between agencies, in many cases, a truly collaborative spirit is lacking.
- Coordinators find it challenging to maintain the Collaborative. Again, lack of resources was cited as an issue. In addition, there is not enough time to prepare grant applications and run the program; but in order to run the program, additional (grant-raised) funds are necessary.

Between Communities

- Coordinators benefited from the opportunity to share accomplishments and challenges. They enjoy working together and would appreciate more opportunities to learn from each other. Best practices knowledge would be particularly useful.
- Again, resources are an issue. The Coordinators would like to build relationships with one another, but feel too strapped to give much energy to this pursuit.
- As external funding sources are limited, communities are competing for these funds. Coordinators would like help leveraging resources.
- Some expressed discomfort with cross neighborhood comparisons. Collaboratives could benefit from an environment in which they were encouraged to share ideas, rather than feeling like they were competing with each other.

With the Boston Office

- Coordinators are appreciative of their autonomy at the local level.
- Coordinators view central office staff as having grown, increasing in numbers and resources. There is, however, a lack of knowledge about how resources are allocated between the central office and communities, as well as a perception that the Boston office has a great deal of funds while communities are struggling.
- As in any program with multiple sites, communication between Coordinators and the Boston office is complicated. As the Boston staff grows, this becomes more of an issue. With program growth, coordinators miss Ed and Steve’s attention, finding them more difficult to access and communication more complex. This issue is exacerbated by a feeling of competition with the tgh@school program.
- Coordinators would benefit from additional avenues for contributing to decisions about resources and program direction. At times, Coordinators perceive a lack of support from Boston staff. There is a sense from Coordinators that the effort required to implement the program is underestimated. They also find it difficult to respond to programmatic changes, particularly decreases in resources, when their input has not been solicited previously.
- Coordinator retention has been difficult. This is viewed as stemming from the lack of support and resources available to the position.
- Finally, Coordinators expressed discomfort around funder-participant relations. They feel uneasy about, as one Coordinator put it, “showcasing families” at events like Evening on the Bridge.

Recommendations

TGH is in a growth phase. As the program model expands and changes, growing pains are to be expected. It is not surprising that those implementing the original, community-based TGH model, are feeling unattended to. From their experience working directly with families, these

front-line staff members have important contributions to make to future-growth planning. Addressing the communication and resource issues detailed above can be straightforward and uncomplicated. The effort will pay off quickly in improved morale program-wide.

Specific suggestions include:

- Systematize opportunities for including a Coordinator perspective as part of the internal planning and decision-making process. This role could take the form of a Coordinator representative who is invited to participate in internal meetings. It could also encompass regular e-mails requesting input on potential program changes.
- Update Coordinators regularly about ongoing funding and resource concerns. By making them feel a part of the process, they will be able to own scarcity issues program-wide, thus avoiding feelings of top-down decision-making that leaves them stretched too thin and feeling under-appreciated.
- Create regular opportunities for Coordinators to share with one another. Potentially, schedule open time (at least 45 minutes) at the monthly meetings. Have Coordinators suggest topics for these sessions, or just leave them open for exchanging ideas and gaining support.

APPENDIX B

Class Observations

March 4, 2003

Center for Social Policy
McCormack Institute, University of Massachusetts Boston

Technology Goes Home

Class Observations
March 4, 2003

Preliminary Results

Introduction

The following report presents the results of Center for Social Policy observations of TGH classes between August and December 2002. Observations were conducted twice at each site: once early in the ten-week session, and once toward the end of the same session. Observers focused on teaching and learning; relationships within and between families as well as with the community as a whole; and the educational environment.

Sites:

Class observations were conducted in most TGH communities and two schools. The two schools were selected to represent the TGH@school pilot. Attendees represented:

- Allston/Brighton,
- Grove Hall,
- Lower Roxbury (two classes, one bilingual),
- Mission Hill,
- Uphams Corner,
- Hale School; and
- Higginson School.

The only community not observed during this period was:

- Codman Square.

Themes:

Overarching Themes

- The program environment is conducive to both learning and building connections within and between families.
- Implementation varies considerably across models. While differences are most significant between the school- and community-based programs, differences between communities (e.g., whether Coordinators also serve as Instructors) also impact students.
- In the pilot phase, the school-based model concentrates more on student learning, paying less attention to parents' roles and community interaction.
- Within the community-based program, physical environments and the level of focus on relationship building vary considerably across sites.

Participants

- While all of the observed classes were primarily made up of mothers and children, fathers took part in the classes in Allston/Brighton, Lower Roxbury (both classes), Mission Hill, and Uphams Corner. There were no male parents in the two TGH@school classes observed.
- As expected, family ethnicity varied by community. Most of the participants at Grove Hall, Lower Roxbury, Mission Hill, Uphams Corner, and both school classes were African American. Allston/Brighton, Lower Roxbury (bilingual class), and Mission Hill had the highest proportions of Latino participants. The only white participants were at Allston/Brighton. Allston/Brighton also had the only Asian participants.
- The youngest children participated in Lower Roxbury, Mission Hill, and Uphams Corner. Mission Hill also served the oldest children.

Teaching and Learning

Community

- In almost all cases, students were active and engaged across communities and sessions.
- Most instructors appeared to be dynamic, connected to students, and highly approachable. Teachers utilized humor and a casual style that appeared successful in engaging students.
- Teachers offered students a great deal of individual attention, patience, and ongoing encouragement.
- In classes where the Coordinator did not also serve as Instructor, students appeared comfortable with the Instructors.
- Students in the bilingual class had the most difficulty staying engaged. Teaching this class seemed to be the most challenging. At times, translating the English curriculum was complicated, as some computer terms were not readily transferable.
- Language barriers affected learning in a few sites; in some cases students needed to serve as translators for their parents.
- In some cases, children participated more than their parents.
- The use of games as instruction appeared fun and seemed to help with engagement; however, at times, competition detracted from learning.
- In one class, the trainer was a former student, this train the trainer model seemed to be working well.
- Students appeared confused by some of the wording in the curriculum.
- Where students were required to take exams, they appeared anxious.

School

- Pilot classes from the @school model appeared less structured. In at least one case it was unclear whether there was a lesson plan.
- The classroom atmosphere was less formal, with nonaffiliated personnel present and people coming and going. This seemed to detract somewhat from learning.
- Students did not appear to have handbooks. In some cases there was also no visual instruction and no handouts.
- In some cases, there were not enough computers for all of the students. Consequently, parents watched while their children completed the hands on tasks applying their new learning.

- The school curriculum was the focus of at least one class. At that session, many parents were absent; those present worked individually with the teacher and their child on the child's school project

Parent-Child Relationships

Community

- Parents and children worked together on assignments, jointly learning and sharing.
- There were many opportunities for children to help their parents learn a task.
- Parents also gained from the opportunity to observe their child in a learning environment. They were able to then talk with them about any issues that arose.
- By the second visit, observers could see the impact of learning together on the parent-child relationship. In some cases the relationship became more balanced because the child was more knowledgeable than the parent about the subject matter. Both parents and children seemed to appreciate this opportunity for the child to take the lead.
- Through working together on projects, parents and children appeared to be building a relationship of mutual learning.
- The country of origin report encouraged children to learn about their parents' identities.

Schools

- There appeared to be less interaction in the school-based model. The learning was focused more on students than parents, particularly where everyone did not have their own computers.
- Children seemed to take the lead in the learning. Parents' roles were often more as observers.
- The focus appeared to be more on strengthening parents' connections to the schools, rather than on building parent-child relationships.

Relationships Between Families

Community

- These relationships varied among communities. In some areas the children made connections across families, while in others parents were more likely to interact.
- Games appeared to encourage interaction across families.
- Cross-family interactions tended to occur when there was some commonality, e.g., ethnicity or language. At times this dynamic seemed to lead to isolation of some families.
- In some cases, there was less interaction between families where there was a separate (non-Coordinator) Instructor.

Schools

- There appeared to be less interaction between families in the school environment. Very few parents were observed interacting.
- Children seemed to connect with their friends from the school day.

Community Connections

Community

- In one community, where guest speakers presented community programs, students appeared to be very comfortable sharing needs and experiences, and reporting that they had accessed services.
- In one community, there appeared to be tension between the program and the host agency. Families were impacted by pressures around issues of space and cleanliness.
- In communities where the Coordinator did not also serve as Instructor, families appeared to be somewhat disconnected from the program as a whole. In at least one case, there was tension between students and the Coordinator, whose formal style was quite different from that of the Instructor.
- In one case students were anxious because of course requirements such as school progress reports and close oversight.

Schools

- There were no connections of this type observed in the two classes.

Learning Environment

Community

- Resources appeared to vary considerably across sites.
- Some labs were much more spacious and conducive to learning than others.
- In some cases there were not enough working computers for all students, detracting from the learning experience. Efforts to fix nonworking computers sometimes took time away from class activities.
- In some areas where there were labs with plenty of working computers, the physical set up detracted from community interaction. In these cases, teachers could not see students and/or students could not see one another.

Schools

- The computer labs were tiny. There were not enough computers for all at one school, and many interruptions and distractions in both classes.
- The labs offered limited room to move around. Spaces were crowded.
- Parents were required to sit in child-sized chairs.

Recommendations

The observations confirm that TGH is providing a high quality and valuable service. Families are learning to use computers while making connections with their communities. However, with the dispersed service-delivery model come challenges. It is not surprising that variations in implementation lead to varying outcomes in particular areas. In addition, the TGH@school pilot provides an opportunity to strengthen both models.

On the next page, we provide some simple suggestions for shared learning across models and communities.

- Create opportunities for continued learning across sites and models. Offer Coordinators and Teachers opportunities to share with one another, and ultimately implement one another's ideas. For example, the Coordinator utilizing outside speakers to present community programs could share this model with others. In addition, a semi-annual gathering for Coordinators and Teachers could offer Teachers the chance to learn from the experience of those who have been implementing the program for several years; Coordinators could also benefit from the new ideas of those that bring fresh perspectives to the program.
- Improve physical resources throughout. Optimal class environments would offer working computers for all students (parents and children), minimal interruptions, and space that encourages communication between families and with the Instructor.
- In communities where there is an outside Instructor, ensure strong communication and positive working relationships between this individual and the Coordinator. Instructors should also be connected with the overall goals of the program, i.e., a focus on community building as well as learning.

APPENDIX C

Satisfaction Check Fall 2002

May 1, 2003

Center for Social Policy
McCormack Institute, University of Massachusetts Boston

TGH@School

Satisfaction Check Fall 2002
May 1, 2003

Summary

Introduction

The following report presents the feedback from the TGH@school participants during the Fall 2002 session. The main objective of this activity was to give the participants an opportunity at two points in time during the session to express what components were working well and those that could be improved. This activity was designed for the instructors to build an evaluative perspective throughout the session, as well as to give the participants a chance to discuss how things are working for them. The following summary analyzes the data gathered during the satisfaction check activities, toward our goal of assisting TGH@school to best achieve its mission.

Participants:

The satisfaction check exercises were conducted at the following schools:

- TechBoston Academy
- The Lucy Stone School
- The Hale School
- The Horace Mann School, and
- The Higginson School.

Themes:

Overarching Themes

- The TGH@school program was a wonderful opportunity for families to connect with their child's school and the various school activities. The participants were able to building stronger relationships with their children, other families and their child's teacher.
- The program facilitated the involvement of many parents in their child's school assignments by incorporating the school projects into the TGH@school curriculum.
- Participants expressed a need for childcare and dinner or snack during the program. Some sites provide these resources while others do not.

Teaching and Learning

- The participants expressed an appreciation for the dynamic, knowledgeable, and patient instructors across all of the sites. Some participants expressed how

important their instructor's organized structure was for their learning experience. Many said it was a very supportive learning experience for them.

- Many participants saw this as an opportunity to build on the skills that they already had, while others were learning about computers for the first time.
- Some participants expressed some frustration with the variety of skill levels in the class. Some children were very advanced and were able to help teach the class and this gave the parents an opportunity to learn directly from their children which most enjoyed. Other participants felt that they need a slow pace or more hands on experience to fully understand the lessons.
- Some participants felt that incorporating school projects into the program was a wonderful opportunity for parents to get involved with the child's school assignments. This experience helped the children to do better in school.
- Some participants felt that the parents need to be incorporated more into the hands on learning activities. Some participants expressed a need for more support with the parents in their learning.

Course Content

- Many of the participants said that the curriculum content was helpful and met most of the needs the different learning styles within the program. The following lessons seemed most beneficial: Microsoft Word, Internet, E-mail, and hands on application of lessons.
- The participants really enjoyed incorporating the school projects in various ways throughout TGH@school.
- Some participants expressed a desire for more "child friendly" activities to keep the children interested. At times the children were bored when reviewing familiar material.
- The interactive activities were very useful for the participants and some expressed a desire for more interactive activities throughout the learning experience.
- Many participants expressed a desire to learn more about Microsoft Word, and to incorporate the following into the curriculum: Microsoft Excel and Powerpoint, typing, more troubleshooting (i.e. computer viruses, etc.), and job readiness skills.

Relationships

Within Families (Parent and Child)

- All of the participants enjoyed the family component of the program. They enjoyed spending quality time and learning with each other.
- Many parents were impressed with their child's wealth of knowledge about computers and their willingness to help the parents learn.
- The families said that they became closer and communicated more because of their participation in the program.
- The parents felt they could now relate more to what their child was learning in school.
- Some participants expressed some frustration with working together because of the different skill levels.

Between Families

- The participants felt that all of the families were very cooperative, sharing ideas, and helping each other. The families helped to make it a very supportive and cooperative learning environment.
- Many expressed that this was a great opportunity to get to know the families of their child's classmates.
- Many participants enjoyed the class activities that involved working with other families, and some participants expressed a desire for additional activities of this nature.

With the TGH and their community

- Many participants expressed an appreciation for the program and the opportunities it offered to their families (i.e. a computer and training, and the opportunity to work with each other, other families, and connecting to the child's school).
- Many participants expressed the value of building a strong relationship with their child's teacher through the program.
- Some participants felt that the program would have a longer term impact on the classroom if there was some way to have 100% participation of all of the families in the class. The also acknowledged the many challenges for that to be a reality (i.e families w/ computers already, and families that cannot participate for the full program).

<u>Resources and Physical Environment</u>

- Some sites identified space and equipment issues (i.e. the lab is too small, not enough computer for everyone to learn at their own pace, and a need to maintain the computers).
- Some participants identified accessibility issues with getting into the school in the evening and transportation issues.
- The provision of childcare and dinner or snack varied among the different sites, but most of the participants expressed a need for these resources as well as transportation.

<u>Class Schedule and Attendance</u>

- The comfort with the class schedule varied among participants. Some felt the schedule was fine, some wanted more time, and other felt the classes were too long and/or the days of the classes did not work.
- Some felt the attendance policy needed to be flexible allowing some flexibility for families that may have an unexpected situation to occur, or previously scheduled appointments or activities.

Recommendations

The participants contributed a wealth of valuable feedback based on their experience with the TGH@school program. This learning from participants will further the growth and expansion of the program. Many of the participants' comments are the driving force of the recommendations on the next page.

Specific suggestions include:

- The families participating in the program face many challenges to accessing this opportunity. The provision of resources for all sites to provide childcare and refreshments would minimize some of the challenges these families face in order to participate.
- Continue to develop the instructors in the following areas: their knowledge of current technology and their ability to work with both adult and child learners.
- Offer TGH@school instructors an opportunity to learn from the TGH community instructors, especially in the areas of meeting the needs of a varying skill levels in one class, and keeping the curriculum flexible enough to do so.
- Inform instructors of various ways to use the pre-skills assessment to keep the class flowing at a pace that is suitable for various levels.
- Explore ways to offer interested participants additional learning in the areas of software programs and troubleshooting that would be valuable for continued skill development. Some participant recommended computer based training opportunities for continued learning.

APPENDIX D

Satisfaction Check Fall 2002

May 6, 2003

Center for Social Policy
McCormack Institute, University of Massachusetts Boston

Technology Goes Home

Satisfaction Check Fall 2002
May 6, 2003

Summary

Introduction

The following report presents the feedback from the TGH participants during the Fall 2002 session. The main objective of this activity was to give the participants an opportunity at two points in time during the session to express what components were working well and those that could be improved. This activity was designed for the instructors to build an evaluative perspective throughout the session, as well as to give the participants a chance to discuss how things are working for them. The following summary analyzes the data gathered during the satisfaction check activities, toward our goal of assisting TGH to best achieve its mission.

Participants:

The satisfaction check exercises were conducted at the following communities:

- Allston/Brighton,
- Codman Square,
- Uphams Corner and
- Grove Hall.

The following communities were not represented:

- Mission Hill, and
- Lower Roxbury.

Themes:

Overarching Themes

- Participants are expanding their knowledge of computer technology, and strengthening relationships within their family, with other families, and within their community.
- Participants expressed a need for childcare and dinner or snack during the program. Some sites provide these resources while others do not.

Teaching and Learning

- The participants expressed an appreciation for the dynamic, knowledgeable, and patient instructor across all of the sites. They felt that the instructors were able to teach to a variety of skill levels. For most participants this experience allowed them to learn at their own speed.

- The presence of a teaching assistant proved to be important because some of the participants needed one on one attention throughout this learning experience.
- All of the participants felt that they gained more knowledge about computer technology through their participation in the program.
- Some participants were not able to keep up with the pace of the class and expressed a need for additional tutoring during the program.

Course Content

- All of the participants said that the curriculum content was helpful and met the needs of the different learning styles within the program. The following lessons seemed most beneficial: Microsoft Word, Internet, E-mail, and Troubleshooting.
- The interactive activities were very useful for the participants. Some expressed a desire for more interactive activities throughout the learning experience.
- Many participants expressed a desire to learn more about Microsoft Word, and to incorporate the following into the curriculum: Microsoft Excel, Powerpoint, and more troubleshooting (i.e. computer viruses, etc.).

Relationships

Within Families (Parent and Child)

- All of the participants enjoyed the family component of the program. They enjoyed spending quality time and learning with each other.
- Many parents were impressed with their child's wealth of knowledge about computers and their willingness to help the parents learn.
- The families said that they became closer and communicated more because of their participation in the program.

Between Families

- The participants felt that all of the families were very cooperative and they helped each other.
- Some participants felt that they formed a community with the other families while participating in the program. They were able to get to know families from their community.
- Many participants enjoyed the class activities that involved working with the other families, and some participants expressed a desire for additional activities of this nature.

With the TGH and their community

- Many participants expressed an appreciation for the program and the opportunities it offered to their families (i.e. a computer and training, and the opportunity to work with each other and other families). "The program gives hope to the residents and the community."
- Some participants said that participating in the program gave them an opportunity to connect to other resources and activities within their community.
- Some participants appreciated the opportunity to provide input and feedback to the program.
- At one site participants identified some frustration with the attitudes of the site administration.

Resources and Physical Environment

- Many participants enjoyed learning in a small class setting.
- For some sites space and equipment issues were identified as problematic (i.e. the lab is too small, not enough computer for everyone to learn at their own pace, and a need to maintain the computers).
- The location of the lab in the community was very important because it was convenient for most participants.
- The provision of childcare and dinner or snack varied among the different sites, but most of the participants expressed a need for these resources.

Class Schedule and Attendance

- The comfort with the class schedule varied among participants. Some felt the schedule was fine, some wanted more time, and other felt the classes were too long and/or the days of the classes not those desired.
- Some felt the attendance policy was too strict and did not allow enough flexibility for families that may have an unexpected situation occur, or previously scheduled appointments or activities.

Recommendations

These participants offered a wealth of feedback based on their experience with the program. Some expressed such appreciation for having the opportunity to provide input into the program through this exercise. Many of the participants' comments are the driving force of the recommendations below.

Specific suggestions include:

- The families participating in the program face many challenges to accessing this opportunity. The provision of resources for all sites to provide childcare and refreshments would minimize some of the challenges these families face in order to participate.
- Continue to develop the instructors in the following areas: their knowledge of current technology and their ability to work with both adult and child learners.
- Explore ways to offer interested participants additional learning in the areas of software programs and troubleshooting that would be valuable for the continued skill development.

APPENDIX E

Teachers' Focus Group

May 6, 2003

Center for Social Policy
McCormack Institute, University of Massachusetts Boston

Technology Goes Home@School
Teachers' Focus Group
May 6, 2003

Summary

Introduction

The following report presents the TGH@school teachers' perceptions of the program, including their impressions of the components that are working well and those that could be improved. During the meeting, teachers discussed relationships, between parents and schools, within schools, within families, and among parents; the program, including the teaching and learning process, course content, and resources; and administrative concerns. As the teachers implemented this pilot program on the front-lines, their views are important to the expansion and success of TGH@school. The following summary analyzes the data gathered at this focus group, toward our goal of assisting TGH@school to best achieve its mission.

Participants:

Attendees represented the following schools:

- Hale Elementary School,
- Horace Mann Elementary School,
- Higginson Elementary School,
- Lucy Stone Elementary School, and
- Boston Tech Academy.

Findings

Overarching Themes

- The program works well in building computer knowledge among program participants and stronger relationships between the schools and the participating families.
- The knowledge gained in the TGH@school program also carries over to the rest of the school.
- Teachers are overwhelmed by the expectations of the program and the time it takes to teach it, and there are concerns around issues of communication and resource availability.

Relationships

- TGH@school promotes stronger relationships between parents and teachers as well as students and teachers. Some parents become more involved with their child's teacher or their child's school as a result of participating in the TGH@school program. As one teacher stated, "*I got closer to this group of parents than ever before to any parent*." Another added that she got much closer to the students as well.
- Parents connect with each other through the program in most but not all schools. At Horace Mann, these connections are particularly strong. One Horace Mann teacher shared that a child said during the graduation ceremony that she was very happy that her mother could get to know and be friends with her friend's mother.
- Parents' diverse backgrounds were cited as a major barrier to better connections among adult students in the program.

- The computer knowledge gained by the children in the TGH@school program has a positive effect on other non-participating members of the school, children as well as teachers. One teacher said: "*the kids who participated in the TGH@school program helped the ones who didn't participate in the program and brought everyone up that way*." The children incorporate what they learn in TGH in other academic areas. Another teacher told this story: "*my science teacher came and told me: 'your kids knew and showed me how to do it on the computer.' To see that carry-over now and hear bits and pieces form other people who were not involved with the program is really exciting*."
- Some principals stay late in order to be present during class breaks, taking the opportunity to connect with parents. One has been particularly active, bringing snacks and attending all of the sessions.
- In some areas, the connections between parents and teachers extend beyond the classroom, to the school as a whole; but in other communities this is not the case. One teacher said, "*I have done parent involvement for 25 years, and I have never seen anything like this*." Another reported that parents were less reluctant to come to school after participating in the program.
- Some parents also develop relationships with the TGH@school program as a whole. As one teacher shared, "*one of my parents offered to volunteer for the next TGH class. That's exciting*."
- The teachers enjoy the opportunity to be more relaxed in the classroom. Because the parents are in control, the teachers can be more casual in their demeanor. Teachers also appreciate watching the parents supporting their kids. One teacher stated, "*a parent told me, 'I didn't know my kid could be so sophisticated*.'" At Tech Boston this dynamic is reversed, as the students have a much higher skill level than the adults and as such are required to patiently teach their parents.
- However, in some schools, there are tensions between the school and the TGH@school program. "*One teacher told a student not to come [to the TGH class that night] because he didn't behave during the day. And that was not fair. First, I had to make it up. Second, suddenly I was the disciplinarian*."
- The Internet is a key component that the teachers felt would really make a difference with parental involvement in their child's school assignments as well as communication between school and home. However, teachers are concerned that they will not be able to rely on the Internet as a long-term tool for communicating with families, because after the family uses the 150 hours of service provided by TGH@school it may be difficult for them to maintain an Internet connection.

<u>Program</u>

Teaching and Learning

- Some teachers incorporate school projects into the computer training. This provides an opportunity for parents to work with their child on a school project, and learn more about the educational standards for their child.
- While some teachers perceive parents getting very involved with the computer training, at times others report struggling to make sure the parents are engaged in the training. The children are familiar with the learning environment and at times do not give the parents the space to participate in the learning activities. In response to this challenge, teachers find creative ways to include the adults by giving the children opportunities to help their parents.

Course Content

- The curriculum guide is a valuable resource, because it is a reference tool that the families will have at home following the completion of the program.
- Some teachers feel that the curriculum should be modified, spending more time on software programs (i.e. Microsoft Word, Excel, and PowerPoint). While this could be a challenge for younger children, the parents have expressed interest in spending more time on these programs.
- The Internet and e-mail lessons are particularly useful.
- Other curriculum areas, such as information on the hardware and Inspiration are viewed as less essential.
- Teachers need more clarity around the goals of the TGH@school program. Some teachers question the feasibility of getting the children to use the computer for academic success while helping the parent to build computer skills for better jobs. "*Can TGH@school realistically do all of this?*" Others wonder about the appropriateness of the curriculum for young students.

Resources

- The TechBoston students are very helpful in most TGH@school classes. However, Horace Mann and Tech Boston report not fully utilizing this resource due to language barriers and the age of the high-school students.
- Teachers identify a need for childcare. Some families have to bring their other children to class, distracting them from fully participating in the program.
- According to some teachers, the lab setting is not always conducive to learning. Some labs do not have enough computers and/or the space is too crowded. Interestingly, the teachers whose schools have just one computer per family prefer this set-up because it encourages parent-child cooperation. Those with two computers per family prefer that setup because it allows everyone to do individual work.
- Some teachers recommend that TGH@school provide the printed curriculum manual for each family.

<u>Administration</u>

- Having two teachers in the classroom is a big help in teaching the TGH program. Teachers appreciate working with one another for support, learning, and the ability to provide one-on-one instruction in the classroom. As one teacher stated, "*pairing with other teachers is so important – we don't have that in Boston. The homeroom teacher was not computer savvy but she learned a lot. I won't do it any other way*!" The combination of one technology and one classroom teacher helps in incorporating TGH fully into the class, rather than it being perceived as a separate program at the school.
- There is a sense from teachers that the effort required to implement the program is underestimated. Teachers express a great deal of stress and burnout. They feel that expectations around what it actually takes to deliver the program are unrealistic. As one stated, "*it was a huge commitment on our part, being in school till 8 and having to come in the next morning ready to teach*." Time for planning and development is not sufficient. All teachers report using personal time for preparation. Teachers support decreasing the program hours; however they still require additional time for planning. One teacher recommended, "*there needs to be some time slotted in to do it all. When I am there I am there a full day. I would prefer that this program is part of the school so that I can do it as part of my school time, e.g. the planning, during the regular school hours, etc. I would like to do that during the day and I would like to have the time to do so*." Another pointed out that in a small school where there is only one fourth-grade teacher, that same individual would be offering the program each year.

- There are also concerns around communication with the administrative staff. Several teachers told stories of being asked to complete evaluation forms on a moment's notice, yet not receiving timely responses to requests for information and other supports. Teachers are discouraged about the lack of follow-through as well. They reported not being paid for several months.
- Teachers are frustrated about having to reapply for next year. They were not aware of the need to do so until very late in the year. As they have invested a great deal of personal energy in the program's success, they feel that the pilot schools should be automatically renewed.
- Teachers are concerned about evaluation confidentiality when forms were not available in Spanish. The evaluation forms are a hassle, especially when deadlines are not clear; "*evaluation was skipped over in the planning process*."
- Some teachers are confused about the number of classes a family is allowed to make-up due to absence. While expressing the need for flexibility in attendance for families, they also acknowledge a need to be fair for those families who do not miss any classes.
- Teachers stress the need for a central repository of TGH@school related materials that they can easily access. As one teacher put it, "*we need one place where we could find everything*."
- Participants feel strongly that many of the families in their schools will not be able to participate under the new purchase model. Two schools have started to think about raising money for scholarships. Teachers believe that it is important for a program designed to meet the needs of low-income families to maintain the capacity to serve the poorest families. As one teacher stated, "*getting students and parents to come was hard. Once you attach dollars to it, it makes it even harder*." Another worried that the long-term payment plan would teach families poor money management skills.

Recommendations

TGH@school is just coming out of the pilot phase. As the program expands, growing pains are to be expected. From their experience implementing the pilot, these front-line staff members have important contributions to make to future-growth planning. Addressing the communication and resource issues detailed above can be straightforward and uncomplicated. The effort will pay off quickly in improved morale program-wide.

Specific suggestions include:

- If possible, offer more planning and development time for teachers. Maintain the team-teaching model, as this provides support to overtaxed professionals.
- Systematize communication channels by building in regular meetings, outlining expectations from the beginning, and responding to requests in a timely manner. Consider creating an annual opportunity to bring together TGH and TGH@school program staff.
- Offer on-site childcare for those parents who need it.
- Keep the curriculum flexible and decrease its length. Teachers benefit from the ability to flexibly apply program content to their class needs.
- Provide an opportunity for teachers to brainstorm with one another and administrative staff around implementation of the purchase model. Creative models could be developed and buy-in could be attained.

APPENDIX F

Annual Report

June 2003

Boston Digital Bridge Foundation
Technology Goes Home
Annual Report

By: Tatjana Meschede, Consuela Greene, Michelle Kahan, and Donna Haig Friedman

Center for Social Policy
McCormack Institute of Public Affairs
University of Massachusetts Boston

June 2003

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Tables and Figures

Acknowledgments
We thank the TGH program participants who shared their experiences in multiple ways; the Coordinators and Teachers who collected data and organized meetings with families; and the BDBF staff who manage all of our evaluation efforts.

Introduction

Technology Goes Home (TGH) is an innovative program designed to bridge the digital divide by bringing technology into low-income families' homes. This Boston Digital Bridge Foundation program strives to prepare adults for employment opportunities and to help children improve academic performance by offering computer training and equipment to families in Boston neighborhoods and schools. Classes are offered in groups, with parents and children learning together in order to strengthen families and build community as well as skills. Neighborhood programs are operated in six communities through Neighborhood Technology Collaboratives, coalitions of community-based organizations. These coalitions select participating families, and provide training, practice lab space, and ongoing support. The TGH@school program uses a similar model through which parents and their children participate in technology training presented by fourth-grade teachers.

Center for Social Policy (CSP) staff have been engaged in a comprehensive evaluation of the program for the past year. In addition to working closely with TGH staff to refine methods and implement findings, evaluation methods utilized thus far have included the following:

- Site observations at both neighborhood and school-based programs;
- Focus groups with front-line providers from both models;
- Focus groups with former program participants, adults and children;
- Analysis of feedback data collected from participants during class sessions;
- Pre- and post-program participation skills assessments; and
- Pre-, post-, and follow-up questionnaires assessing program goals, achievements, and satisfaction.

Prior to presenting the latest data from the questionnaires, this report offers several evaluation findings that are consistent across the various data collection methodologies. Additionally, short reports on site observations, focus groups with neighborhood coordinators and teachers, and feedback data were completed during the year. Forthcoming reports will include data gathered from participants during focus groups; future data reports will also include pre- and post-skills assessment information.

Integrative Findings

All of the data collected thus far in the evaluation process confirm the following.

- TGH is effectively training families. Both program models successfully strengthen parents' and children's computer knowledge. Families are gaining a great deal from the program.
- Program participants are overwhelmingly satisfied with the training.
- In the area of community building, program results are mixed. Some communities and schools focus more on community interaction and thus create deeper connections, while others more strongly emphasize learning. This difference is most apparent in the TGH@school program, where some schools focus more on student learning and less on parents overall; while others work hard to develop relationships with parents, involving them in the school community.
- Resources are tight. Across both models, service providers feel overwhelmed by the expectations of the program. They also express concerns around communication with the foundation and other administrative issues.

Questionnaire Data

Introduction

This report presents information collected on 187 TGH and TGH@school participants who entered the program between June 2002 and January 2003. The report includes information on those participants who completed questionnaires at both the beginning (Q1) and end (Q2) of the 10-week course.

Most of the records were provided by the TGH neighborhood-based program. The neighborhood model offered several classes during the period, while TGH@school conducted just one round of pilot classes in the fall of 2002. Table 1 details the number of records from each collaborative and school.

Table 1: Technology Collaborative/School

Program	Q1 only	Q2 only	Q1 and Q2	Q1 and Q2 Percent of Total
Allston Brighton	5	1	28	15%
Codman Square	15	5	30	16%
Grove Hall	8		17	9%
Lower Roxbury	28	21	18	10%
Mission Hill/Fenway	7	2	28	15%
Uphams Corner/Dudley	10	1	22	12%
Hale School	1		7	4%
Higginson School	1		10	5%
Horace Mann School	1		9	5%
Lucy Stone School	1		6	3%
Lyon School			4	2%
TechBoston Academy	11	7	8	4%
TOTAL	88	37	187	100%

Demographic Characteristics

- Gender:
  - Adults: 92% female[1] 8% male
  - Children: 54% girls 47% boys

- Average Age:
  - Adults: 38 years on average, ranging from 15 to 59
  - Children: 11.7 years on average, ranging from 7 to 18
    Grade levels vary between 1 and 13 (one student attended college)

    - Numbers of Young Children (Community-Based Model Only):
      - Less than 9: Codman Square 4
        Lower Roxbury 1
        Mission Hill 2

[1] All percents presented in this report are valid percents, excluding missing information. Due to rounding, totals may not equal 100 percent.

-	Age 9:	Allston/Brighton	3
		Codman Square	2
		Mission Hill	4
		Uphams Corner	7
-	Grade 3 or Less:	Codman Square	5
		Lower Roxbury	1
		Mission Hill	5
		Uphams Corner	4
-	Grade 4:	Allston/Brighton	3
		Mission Hill	1
		Uphams Corner	3

- Adults' Primary Ethnicity:
  - African American 58%
  - Hispanic/Latino 27%
  - Asian 5%
  - White 7%
  - Other 3%

- Childrens' Primary Ethnicity:
  - African American 60%
  - Hispanic/Latino 26%
  - Asian 5%
  - White 5%
  - Other 4%

- Adults' Primary Language:
  - English 67%
  - Spanish 19%
  - Multilingual 6%
  - Bengali 1%
  - Urdu 1%
  - Chinese 1%
  - Other 5%

- Childrens' Primary Language:
  - English 75%
  - Spanish 10%
  - Multilingual 9%
  - ASL 3%
  - Chinese 1%
  - Other 3%

- Children's School Enrollment (Community-Based Model Only):
  - Boston Public Schools 81%
    - Charter Schools 3%
  - Other 16%

  (Other includes METCO placements and private schools, primarily parochial.)

- Adults' Educational Attainment:
  - No high school degree 25%
  - High school graduate/GED 31%
  - Some College/AA 29%
  - College graduates 13%
  - Post graduate work 2%

- Adults' Employment:
  - Status: 61% currently employed

    64% of all currently employed work full time (30 hours or more)

- Annual Salaries by Number of Dependents:

Table 2: Family Income

Annual Amount	All Families[2] (N=132)	With 1 Dep. (N=36)	With 2 Dep. (N=22)	With 3 or More Dep. (N=63)
Less than $20,000	63%	75%	59%	60%
Between $20,000 and $29,999	23%	22%	18%	24%
Between $30,000 and $39,000	13%	3%	14%	16%
Above $40,000	2%	0%	9%	0%

- Benefits:
  77% of those currently employed receive benefits, mostly in the form of paid vacation/personal time, paid sick time, and/or health insurance coverage.

- Length of Time at Current Job:
  Average of 40 months, ranging from less than 1 month to 360 months.

At the Beginning of the TGH Training Program

Computer Use and Training Prior to TGH Program Participation[3]

- Experience Using a Computer before TGH:
  - Adults: 62%
  - Children: 94%

    - Community Model:
      - Adults: 62%
      - Children: 94%

    - TGH@School:
      - Adults: 63%
      - Children: 96%

[2] The total N is greater than that for each of the columns by dependent because of additional missing information (i.e. of the 68 families providing income data, only 57 provided information on family size).

[3] Future reports will include skills assessment data here and in the next section. Currently records are available only for the skills assessment at program exit. Those have not been included in this report because they represent just a small portion of the total participants (N=72).

- Purpose of Computer Usage Before TGH:

Table 3: Purposes of Prior Computer Use

Purpose	Adults	Children
Communicating with Friends and Family	32%	19%
Communicating with Colleagues	11%	NA
Data Entry	33%	14%
Playing Games	44%	63%
Using the Internet	49%	43%
Preparing Budgets/Math or Other Numerical Work	8%	22%
Taking classes/Educational Programs	29%	56%
Writing for Work/School	42%	48%
Writing for Personal Use	26%	13%

- Access to Computers Before TGH Training for Those with Prior Computer Knowledge:

Table 4: Locations of Prior Computer Use

Location	Adults	Children
Community Center	17%	13%
Home	11%	7%
Library	44%	47%
Work/School	50%	88%
Through Friends and/or Family	13%	12%

- Participation in Computer Training Prior to TGH:
  - Adults: 30%
  - Children: 29%

- Focus of Prior Computer Training:

Table 5: Focus of Training for all with Prior Computer Training

Focus	Adults	Children
Word Processing	74%	58%
Internet/E-mail	40%	44%
Presentation Software	23%	38%
Data management/Spreadsheets	25%	20%
Other, mostly introductory classes or training in specific software programs	34%	34%

Program Goals

- Families chose to participate in the program for the following reasons:[4]
  - Learning 71%
  - Help Children in School 20%
  - Computer 11%
  - Community Connections 10%
  - Quality Family Time 7%
  - Job Advancement 6%

"I've always wanted to learn computers for a long time. Practically everything is with computers, wherever we go, plus it's another good experience to learn."

"It was the ultimate opportunity for both of us to learn and do it together."

- They entered the program with many hopes:

Adults
  - Learning 72%
  - Computer Skills 16%
  - Better Employment Opportunities 14%
  - Academic Success 6%

"I hope to gain more quality time with my child and at the same time learn. Computers are very much in the future. There is something new to learn everyday. Children seem to pick up on things faster. That encourages me."

Children
  - School/Homework 63%
  - Interaction through Technology 26%
  - Connections within the Family 6%

"I hope to gain better knowledge about the computer that I can share with others."

"It's a good way for my kids to learn."

- Plans for use of the TGH computer varied:
  - Homework 42%
  - Learn Together 24%
  - Communication with Family and Friends 21%
  - Further Education 19%
  - Research 16%
  - Work 9%
  - Fun 9%
  - Family Finances 5%

"This will be a family computer that we'll use for family finances, education/homework and to find educational opportunities for myself."

"We plan to educate the rest of the family."

Program Model

Respondents were asked whether they would have chosen to enroll in the program if they had to pay (approximately $15/month for three years) for the TGH computer.

- Yes: 70%
- No: 30%

[4] Categories in this section do not total 100% because respondents were able to select multiple responses.

At Completion of the TGH Training Program

Computer Use at the End of TGH Training

- Current Computer Use:

Table 6: Frequency of Computer Use

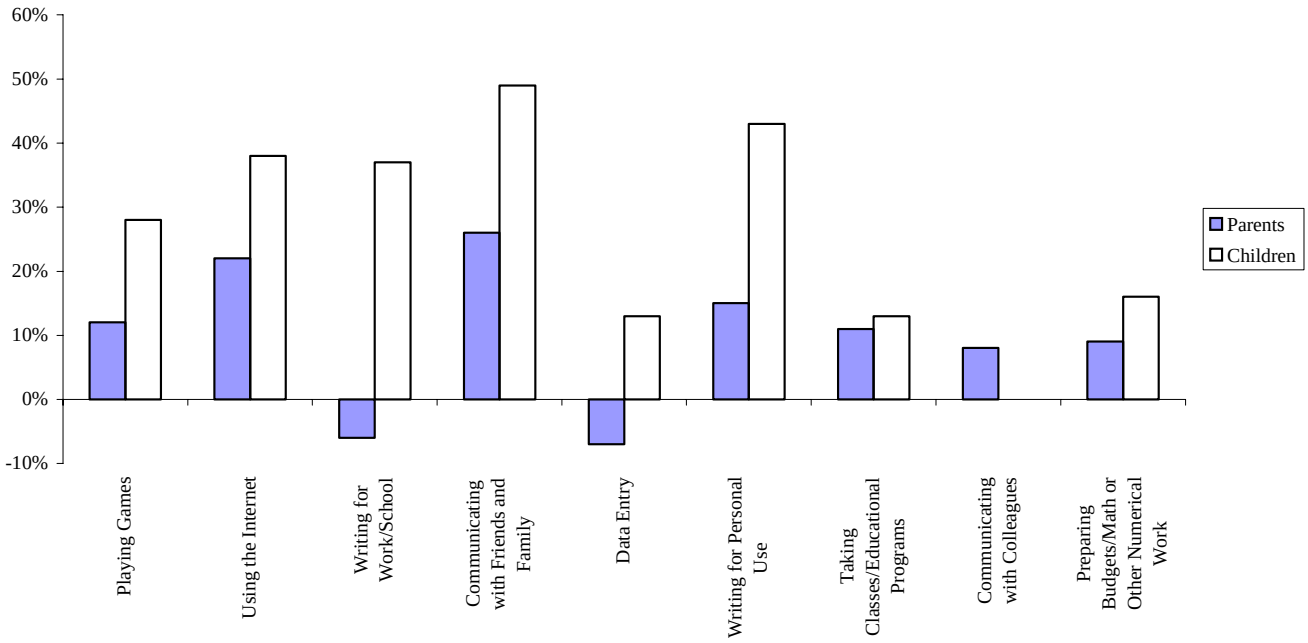
Frequency	Adults	Children
More than Once a Day	10%	15%
Daily	41%	49%
Weekly	37%	32%
Monthly	3%	2%
Less than Monthly	9%	2%

- Purpose of Computer Usage at the End of TGH Training:

Table 7: Purposes of Current Computer Use

Purpose	Adults	Children
Communicating with Friends and Family	58%	68%
Using the Internet	71%	81%
Communicating with Colleagues	19%	NA
Taking classes/Educational Programs	40%	69%
Data Entry	26%	27%
Writing for Work/School	36%	85%
Playing Games	56%	91%
Writing for Personal Use	41%	56%
Preparing Budgets/Math or Other Numerical Work	17%	38%

Figure 1: Percent Change in Type of Computer Use from Beginning to Completion of TGH



Plans for Future Computer Training

- Plan to Enroll in Further Computer Training:
  - Adults: 85%
  - Children: 71%

- Topics of Interest for Future Training:

Table 8: Potential Focus for Future Computer Training

Focus	Adults	Children
Word Processing	64%	62%
Presentation Software	56%	46%
Data management/Spreadsheets	46%	18%
Internet/E-mail	41%	58%
Other	18%	16%

Program Satisfaction

- Program Components:

Table 9: Ratings of Program Components[5]

TGH Component	Very Valuable	Valuable	Somewhat Valuable	Not Valuable
Hardware Instruction	73%	24%	3%	1%
Software Instruction	75%	22%	3%	0%
E-mail and Internet Instruction	68%	30%	2%	1%
Instruction in Computer Programs	76%	23%	1%	0%
Class Projects	62%	32%	6%	1%
Handouts	66%	26%	6%	2%
Homework Assignments	59%	30%	9%	2%

Table 10: Ratings of Program Components by Collaborative/ Schools (% Very Valuable)[6]

TGH Component	Allston Brighton (N=28)	Codman Sq. (N=30)	Grove Hall (N=17)	Lower Roxbury (N=18)	Mission Hill (N=28)	Uphams Corner (N=22)	TGH @school (N=44)
Hardware Instruction	77%	72%	77%	44%	79%	82%	73%
Software Instruction	80%	82%	65%	67%	72%	73%	79%
E-mail and Internet Instruction	58%	55%	65%	79%	80%	68%	72%
Instruction in Computer Programs	65%	76%	71%	72%	84%	73%	84%
Class Projects	42%	66%	65%	53%	60%	62%	77%
Handouts	71%	76%	65%	78%	52%	50%	64%
Homework Assignments	62%	57%	53%	65%	46%	43%	73%

- Program Impact:

Table 11: Ratings of Program Impact

Impact Area	Very Strong	Strong	Somewhat Strong	Not Strong
Computer Skills	60%	35%	6%	0%
Community Connection	48%	39%	11%	1%
Child's School Performance	53%	39%	6%	2%
Overall Program Satisfaction[7]	84%	15%	1%	0%

[5] The data in tables 9-12 are per family, most likely rated by the adult.
[6] As the Ns are small, we have only presented the first response category here. Future reports will include additional detail for each neighborhood/school.
[7] Response categories for this question were: very satisfied, and satisfied, somewhat satisfied, and not satisfied.

Table 12: Ratings of Program Impact by Collaborative/ Schools (% Very Strong)[8]

Impact Area	Allston Brighton (N=28)	Codman Sq. (N=30)	Grove Hall (N=17)	Lower Roxbury (N=18)	Mission Hill (N=28)	Uphams Corner (N=22)	TGH @school (N=44)
Computer Skills	58%	59%	56%	67%	64%	57%	58%
Community Connection	50%	62%	41%	67%	28%	43%	47%
Child's School Performance	54%	52%	53%	61%	44%	48%	59%
Overall Program Satisfaction[9]	92%	83%	88%	78%	71%	81%	91%

- Likes and Dislikes:
  - <u>What they liked about the program</u>:
    - Gaining Computer Skills 37%
    - Teaching 33%
    - Togetherness with Community 20%
    - Togetherness with Family 13%
    - Everything 5%
    - Program Schedule 1%
    - Course Content 1%
    - Class Activities 1%
  - <u>What they would change</u>:
    - Nothing 39%
    - Scheduling 16%
    - More Information 3%
    - Equipment 2%
    - More Homework 2%
    - More Practice Time 2%
    - Refreshments 2%
    - Childcare 2%
    - Level of Training 2%
    - Tardiness of Students 1%
    - Activity 1%
    - More Organization 1%

"Made new friends; learned about the computer; excellent teacher."

"I liked the fact that I understand the computer better now than before. My daughter likes the fact she can play computer games and chat with her family."

"Everyone worked together and helped each other when someone fell behind."

"Classes should be offered based on skill level."

"They should work more with the parents."

"The only thing I would change is the childcare. It's very hard to focus on TGH when you bring your kids without childcare."

"I would like to see participants get the computer at the beginning of the program so that assignments could be worked on at home."

[8] As the Ns are small, we have only presented the first response category here. Future reports will include additional detail for each neighborhood/school.

[9] Response categories for this question were: very satisfied, and satisfied, somewhat satisfied, and not satisfied.

APPENDIX G

Participant Focus Group

September 25, 2003

Center for Social Policy
McCormack Institute, University of Massachusetts Boston

Technology Goes Home

Participant Focus Groups
September 25, 2003

Summary

Introduction

The following report presents participants' perceptions of the program, including their impressions of the components that are working well and those that could be improved. Through three focus groups conducted in Spring 2003, CSP researchers spoke with a total of 33 individuals representing 17 TGH graduate families, as follows:

- Allston/Brighton, March 12, 2003, 6 families;
- Codman Square, May 17, 2003, 1 adult; and
- Lower Roxbury, May 6, 2003, 10 families.

These data do not include participants from the remaining three communities:

- Grove Hall,
- Mission Hill, and
- Uphams Corner.

TGH@school participants were also not included in these groups.

Participants represented a range of races (55% Latino; 33% Black; 6% Asian; and 6% Caucasian) and genders (73% female; 27% male), however only one of the adult participants represented was male. For children, the average grade level was 6.8, with a range from 4th through 10th grade. The majority of adult participants were identified as in their 30s. All had completed the TGH program between winter 2001 and winter 2003.

During the meetings, children (in a separate session, without adults present) discussed their initial expectations for the program, the experience of learning with their parents and other families, outcomes in terms of impact on school performance, and their general likes and dislikes about the program. Parents then (again separately) talked about similar topics, including the program's impact on their work situations, as well as connections with the TGH community.

The focus groups were lively conversations. Children and adults openly shared not only their appreciation for the training and computers, but also talked about parts of the program that didn't work as well and shared ideas for improvements. The Neighborhood Coordinators have clearly created an atmosphere of trust and respect in which honest feedback is valued.

There were, however, two coordination issues that may have slightly influenced results. Due to language issues at one site, the Coordinator was present for some of the meeting; future groups will include translation resources. At one of the sites there was limited private space; consequently, separating parents and children was difficult.

As these families directly experienced the TGH program on the front-lines, their views are important to its success. The following summary analyzes the data gathered at these focus groups, toward our goal of assisting TGH to best achieve its mission.

Themes

Overarching Themes

- The program offers high quality teaching from which students gain a great deal.
- TGH has positive impacts on adult and child learning, employment, and family relationships.
- The community-building parts of the program are less developed thus far. With more attention these activities could continue to grow.

Teaching and Learning

- Across the board, participants felt that TGH instruction was of very high quality. Teachers were patient and helpful, and made class sessions fun. Instructors made everyone feel welcome and were very supportive. As one student said of her Coordinator, "*She feels a part of the family*."
- The course content was fun and the time passed quickly. To a person, participants reported learning a great deal and enjoying the class. As one child participant stated, "*Learning about the computer wasn't boring*."

Curriculum

- Presenting and pacing the material for both adults and children was challenging. Some of the instruction was too slow for many of the child participants, while simultaneously presenting a struggle for the adults.
- Several participants suggested that the program run longer than 10 weeks, and include instruction in other software programs, such as Microsoft PowerPoint, Access, and Excel. Others proposed that the curriculum be expanded to include troubleshooting. Some recommended that this instruction be offered by adding a second, more advanced, level to the TGH program.
- One student suggested re-ordering the curriculum, beginning with parts of the computer and working toward the Internet at the end, rather than starting with that. As she said, "*We should be comfortable with what we have first before we go on the Internet. I found it a little overwhelming at first*."

Resources

- Some students thought that learning would be improved if the computers in the lab were upgraded, as they are apparently very slow (particularly in Allston/Brighton). Others requested additional memory and software for their home computers.

Impact on Families

- Adult and child participants all spoke of the benefits they continue to receive from the TGH training and computer. One mom stated that she was happy her daughter was back in school, so she could finally get some time on the computer herself. Another adult spoke of her increased skills: "*Before I was scared to touch it [the computer] but now I go there I touch anything I want. It's like a whole new world*. … *I think everybody needs to know computers*."

- Students reported many advantages of having a computer at home for schoolwork. In the past they had to spend a great deal of time at the library; doing schoolwork at home is more efficient for the family as a whole. A few children reported moving into advanced classes at school. Many said that their grades had improved.
- Parents also spoke passionately about the impact on their children. One child helps other kids on the computer at school, and as a result has become more outgoing. Another shared her grandson's experience: "*Now his computer teacher lets him set up the computers, lets him put the programs in, and lets him show everybody else how to do whatever it is that needs to be done. [This] makes him feel really like [he] knows it all*."
- A parent spoke proudly of going to an open house at her son's school and being told that his work had improved. Another said that the program encourages kids to go to college. Adults also said that the program enabled them to help their children with schoolwork.
- Adults shared the impact of improved computer skills on their work. A parent who works as a temp stated that she's been getting better assignments since completing the program. Others reported being promoted, getting new jobs, and gaining confidence and skills in existing positions. One said that while in the past she was not able to run reports at work; "*Now I can do anything I want with no problem*."
- Outside of work, the new skills gained during the program enabled adults to assist with mailings at church; conduct research for a planned business; improve English skills; and pay bills on line, as well as use the computer to budget and keep track of financial resources.
- A few adult participants reported that the program excited them about learning, motivating them to return to school. One mom stated, "*It has been 25 years since I was in school. Now I enrolled [in an educational program] this past semester.*" Another said, "*It's never too late to learn*."

<u>Relationships</u>

Within Families

- Children reported mixed feelings on learning with their parents. While many were proud to help their moms in class, a few (mostly older children) stated that they were embarrassed and frustrated by working with their parent.
- Parents, on the other hand, spoke unanimously about the bonding experience created by the program. One mom reported that, after the class, her son taught her husband (who had not participated) as well. In another family, the mother and son were not living together during the class; "*Working together helped a lot; teamwork*." Some stated that, as a result of the program, they better understand what their children are doing in school, and as such are able to discuss school projects and provide assistance. Many reported positive impacts on their relationships with their children. As one mom said, "*[This was a] good program to spend time with [my] daughter*."
- Participants also reported using the computer to communicate with family outside the country.

Between Families

- Some families clearly valued the connections they made through the program. As one said, "*You learn a lot from each other, meet people*." Another spoke of not feeling as alone anymore. Others reported contacting other families to help with

computer problems, and communicating with one another via e-mail. One said, "*Classmates are now like family*."

- One child reported becoming better friends with another child because their parents now know each other.
- While participants agreed that the families helped one another in the program, some felt that the connections were not that deep or ongoing. As one child stated, "*Everyone was scared to open up until the last week*."

With the Community

- One adult spoke enthusiastically of the opportunities that TGH opened for her. Since completing the program she attended several other computer training classes, some offered by TGH and others through local organizations: "*I didn't stop; I kept on going*. *… We're usually here. If there's something [we] can participate in, we do*."
- Connections beyond the classroom seem to primarily emanate from relationships with the Neighborhood Coordinator, rather than with the TGH community as a whole. As one participant stated, and many echoed, "*[She] always makes everyone feel welcome. The door is always open to graduates*." Others spoke of working with the Coordinator, "*Not just TGH*." The Coordinators contact TGH graduates about issues in the community, and encourage them to complete their volunteer hours.
- A participant spoke of the gratification of "*Giving back to the community, finding information [and] confidence to help others*."

Recommendations

Clearly, the program is meeting TGH's overall goal of providing quality training to children and parents. In addition to assisting participants to gain new skills, TGH is bringing families together and increasing interest in learning. As BDBF staff consider program modifications, participants' ideas about curriculum changes and potential follow-up programs are worth reviewing. Graduates could also be included on committees considering curriculum revisions.

As stated in other reports and confirmed here, the community building aspects of the program could benefit from additional attention. In order to allow more focus on relationship building, the program should continue to decrease the administrative burden on Coordinators, and consider funding Alumnae Coordinator positions. In addition, the curriculum itself could be used to enhance community building, by including some additional, targeted, group exercises within the classroom.

APPENDIX H

Report on Follow-Up Interviews with Participants

October 2003

Boston Digital Bridge Foundation
Technology Goes Home
Report on Follow-Up Interviews with Participants

October 2003

Technology Goes Home (TGH) is an innovative program designed to bridge the digital divide by bringing technology into low-income families' homes. This Boston Digital Bridge Foundation program strives to prepare adults for employment opportunities and to help children improve academic performance by offering computer training and equipment to families in Boston neighborhoods and schools. Classes are offered in groups, with parents and children learning together in order to strengthen families and build community as well as skills. Neighborhood programs are operated in six communities through Neighborhood Technology Collaboratives, coalitions of community-based organizations. These coalitions select participating families, and provide training, practice lab space, and ongoing support. The TGH@school program uses a similar model through which parents and their children participate in technology training delivered by fourth-grade teachers.

For the past year, the Center for Social Policy (CSP) staff have been engaged in a comprehensive evaluation of the program. In addition to working closely with TGH staff to refine methods and implement lessons from findings, evaluation methods utilized thus far have included the following:

- Site observations at both neighborhood and school-based programs;
- Focus groups with front-line providers from both models (TGH and TGH@school);
- Focus groups with former program participants, adults and children;
- Analysis of feedback data collected from participants during class sessions;
- Pre- and post-program participation skills assessments; and
- Pre-, post-, and follow-up questionnaires assessing program goals, achievements, and satisfaction.

This brief report presents information from participants who completed the TGH community-based program between June 2002 and January 2003. Most participated in Fall 2002 classes. In order to gather this information, TGH staff attempted to contact 113 former program participants who completed the program during this period. Of these, interviews were completed with 54 participants, for a response rate of 48 percent. The bulk of the data were gathered in telephone interviews conducted by BDBF staff. Participants initially received written survey forms; just a few completed these in writing.

Findings

The first section of this report presents information provided by the 54 respondents to the follow-up questionnaire. This information was gathered approximately six months post program completion, via a short survey designed for optimal response rate. As a result, only a few key data elements are available for reporting below. Data collected were in the area of employment outcomes, participation in additional training programs, Internet access, and children's school performance. The goal of this data-collection effort was to obtain information about the impact of the program on employment experiences for parents and school performance for children.

Employment

- Seven adults, or 13% reported getting new jobs since completing the TGH program.
- All seven, or 100%, reported that their new position requires computer skills. Most of this work involved using word-processing, spreadsheet, and e-mail programs.

Computer Training

- Since completing TGH, 12, or 22% of respondents participated in additional computer training. Another respondent reported that she had plans to do so.
- Trainings focused primarily on word processing and Internet use. Others reported spreadsheet and presentation training. Three respondents participated in the TGH+ program.
- Most of the non-TGH trainings were offered at local community centers. Two attended training classes at the Wentworth Institute of Technology.

Internet Access

- 74% reported having Internet Access at home.
- Of these, 38% were using the Budget service. Another 28% used AOL, and 15% had Verizon as their service providers.

School

- All who responded to this question, 83% of the total sample, reported improvement in their child's academic performance since completing the TGH program.
- Of these, 33% reported improved grades. Another 22% stated that their child's ability to complete homework projects improved. Others mentioned increases in self esteem, and motivation for school achievement.

"My daughter was having problems with reading and writing; but with the help of TGH she's doing better. I'm doing better in school also."

My son spends more time at home on the computer. His school papers are well presented and clean. That has helped improve his grades."

Validity of Findings: How Respondents Compare to Other TGH Participants

This section of the report compares the characteristics of these respondents to those among the initial 113 who were not reached in order to determine whether the sample is representative of the population of TGH program participants served at that time.[1] In addition, characteristics of both of these groups are compared to those of all served during the period.

Table 1 details the number of records from each collaborative. Q1 refers to the written questionnaire participants complete before starting the program; Q2 is the form they fill out at the end of the 10-week course; and Q3 is the follow-up survey form.

Table 1: Technology Collaborative/School[2]

Program	Q1 and Q2	Q3	Q3 Percents by Community
Allston Brighton	28	8	15%
Codman Square	30	11	20%
Grove Hall	17	11	20%
Lower Roxbury	18	10	19%
Mission Hill/Fenway	28	9	17%
Uphams Corner/Dudley	22	5	9%
TOTAL	143	54	100%

Characteristics

Table 2 compares respondents to participants who did not complete the follow-up survey, as well as to the overall population of TGH participants.

As can be seen from the data, respondents were similar to nonrespondents in terms of children's gender, age, children's school attendance, and adult educational backgrounds. Adult genders were somewhat different in that respondents were somewhat less likely to be male. In terms of ethnicity, respondents were somewhat more likely to be Latino and less likely to be of Asian descent; as these numbers are so small they may, however, not be reliable. This difference may be due to difficulty communicating with the Asian participants via telephone, as they may be less likely to speak English.

The most notable differences between the two groups relate to employment and income. Respondents were less likely to have been employed when they entered the program. However, those who did work, were more likely to work full time. More respondents had higher incomes, relative to nonrespondents, with the largest proportion earning $20,000-29,999 per year, while almost two-thirds of nonrespondents earned less than $20,000 annually.[3] Respondents' higher income levels likely

[1] Of the 54 respondents, data from both the beginning (Q1) and end (Q2) of the 10-week course is available for 41. Most of this discrepancy stems from data for Lower Roxbury due to a mismatch of identifiers between questionnaires, making merging these data impossible.

[2] All percents presented in this report are valid percents, excluding missing information. Due to rounding, totals may not equal 100 percent.

[3] Although not detailed in Table 2, family sizes were similar for both groups, with about 40% having just one dependent.

correlate to their longer work hours. As noted in the table, the response rate to this question was particularly low; as such, this information may be skewed to include more employed participants.

For the most part, respondents and non-respondents are similar to the larger group of TGH participants served during the period.

Table 2: Demographic Characteristics by Respondent Type

Characteristics	**Q3 Respondents** (N=41)	**Non-Respondents to Q3** (N=42)	**All Q1 and Q2 Respondents from Previous Report**[4] (N=187)
Gender - Adult			
Male	5%	12%	8%
Female	95%	88%	92%
Gender - Child			
Male	46%	52%	47%
Female	54%	48%	54%
Average Age - Adult	40	38	38
Average Age - Child	12	12	12
Age Range[5]	8-18	7-18	7-18
Primary Ethnicity - Adult			
African American	61%	58%	58%
Hispanic/Latino	24%	23%	27%
Asian	10%	15%	5%
White	2%	5%	7%
Other	2%	0%	3%
Primary Ethnicity - Child			
African American	56%	56%	60%
Hispanic/Latino	28%	23%	26%
Asian	10%	15%	5%
White	3%	3%	5%
Other	3%	3%	4%
Child School Attendance			
Boston Public Schools	78%	80%	81%
Charter School	0%	2%	3%
Other	22%	18%	16%

[4] The last annual report provided data on participants served between June 2002 and January 2003. The information copied here is duplicative – those listed in the Q3 respondent and non-respondent columns are also included in this last column's data. Please note that these data also include TGH@school participants.

[5] Please note that due to the small sample size, details are not provided on young children by community, as they have been in previous reports.

[7] The last annual report provided data on participants served between June 2002 and January 2003. The information copied here is duplicative – those listed in the Q3 respondent and non-respondent columns are also included in this last column's data.

Table 2 Continued

Characteristics	Q3 Respondents (N=41)	Non-Respondents to Q3 (N=42)	All Q1 and Q2 Respondents from Previous Report[7] (N=187)
Adult Educational Attainment			
No High School Degree	22%	21%	25%
High School Graduate/GED	34%	33%	31%
Some College/AA	32%	31%	29%
College Graduate	12%	12%	13%
Post Graduate Work	0%	2%	2%
Adult Employment			
Employed at Program Entry	58%	67%	61%
Of Employed, Work Full Time	84%	74%	64%
Of Employed, Receive Benefits[8]	70%	63%	77%
Annual Income Amount	(N=23)	(N=25)	(N=132)
Less than $20,000	39%	64%	63%
Between $20,000 and $29,999	48%	12%	23%
Between $30,000 and $39,000	13%	20%	13%
Above $40,000	0%	4%	2%

[8] Benefits were mostly in the form of paid vacation/personal time, paid sick time, and/or health insurance coverage.

APPENDIX I

Class Observations: Community-Based Model

December 5, 2003

Center for Social Policy
McCormack Institute, University of Massachusetts Boston

Technology Goes Home

Class Observations: Community-Based Model

December 5, 2003

Updated Results

Introduction

The following report presents the results of Center for Social Policy observations of TGH classes between August 2002 and September 2003. Observations were conducted twice at each site: once early in the ten-week session, and once toward the end of the same session. Observers focused on teaching and learning; relationships within and between families as well as with the community as a whole; and the educational environment.

Sites:

Class observations were conducted in all of the TGH communities. Attendees represented:

- Allston/Brighton (Summer 2002),
- Allston/Brighton (Spring 2003),
- Grove Hall (Fall 2002),
- Grove Hall (Summer 2003),
- Lower Roxbury (Fall 2002),
- Lower Roxbury (bilingual Fall 2002),
- Mission Hill (Summer 2002),
- Mission Hill (Spring 2003),
- Uphams Corner (Summer 2002),
- Uphams Corner (Winter 2003),
- Codman Square. (Winter 2003)

Themes:

Overarching Themes

- The program environment is conducive to both learning and building connections within and between families.
- Implementation varies somewhat across communities. Differences such as whether Coordinators also serve as Instructors, physical environments, and the level of focus on relationship building vary across sites.

Participants

- While all of the observed classes were primarily made up of mothers and children, a few fathers took part in the classes in Allston/Brighton, Lower Roxbury (both classes), Mission Hill, Codman Square, Grove Hall (one class) and Uphams Corner. At a few sites some of the adult caregiver participants were grandparents and/or aunts of the child participants.
- As expected, family ethnicity varied by community. Most of the participants at Grove Hall, Lower Roxbury, Mission Hill, Uphams Corner, and Codman Square were African American. Allston/Brighton, Lower Roxbury (bilingual class), and Mission Hill had the highest proportions of Latino participants. The only white participants were at Allston/Brighton. Allston/Brighton and Codman Square also had the only Asian participants. Allston/Brighton had the most diversity among participants.
- Of the classes observed, the youngest children participated in Lower Roxbury, Mission Hill, and Uphams Corner. Mission Hill also served the oldest children. Allston/Brighton, Grove Hall and Codman Square classes had a diverse mix of child ages.

Teaching and Learning

- In almost all cases, students were active and engaged across communities and sessions.
- Most instructors appeared to be dynamic, connected to students, and highly approachable. Teachers utilized humor and a casual style that appeared successful in engaging students.
- Teachers offered students a great deal of individual attention, patience, and ongoing encouragement. This was most effective at sites with teacher assistants. The availability of TechBoston students and high-school aged students in the program increased the individual support participants received. Additional instructor support variety across sites. One site had volunteers from the community and in another site TGH alumnae were available to assist the instructors.
- In classes where the Coordinator did not also serve as Instructor, students appeared comfortable with the Instructors.
- Students in the bilingual class had the most difficulty staying engaged. Teaching this class seemed to be the most challenging. At times, translating the English curriculum was complicated, as some computer terms were not readily transferable.
- Language barriers affected learning in a few sites; in some cases children needed to serve as translators for their parents.
- In some cases, children participated more than their parents.
- In some cases there was some difficulty maintaining engagement with older children during the session.
- The use of games as instruction appeared fun and seemed to help with engagement; however, at times, competition detracted from learning.
- In one class, the trainer was a former student, this train the trainer model seemed to be working well.
- Students appeared confused by some of the wording in the curriculum.
- In one community the Instructor appears to have customized the curriculum, and expressed frustration about the poor quality of the TGH website and curriculum materials.

- In some cases the lab operating system and/or software packages were not consistent, causing confusion during the training.
- Where students were required to take exams, they appeared anxious.

Parent-Child Relationships

- Parents and children worked together on assignments, jointly learning and sharing.
- There were many opportunities for children to help their parents learn a task.
- Parents also gained from the opportunity to observe their child in a learning environment. They were able to then talk with them about any issues that arose.
- By the second visit, observers could see the impact of learning together on the parent-child relationship. In some cases the relationship became more balanced because the child was more knowledgeable than the parent about the subject matter. Both parents and children seemed to appreciate this opportunity for the child to take the lead.
- Through working together on projects, parents and children appeared to be building a relationship of mutual learning.
- The country of origin report encouraged children to learn about their parents' identities.

Relationships Between Families

- These relationships varied among communities. In some areas the children made connections across families, while in others parents were more likely to interact.
- Games appeared to encourage interaction across families.
- Cross-family interactions tended to occur when there was some commonality, e.g., ethnicity or language. At times this dynamic seemed to lead to isolation of some families.
- In some cases, there was less interaction between families where there was a separate (non-Coordinator) Instructor.
- Some neighborhoods provided refreshments for the families. There was a more noticeable increase in relationship building amongst families from the first observation to the second observation visit during these meals.

Community Connections

- In one community, where guest speakers presented community programs, students appeared to be very comfortable sharing needs and experiences, and reporting that they had accessed services.
- In communities where the Coordinator did not also serve as Instructor, families appeared to be a bit disconnected from the program as a whole. However, at all of the more recent classes, Coordinators were available during the session so this issue was less noticeable.

Learning Environment

- Resources appeared to vary considerably across sites.
- Sites where the computer lab belonged to the lead agency seemed to have fewer space and equipment issues.
- Some labs were much more spacious and conducive to learning than others.

- In some cases there were not enough working computers for all students, detracting from the learning experience. Efforts to fix nonworking computers sometimes took time away from class activities.
- In some areas where there were labs with plenty of working computers, the physical set up detracted from community interaction. In these cases, teachers could not see students and/or students could not see one another.

Recommendations

The observations continue to confirm that TGH is providing a high quality and valuable service. Families are learning to use computers while making connections with their communities. However, with the dispersed service-delivery model come challenges. It is not surprising that variations in implementation lead to varying outcomes in particular areas.

Over the past year, the program has made great strides in terms of cross-site communication and learning. We encourage BDBF to continue to develop opportunities for ongoing learning across sites. Continue to offer Coordinators and, in particular, Instructors opportunities to share with one another, and ultimately implement one another's ideas. For example, the Coordinator utilizing outside speakers to present community programs could share this model with others. Continue to utilize Coordinators' meetings for regular sharing and relationship-building between sites. At this point, it would also be beneficial to invite Instructors to one to two of these meetings annually, with a focus on best practices.

Physical resources also continue to vary throughout the program, particularly where communities utilize outside training sites, and as such cannot control the environment. We encourage BDBF to continue to work on improvements to these resources. Optimal class environments would offer working computers for all students (parents and children), minimal interruptions, and space that encourages communication between families and with the Instructor/Coordinator.