

Community Access to Technology Executive Summary

What are the goals of the program? Technology Opportunities Program - Community Access to Technology (TOP-CAT) project seeks to provide access to and promote effective use of digital network technologies so that people in selected, underserved neighborhoods in Durham, North Carolina may work to resolve several challenges that effect their quality of life. This project will furnish a technology gateway for people in Eagle Village, the community within a two mile radius of North Carolina Central University (NCCU), an Historically Black College and University (HBCU).

What services will be provided through the project and to whom? The participants are school-aged youth, their parents and their grandparents, who are often surrogate parents and senior citizens. They will have access to and be tutored in the use of applications software, Internet browsing, and e-mail. Youth will be tutored in reading, writing, mathematics, and test taking.

What are the anticipated outcomes and impact of the project? Students in the project will gain reading, writing, mathematics and test-taking skills. Parents will learn skills that will enable them to help their children with school work and parents will engage in classes leading to GEDs or degrees via distance education courses. Some participants will gain access to lifelong learning experiences; others will learn practical skills that lead to jobs or improve current employment situations. The community benefits from a more educated citizenry, increased employment pool with skilled talent for part-time and full-time jobs, improved community involvement and volunteerism.

How many sites are there and where are they located? The project will be housed in five locations: Fisher's United Holy Church, First United Antioch Baptist Church, Shepard Middle School, Spalding Biosphere School, and North Carolina Central University.

What technologies are to be employed? Hardware consists of personal computers, printers, DSL/Cable routers, switches, and DSL; and Microsoft Office 2000 software, net browsers and e-mail; and IP/TV streaming video/video-on-demand.

What organizations are participating as project partners? NCCU, Eagle Village Community Development Corporation, eight Durham Public Schools, two Housing Authority communities, two Churches, two Salvation Army Boys and Girls Clubs, GE Capital and GE Elfun.

Technology Opportunities Program -Community Access to Technology (TOP - CAT)

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1. Need for the Project

The need for this project is threefold. Technology Opportunities Program - Community Access to Technology (TOP-CAT) project seeks to provide access to and promote effective use of digital network technologies so that people in selected, underserved neighborhoods in Durham, North Carolina may work to resolve several challenges that affect the quality of life where they live. This project will furnish a technology gateway for people in Eagle Village, the community within a two mile radius of North Carolina Central University (NCCU), an Historically Black College and University (HBCU). There are three distinct demographic groups who need access to digital network technology for separate, yet common reasons. The groups are school-aged youth, their parents and their grandparents, who are often surrogate parents and senior citizens. From our observations and interactions with community representatives, and from the data collected, these three groups all share a desire to make their community better places to live, work, and play.

Senior citizens need this project. In a recent focus group consisting of 15 Eagle village senior citizens, crime was identified as the major problem in the community. The seniors believe something must be done about it. They said too many young men have no education, and this leads to crime. One person said that poverty is at the root of all of it. The facilitator asked them to identify other major problems, but the group consensus was that nothing comes close to crime and those things that produce it. The facilitator asked them whether they believe there is any place in the world where a community like Eagle Village has solved these types of problems. They all agreed there must be. The facilitator suggested that TOP - CAT could provide grant money to teach them how to work on a computer to gain information about how to combat challenges like poverty, crime and poor education.

One man asked, “So we could get computers and training if we wanted to tackle some of these problems, using information off the computer?” The facilitator said exactly. He asked how many already used computers and the Internet everyday. The response was, no one. He asked how many would be willing to learn how to use computers, in order to gain needed information from wherever it exists. Everyone except a man over in the corner, whose level of disability is fairly extensive, enthusiastically agreed.

Neighborhood parents need this project. In a conversation with a deacon at Fisher’s Memorial United Holy Church, the deacon declared that most single parents really are concerned about the intellectual growth of their children. This deacon is employed at NCCU as an administrator in Information Technology, and also coaches basketball, baseball, and football for the church’s athletic teams. He said once youth become involved in church sports activities, their parents start coming to athletic events. He also found that parents showed an interest in the tutorial program initiated by the church. When youth began going to the church’s computer center, parents soon followed, for they wanted to learn how to use the technology themselves in order to gain skills that will enable them to be involved in their children’s education.

Youth need this project. The document, "The State of Durham's Children 2000," published by the Durham Youth Coordinating Board, July 1, 2000, makes three key points about Durham. They are:

- The poverty rate for Durham's African American Children, ranged from 22% to 38%, depending on age. The comparable poverty rate for white children was only 3% to 4%.
- The 1998-99 high school drop out rate was 27% higher for Durham than for the state.
- The 1999 total number of non-fatal gunshot wounds to juveniles in Durham was double that for the state as a whole.

These data support the conclusions drawn by seniors in the focus group that poverty, school failure, and crime are the major challenges in Eagle Village. While trying to develop a strategy for attacking the above challenges, Fisher's Memorial, decided to establish a computer center whose initial purpose was to tutor students in an effort to improve test-taking skills, improve grades, and improve school retention rates. One of the first observations the computer program coordinator made was that many of the youth could not read well. Thus, before they could teach youth to test well, pass their courses, and/or stay in school, they needed to teach them to read better. A second conclusion was that the digital divide causes severe problems for children from these low-income neighborhoods. All students in Durham Public Schools receive computer applications training and opportunities to use technology at school. However, when a student has an assignment that requires having access to computers away from school, those students without computers have fewer ways to complete their work. That challenge confirmed the need for access to technology for the members of Fisher's Memorial and validated the need for the TOP-CAT project.

The Proposed Solution

A credible solution that employs network technology. The TOP-CAT project proposes establishing computing centers in some cases and using existing technology in others, making them available to residents of Eagle Village. To accomplish this task, we are partnering with five organizations located in the community that are currently working with our targeted population—grandparents/seniors, parents and/or youth. They are Fisher's Memorial, First United Antioch Baptist Church, Shepard Middle School, Spaulding Biosphere Elementary School, and NCCU's Community Service Program. Each center will have at least five computer workstations, one network printer, applications software, reading, writing, mathematics, and Spanish tutorial software, and access to e-mail and the Internet. All the centers will have a DSL for Internet service, with an Etherfast DSL/Cable router/print server and a 10/100 switch for network connectivity. NCCU will furnish Microsoft Office 2000 applications software and some tutorial software for all the centers, and streaming video and video-on-demand systems for training module development. The existing locations, ready audiences, infusion of digital network technology, and our demonstrated training models make this project extremely credible and feasible.

Project Goals and Measurable Outcomes

Goal 1 – To provide a means for citizens of the Eagle Village to access digital network technology.

Measurable Outcomes for Goal 1 - By the end of the project

- 1.2 four new computing centers will be added to existing ones and made available for use by citizens of Eagle Village.

Goal 2 – To provide training so that citizens will be able to use technology effectively and efficiently.

Measurable Outcomes for Goal 2 - By the end of the project

- 2.1 over 900 seniors/grandparents from Eagle Village will have had training using digital network technology and will know how to browse the Internet for information and problem solving.
- 2.2 one third of the Eagle Village seniors receiving TOP-CAT training will continue to use the technology regularly in the computer centers as volunteers or as paid, part-time aides.
- 2.3 seventy-five percent of the Eagle Village seniors who participate regularly in the TOP-CAT project will share their learned problem solving skills with their peers.

Goal 3 – To provide technology resources to help students improve their grades.

Measurable Outcomes for Goal 3 - By the end of the project

- 3.1 ten percent of the Eagle Village seniors participating in the TOP-CAT project will use their acquired skills, to share solutions to problems of school failure among Eagle Village school children, through a variety of media.
- 3.2 ten percent of the Eagle Village seniors who participate regularly in the TOP-CAT project will serve as mentors or coaches for the parents or older siblings of the children who regularly participate in the program.
- 3.3 parents of two-thirds of the Eagle Village youth who participate regularly in the TOP-CAT homework program will become actively involved in their children's participation in the program.
- 3.4 over 2,500 Eagle Village youth will participate in the TOP-CAT homework program.
- 3.5 two thirds of the more than 2,500 Eagle Village youth will regularly participate in the TOP-CAT homework program.
- 3.6 ninety percent of the Eagle Village youth who participate regularly in the TOP-CAT homework program will pass end-of-grade tests.
- 3.7 ninety five percent of the Eagle Village youth who participate regularly in the TOP-CAT homework program during their last year of school will graduate from high school.
- 3.8 the Eagle Village youth who participate regularly in the TOP computer-assisted homework program will have 95% fewer school suspensions or expulsions than Eagle Village school children not participating regularly in it.

Goal 4 – To introduce participants to resources to enhance and enrich their lives.

Measurable Outcomes for Goal 4 - By the end of the project

- 4.1 fifty percent of the parents or older siblings of the Eagle Village youth who participate regularly in the TOP-CAT homework program, and who lack high school diplomas, will become participants in the TOP computer-assisted problem-solving program.
- 4.2 twenty percent of the Eagle Village parents or older siblings without high school diplomas participating in the TOP-CAT project who have seniors as mentors or coaches will formally enroll in GED or other educational or skills training programs.
- 4.3 fifty percent of the Eagle Village parents or older siblings participating in TOP-CAT project will enroll and complete an educational or training program.

2. Innovations

NCCU, an HBCU, will be linked with 14 computer centers distributed widely throughout Eagle Village. At least five new computing centers with five or more computers in each, will be staffed by five person teams, three of them community residents paired with NCCU students. The innovations associated with this project are listed below, and each is further described in the Appendix.

1. **Cascade model** - The cascade model facilitates teaching and learning in multiple directions, i.e., back and forth among the college instructors and their students, the students and community computer monitors, the computer center supervisors and their peers.
2. **Community Service Learning** - Community service learning is offered by fewer than 800 of the 3000 colleges and universities in the country, and fewer than 30 have a service learning requirement. NCCU is the only one of 118 HBCUs that has a community service learning graduation requirement.
3. **Intergenerational Engagement and Problem Solving** - TOP - CAT will target seniors who will become volunteer or paid community computer center supervisors or monitors. Their job descriptions will call upon them to engage in problem identification and coalition building with young adults and teenagers. This Intergenerational dialogue has the potential to help all parties to this project to find their transforming niches in the virtual worlds that they learn to explore.
4. **Tutoring-at-a-Distance** - Through Campus Compact, General Electric funded a novel approach to tutoring at NCCU. It is called Tutoring at a Distance (TAD). TAD allows NCCU Students to tutor and coach school children and even residents of public housing, without the liabilities associated with traveling off campus.
5. **Streaming Video/Video-on Demand Technology** - The streaming video will be tested by developing training modules for TAD tutors and TOP-CAT supervisors and monitors. Once tested, the streaming video and video-on-demand files will be available for all participants. This video over IP technology will help participants move into distance education courses.

The combination of using the cascade model, community service learning, intergenerational dialogue, tutoring-at-a-distance, and streaming video/video-on-demand makes this TOP-CAT proposal unique, and yet replicatable.

3. Diffusion Potential

Lack of access to digital network is a fairly common problem in low-income, inner-city communities. While the price of computers is becoming more affordable to the masses, many families still cannot afford one. Other families do not realize the importance of access to technology, thus, they do not see spending money for a home computer as a priority. The TOP-CAT project will attempt to overcome these obstacles by placing access to technology within the grasp of all families. We pulled our project together using existing organizations and institutions, most of which are accustomed to providing service. The project is easily replicatable because nearly every community has a church, community center or school with space and a willingness to work on such a project.

In Durham, we are fortunate to have many partners willing to share resources. Technologically, the hardware, software, and installation are not elaborate. We are using personal computers, an inexpensive router for network connectivity that serves as a print server, and Microsoft Office 2000 software. The telephone line and DSL, used for Internet access are the most costly items because they must be sustained on a monthly basis. All this is to say that this project is easily duplicated.

Our training modules are still evolving, which is good. Periodically they need modification. One of the major advantages of streaming video is the archiving feature. The training can be live and it can be retrieved later for on-demand viewing. Also, the archive files give us an opportunity to analyze our training and make corrections. We are very enthusiastic about this project and, if funded, look forward to three actions: 1) sharing the results of our project at conferences and in professional journals; 2) expanding it to several other community centers and churches in the city; and 3) taking it into poor, rural counties north of Durham.

4. Project Feasibility

Earlier, we mentioned that the technological approach we are using is going to be simple. It is simple because in the Community of Learners project mentioned above, we learned that the best approach is the simple one. The PCS used in this project will be networked to a Linksys etherfast cable/DSL router with print server. Currently, models of this technology are in use in computing centers at the Salvation Army Boys and Girls Club, two public housing communities, and the NCCU Community Service Learning Program. At this point, they are working and stable. DSL is the preferred to Cable modem. The decision to go with DSL has to do with money. DSL is less expensive than cable modem and, we are told, faster. The streaming video is a bonus for the project. The servers arrived last week and we will begin training on them in April. Our technicians have had experience installing, testing and using all the hardware, except the video/servers. With technology, it is difficult to say that every possibility has been anticipated. Things can and will go wrong. However, we are using technology that has been tried and tested. It is reliable and scalable and we feel very comfortable saying it will work for this project.

Because we are using facilities with some hardware our technology needs are few, and the equipment we request is very cost-efficient and stable. We intend to contract technical support, using student

interns from the Durham Technical Community College as our first-line of support and technicians from NCCU Information Technology Services to oversee the interns and provide secondary service. Listed below are our current hardware, software and NetWare assets and needs.

4. Fisher's Memorial already has four computers and is expecting four more from GlaxoSmithKline Pharmaceutical Company, and four from Duke University. The church has some software. TOP-CAT will provide a router/print server and DSL line.
5. Greater United Antioch needs hardware, software, and Internet and network connectivity.
6. Shepard and Spaulding Schools, and NCCU Community Service Program have software and Internet connections, but need hardware, including routers.

Initially, most of the centers' hours of operation will be based on use. A goal of the project is to have the churches and university open Monday-Friday, 10:00 a.m.- 9:00 p.m. and Saturday, 10:00 a.m.- 3:00 p.m. Shepard and Spalding Schools will be open during regular school hours, including those hours maintained for after school activities.

Applicant Qualifications. The co-principal investigators have the ability to manage the technical complexities and organizational challenges associated with this project. Dr. Theodore Parrish is the Director for the Community Service Program and Chair of the Department of Health Education at NCCU. He is the PI of a \$473,000, two-year-old Campus of Learners (COL) project that serves as the model for TOP - CAT. Also, he is PI for the three-year-old Tutoring-At-a-Distance program, funded by GE. Dr. Parrish founded and developed the Tenant's Development Corporation, a private housing development located in the South End of Boston. The organization is currently worth \$80 million, but started with a handful of low-income, inner-city residents. He serves on the Diversity Council of the American Red Cross, which uses models developed by Dr. Parrish to change blood and bone marrow donor recruiting patterns among African-Americans. Also, he developed the partnership report for NCCU that received the highest commendation given the University during its most recent accreditation from the Southern Association of Colleges and Schools (SACS).

Dr. Kenneth Chambers is the Director of Training and Special Projects for Information Technology Services (IT) at NCCU. During his five year tenure with IT, he led the University from fewer than 200 networked desktop computer workstations to more than 1,300 today, fewer than four servers to more than 40 today, and eight staff members to 20+. He has seen technology explode during those years and had to manage that growth while the budget for the most part stood still. Dr. Chambers has been a Title III PI for nine years. He was PI for five years for an English Department technology grant (\$288,000) and four years for an IT grant (\$800,000). For the past four years, he managed the Educational Technology budget at NCCU (\$600,000 per/year) and during that time he established fourteen student computing centers on campus. Dr. Chambers was Chair of the Faculty Senate for two years and represented the University at the University of North Carolina Faculty Assembly, where he chaired the Faculty Tenure Committee. He is the founder of the Greater St. Paul Baptist Church Men's Club Mentor Program and served as president for six years.

Implementation

Please see a time line in the appendix, which describes how TOP-CAT will be implemented.

Privacy

NCCU has a human subjects review process, which guarantees that all projects conducted by the university meets all requirements with respect to human privacy.

Sustainability

The project is engaging in partnerships with long standing commitment in the community. With the success of TOP-CAT project, two things will happen. First, the partners will continue to support the project; and second, the project will attract funding from other outside forces, such as our partnership with GE Capital Foundation.

5. Community Involvement

Partnerships

The TOP-CAT project is being built on a solid partnership foundation. Called Campus/Corporate/Community Partnership (CCC), it involves the community, the corporate sector and NCCU working together. Each sector brings a different set of resources and experiences to the table. Over the last three years, this has permitted TAD to grow from a one school program to a many sited and continually expanding and evolving institutionalized arrangement. It holds promise for continued growth and development that can serve as a model, especially for settings similar to the one in Durham. Other HBCUs, such as, Shaw University and St. Augustine College in Raleigh, NC, Howard University and the University of the District of Columbia in Washington, DC, and Spellman and Morehouse Colleges in Atlanta, GA are institutions that could benefit by adopting a CCC partnership approach to some of the challenges they face, within the communities where they are located. Because of the symbiotic nature of the partnership, the whole community stands to gain. To illustrate, the community gains by employment for community residents and access to university resources and expertise, including that of both students and faculty. The university gains because of the opportunities to learn from real life situations. It also can identify individuals with college potential to recruit, which helps with recruiting challenges faced by many HBCUs. The corporate sector gains good public relations, a diverse pool of potential interns and employees, as well as tax write offs for contributing used, but good hardware to equip community, family or school computer stations. In addition, in the case of General Electric and the GE Elfun, there is the opportunity for successful business men and women to play a meaningful role in helping solve some of today's most chronic and intransigent problems. A list of the current partners in this project is included in the appendix.

The roles of the partners are as follows:

NCCU has the Principal Investigators and will serve as the primary fiscal agent. **Eagle Village Community Development Corporation** (EVCDC) will serve as a community based fiscal agent. NCCU will provide students, faculty and support personnel to meet TOP - CAT needs. **Eight Durham Public Schools, two Housing Authority communities, two Churches, and two Salvation Army Boys and Girls Clubs** will all provide space for computers where children, older siblings, parents, or seniors can participate in tutoring either on-site or through distance techniques. All the partners will provide technical support staff, recruit end users, and participate on the advisory board where policies are considered. **GE Capital and GE Elfun** will continue to provide hardware and software, technical help, cash support for wiring, an intern, and general guidance. Partnership meetings will continue to circulate and be hosted by all partners.

Obtaining and sustaining community involvement

Several methods that have been used to include a wide variety of community stakeholders:

5. Involvement of decision makers during the early stages
6. Meetings with Residents Councils and Youth Groups at the Boys and Girls Club
7. Focus groups to explore ideas
8. Surveys to identify problems and to track progress

Meetings were held with officials from the Durham Public Schools, Durham Housing Authority, and the Salvation Army Boys and Girls Club, before grant requests were undertaken. Their ideas and input helped shape the successful bids for grants which to date have exceeded \$400,000 in cash and \$100,000 in-kind. NCCU facilitated the meetings, but GE Elfun and EVCDC have been involved from the beginning in helping promote funding efforts or collecting information through surveys.

Officials participating in the above meetings have opened doors to end user meetings where program ideas and opportunities have been discussed. These proved extremely helpful in shaping the approaches used in the public housing communities and the Boys and Girls club. For example, it was the president of the McDougald Terrace Residents Council who suggested that the residences of anyone wanting a computer in her or his apartment had to be inspected before the family could be approved for a computer set up. It was her strong relationship with the Manager of the Housing Community that led to Authority personnel making certain repairs in apartments before the computers were installed. In addition, the priority list for those to receive computers first was developed by the Residents Councils.

It was through a focus group held at W.D. Hill that the idea of an intergenerational approach to this proposal was surfaced. Moreover, the seniors identified the problems that will help focus dialogue between themselves, youth and the partnership.

It has been through surveys that are part of process evaluations that problems connected with implementation of existing programs have been identified and addressed. For example, the need for on going training and refresher sessions was identified because some residents were complaining because their computers were beginning to work slowly. Monitors discovered that some residents were loading their computers with software that was causing them problems. This led to a retraining for site monitors and NCCU student monitors where this and other issues were addressed. A new training manual was developed with the help of the Information and Technology Office at NCCU, to be used by the monitors.

Support for end users

End users will receive training from project trainers and tutors. Because of the center locations, end users will have continuous access to support.

6. Evaluation

The object of the project is to provide senior citizens, parents and their school going children with access to computers in order to expand the learning resources currently available to low income families. Decreasing the digital gap is expected to enhance the quality of their lives. To evaluate the impact of the project, comparisons of selected indicator variables will be made in a before-and-after design, as well as between the intervention and control sites. Process evaluation, on the other hand will be ongoing, throughout the project. Both process and impact evaluation procedures will require that baseline data are collected initially. See appendix for further details.

APPENDIX

EVALUATION PLAN

The object of the project is to provide senior citizens, parents and their school going children with access to computers in order to expand the learning resources currently available to low income families. Decreasing the digital gap is expected to enhance the quality of their lives. To evaluate the impact of the project, comparisons of selected indicator variables will be made in a before-and-after design, as well as between the intervention and control sites. Process evaluation, on the other hand will be ongoing, throughout the project. Both process and impact evaluation procedures will require that baseline data are collected initially.

The evaluation will be conducted by Dr. Cathrine Hoyo, a biostatistician and epidemiologist. She is employed in the NCCU Health Education Department where she teaches the two above referenced subjects. Dr. Hoyo is not employed in either of the units where the Co-Investigators are located, i.e., Academic Community Service Learning and Information Technology. Therefore, she has an arms length relationship with the two departments that will have key responsibility for administering project.

Process Indicators

Data collected at baseline will include process indicators among the five demonstration sites, Fisher's United Memorial Holy Church, First United Antioch Baptist Church, Shepard Middle School, Spaulding Biosphere Elementary School and the NCCU's Community Service Computer Laboratory. These will include; the number of computers that have been distributed at each site, the number of persons or households who successfully undergo training in computer use, both for software and Internet access, proportion of the time that users have successfully relied on computer lab support and the proportion of the times to digital technology. Other process indicators will be the number of volunteers who register for the project, the number of parents and children who participate regularly in the program. Similar data will be collected periodically in order to assure the smooth operation of the project. Chi square tests will be used to determine whether the difference in proportions is statistically significant. In order to control for temporality, these indicators will also be compared with those of a different site, Fayetteville Street public housing community, where NCCU is involved in unrelated intervention projects.

Impact Indicators

Impact indicators will also be collected at baseline and at the end of the project. Among parents and seniors, impact indicators will include knowledge about various commonly used software packages, and Internet access including electronic mail use. This subgroup will also be asked questions about the types of information they have found off the net, relating to various aspects of their lives, including social justice and health. While the project will collect information about children's failures in school, number of classes cut, suspensions, expulsions and failure to complete assignments, the youth will not be surveyed directly. Rather, the public school partners in TOP-CAT program will be asked to provide this data. In such cases, parental permission will be sought for the release of these data.

In order to compare whether a significant difference exists between knowledge and frequency of information access on the Internet, chi-square and paired t-tests will be used. At the end of the project, a between-group comparison will also be made between the knowledge levels and their practice of computer skills in order to hold constant the effect of time in improving the skills among participants. Paired t-tests and chi-square tests will be used for these comparisons.

Time Line for TOP - CAT	
Month 1.	Meet with partners to publicly announce and celebrate receiving grant; share expected outcomes with the press and community; and review respective roles, announce Project manager and Assistant Manager.
Month 2	Develop marketing strategies to identify pools from which students, community supervisors, and community monitors will be drawn; select and train first teams for operating new laboratories; have first Partnership meeting following grant announcement; and order and install all hardware and software.
Month 3	Promote opening of first two new sites, one in a school and one in a church; begin computer training, tutoring, and coaching for children end users; hold second monthly partners meeting since grant announced; review first quarterly report for submission to TOP manager at the Department of Commerce.
Month 4	Promote opening of second new sites, one in a school and one in a church, targeting school children; target school parents and grandparents or other seniors for training at first two sites for computer instructions; hold third regular monthly partners meeting and review first formative evaluation, making changes as needed.
Month 5	Recruit parents and grandparents or other seniors for training at second two sites; hold fourth monthly meeting of partners; begin recruiting parents and grandparents to form problem review and solution identification groups at each site; hold fourth regular partners meeting.
Month 6	Continue all regular computing center operations at all centers; begin regular chats among the problem review and solution groups from each site; hold fifth regular partners meeting, featuring presentation from the problem review and solution identification groups from each center; begin parent/grandparent letter writing campaigns to local black newspapers about identified problems and potential solutions; submit second quarterly report.
Month 7	Continue all operations at all four locations; begin planning for first annual TOP - CAT meeting for participants, school children, parents, grandparents and stakeholders for end of the year public meeting on TOP - CAT operations, successes, and challenges; hold sixth partners meeting, featuring results of second formative evaluation with recommendations for modifications.

Month 8	Continue all operations at all four centers; continue letter writing campaigns; begin presentations on radio stations at NCCU and mainstream radio stations that provide appropriate forums for the issues identified by the discussion groups; hold seventh partners meeting, featuring a report on the planned first annual meeting and a report on changes made pursuant to formative evaluations.
Month 9	Continue all operations at all four centers; continue letter writing campaigns and radio commentaries; begin engagement of problem solving groups in dialogue with elected officials, including both city and county; hold eighth partnership meeting; submit third quarterly report to Commerce Department; report to Chancellor of NCCU and his cabinet on progress to date involving IT and Community Service Learning through TOP - CAT.
Month 10	Continue all operations at all four centers; begin development of TOP - CAT newsletter; hold ninth meeting of partnership; have a special report on progress of school children in the TOP- CAT program.
Month 11	Continue all operations at four centers; market and coordinate information about all parents and older siblings who have enrolled in computer assisted GED or related educational improvement efforts in four new centers and all existing centers; hold 10 th partnership meeting, featuring final report before first annual meeting; publish first newsletter.
Month 12	Continue all operations; fourth quarterly report and first annual report; annual meeting; make public presentations on first year at local, regional, state and national meetings; third formative evaluation; year end in-service for TOP-CAT staff.
Month 13	Begin second year by establish year end educational achievement targets for end users at all levels, including public school students, older and out of school siblings, parents, surrogate parents and other participating seniors.
Month 14	Establish year end targets for problem solving groups.
Months 15 - 24	Continue scheduled monthly partner meetings, center operations, writing campaigns, radio presentations, and all other computer assisted activities.
Months 14 - 24	Hold regular monthly partnership meetings, submit quarterly reports; conduct formative evaluations every four months; write TOP-CAT newsletters every quarter.
Month 24	Hold second annual meeting; submit second annual report; have second annual in-service; complete summative evaluation.
Month 25	Set final year educational and problem solving objectives with end users; make decisions about sustainability strategies for months 37 and beyond.
Months 25 - 36	Perform according to established protocols until end of grant period.

Month 34	Complete implementation of sustainability plans.
Month 36	Final Annual Report under TOP - CAT Grant.

Partners and Their Role

Durham schools provide space for computers where children can participate in tutoring either on-site or through TAD. The schools, like all the partners, host CCC meetings, and have participated in presentations at conferences in Chicago, Washington, Providence, and Salt Lake City.

The Eagle Village Community Development Corporation (EVCDC) serves as one of the fiscal agents for the partnership's initiatives. Its flexibility makes it easier for purchases of tables, chairs, computers, printers and other items. As a public institution, the university has certain constraints which make this shared arrangement very useful. In addition, the EVCDC has a comprehensive board that includes community leaders, city, agency and organization officials. This board configuration helps the partnership with its networking. EVCDC helps with the promotion of the existing program and would do so as well with the TOP program, should it be funded. At a recent power point presentation made by the EVCDC Executive Director to a large gathering of community leaders, businessmen and elected officials, EVCDC featured the CCC partnership's efforts in improving and promoting access by Eagle Village residents to the Internet.

The Edgemont Community Center provides space for the computer lab in the Few Gardens public housing community, since space was very tight there. This facility has a large meeting room where the Residents Council meets. The lab is in a section of that room, but separated from the meeting space.

First United Antioch Baptist Church is new to the partnership, but has a tradition of heavy involvement in the community. The church joins TOP-CAT as a computing center. This facility has ample space for teaching and learning activities. We look forward to working with our new partner.

Fisher's Memorial United Holy Church of America is new to the partnership, but not new to efforts to help its membership become computer literate. Fisher has agreed to open its laboratory to the surrounding community, so that people in the northern part of Eagle Village will have access to a lab nearer to them than the existing sites. Fisher promises to be an important new partner because its laboratory has a retired Duke professor as a supervisor. It is believed that her skills and experience will be helpful when other laboratory supervisors need to be trained.

GE Capital and GE Elfun have provided hardware and software, technical help, cash support for wiring, an intern, and general guidance. Partnership meetings have been hosted at GE Capital offices in Raleigh. GE Elfun has participated in conferences where the program has been described.

The Housing Authority and the Residents Councils have marketed TAD throughout their communities, provided space for computer labs, helped pay for wiring, provided technical staff, helped with recruiting end users, and revised policies to accommodate the program. For example, if a recipient of a computer were to abuse the computer, the Housing Authority would help collect penalty payments. (This provision has not been used, since no abuse has been found to date.)

NCCU has the Principal Investigators, serves as the overall fiscal agent, coordinates monthly meetings, and provides students, staff and faculty to help with tutoring and coaching, training, technical problems, publicity, etc.

The Salvation Army Boys and Girls Club has provided space for a computer laboratory, access to the community for training, and technical assistance. Its youth have participated in defining the program. It also provided space and manpower for a summer computer camp for school students who have exhibited special needs, and are part of a five year research program at Duke University. The Salvation Army Boys and Girls Club has also recently opened a new facility close to McDougald Terrace public housing community. When the partnership provided 10 new Gateway PCS to the existing site near Few Gardens public housing community, the computers which had been there were relocated to the new site. This triples the access available to the residents in the McDougald Terrace community.

TOP-CAT BUDGET

PERSONNEL

Co-Principal Investigators. The Co-Principal Investigators will oversee all aspects of the grant. Responsibilities will include ensuring that budget and timetable targets are met, selecting contractors, coordinating advisory committee, preparing reports, and supervising the project staff. The Co-Principal Investigators will work 20% of their time for three years. The cost to the project will be \$89,666.

Federal Funds: \$45,000 Matching Funds: \$44,666 Total: \$89,666

Project Manager. The project manager will oversee the day-to-day operations, make sure that all benchmarks are met, and supervise the TOP-CAT contractual personnel. The project manager will work 50% of the time for 36 months. Based on an annual salary of \$40,000 with a 3% increase in the second and third years, the total project cost will be \$60,818.

Federal Funds: \$50,818 Matching Funds: \$10,000 Total: \$60,818

Project Assistant. The project assistant will assist the project manager with the day-to-day operations, and provide special oversight to the elderly participants. He/she will perform other functions pursuant to achieving program goals and supervising personnel. The project assistant will work 50% of the time for 36 months. Based on an annual salary of \$24,000 with a 3% increase the second and third years, the total project cost will be \$37,091.

Federal Funds: \$30,091 Matching Funds: \$7,000 Total: \$37,091

Student Stipends. Student monitors/tutors will perform minor hardware and software maintenance, alert the technician when hardware, software and network problems are beyond their range, help clients use software and provide minor hardware and software training for community monitors. There will be 5 student monitors working 10 hours per week at \$8 per hour for 50 weeks per year, for three years. (\$60,000)

Federal Funds: \$24,000 Matching Funds: \$36,000 Total: \$60,000

Community Supervisor

For 3 years, 5 community supervisors at 15 hours x 50 weeks x \$7.74+ hourly, open and close the centers on days of operation, make sure the location is clean, hardware is dust-free, furniture maintained and oversee proper use of center.

Federal Funds: \$37,000 Matching Funds: \$50,185 Total: \$87,185

Community monitors/tutors

For 3 years, 5 community monitors/tutors at 10 hours/week x 50 weeks x \$8.26+, perform minor maintenance on hardware and software, alert technician when hardware, software, and network

problems beyond his/her scope occur, help clients use software, and provide minor hardware and software training for volunteers. The total cost of the community monitors/tutors to the project is \$61,990.

Federal Funds: \$37,003 Matching Funds: \$24,987 Total: \$61,990

Evaluator

Provides program evaluation from onset of the project until the end, making sure that project stays within the established parameters and meets goals and objectives, and suggests program changes when and where necessary. Based on an annual salary of \$27,796 the first year, \$21,863 the second and \$22,400 the third year, the total project cost will be \$71,059.

Federal Funds: \$9,000 Matching Funds: \$62,059 Total: \$71,059

Computer Technician

The computer technician will maintain the hardware and software at each site and provide technical training for supervisors and monitors. The computer technician will consist of 1/4 time and the annual salary is based on about \$40,000 per year. The total cost to the project is \$30,891.

Federal Funds: \$9,937 Matching Funds: \$20,954 Total: \$30,891

Fringe Benefits

Fringe benefits are calculated as 28.5% of base salary. Benefits include health care, Social Security, workers compensation, short term disability, and retirement benefits.

Federal Funds: \$34,987 Matching Funds: \$0 Total: \$34,987

Equipment

5 personal computers will be installed at 5 sites for public access to the network. Each computer will be configured with 256 MB RAM, Pentium IV1.5 MHZ processor, 40 GB hard drive with modem and fast Ethernet and will cost \$1,500 each. Five laser printers at \$2,200 each. Software and site licenses for personal computers – \$5,023.

Federal Funds: \$44,838 Matching Funds: \$8,685 Total: \$53,523

Indirect Cost

The university is making special arrangement in this case by charging a below rate nominal indirect of \$14,537.

Federal Funds: \$14,537 Matching Funds: \$0 Total: \$14,537

Contractual Services

Eagle Village Development Corporation

This organization will serve as one of the fiscal agents for the partnership's initiatives. Its flexibility makes it easier to manage student and community stipends and purchase equipment. As a public institution, the university has certain constraints which make this shared arrangement very useful. The total cost to the project is \$27,000.

Federal Funds: \$27,000 Matching Funds: \$0 Total: \$27,000

Travel – Local

61+ miles per day x 6 days per week x 50 weeks x 34.5¢ x 3 years for all monitors, students, trainees, at all 5 sites. \$19,051.

Federal Funds: \$19,051 Matching Funds: \$0 Total: \$19,051

Travel – Principal Investigators

Arrange for the PI's to attend two conferences per year at \$1,000 per year. The total cost to the project will be \$6,000.

Federal Funds: \$6,000 Matching Funds: \$0 Total: \$6,000

Travel – Year-End Conferences

Arrange for all 3 year-end conferences at \$2,627, to cover printing, postage, honoraria, space, and other necessities. The cost to the project is \$7,881

Federal Funds: \$7,881 Matching Funds: \$0 Total: \$7,881

Supplies

Provide supplies for five sites, including paper, toner cartridges at \$1,500 per year per center for 3 years. The cost to the project is \$22,500.

Federal Funds: \$22,500 Matching Funds: \$0 Total: \$22,500

Contractual (phone and cable)

Make arrangement with Internet service provider at \$1,400 per year per site and \$400 one-time installation fee.

Federal Funds: \$21,400 Matching Funds: \$0 Total: \$21,400

Other

Five Centers at average cost of \$1,020 per month x 36 months (Rental = \$300, Utilities = \$160, Internet Connection = \$50, Furniture = \$50, Telephone Lines = \$40, Security = \$40, Physical Maintenance = \$10, Janitorial = \$180, Insurance = \$10, Liability = \$30, Computers = \$150)

Federal Funds: \$0 Matching Funds: \$183,600 Total: \$183,600

Focus Group with Seniors of Eagle Village

March 13, 2001

Ted Parrish

From 11:30 a.m. to noon, on March 13, a focus group discussion was held with 15 Eagle Village seniors who reside in Eagle Village, a two-mile radius surrounding North Carolina Central University (NCCU). After introductions, to orient the seniors, the facilitator described the Campus of Learners (COL) program. COL has provided 65 computers and training for residents in two Eagle Village communities, teachers in four schools, and officials at two boys and girls clubs. The purpose is to reduce the gap in opportunities between more affluent communities and those that are digitally challenged. NCCU is a partner, working with others such as the Durham Public Schools, GE, and the Durham Housing Authority, to accomplish this mission. Following that, the facilitator gave a brief description of the Technology Opportunity Program (TOP) request for proposals, from the US Commerce Department. The facilitator then stated that the seniors are in a position better than most, to describe the major problems and challenges facing Eagle Village, because they have been residents long enough to know its ins and outs.

The seniors began a litany of highly related challenges facing the community. First on the list was crime. They feel that something must be done about it, especially crime related to illegal drugs. They said accompanying this is the problem of young men who have no education and who gravitate to such crime. One person said that poverty is the basis for all of it. "The boarded up buildings reflect poverty and criminal behavior. It would look like somebody ought to be able to make use of these buildings."

Then there are the single mothers who can't raise all these kids they keep having. "It is no wonder that the kids are in crime. These kids will trash things, and the mothers will defend them."

The facilitator asked them to put other challenges on the floor that are as important as these. It was a consensus that nothing was as important as crime and those things that produce it.

The facilitator asked them whether they believe there is any place in the world where a community like Eagle Village has solved these types of problems. They all agreed there must be. The facilitator suggested that was the basis of TOP. He said TOP will not provide grant money for anyone to simply learn how to work on a computer. But it would if people were learning computer skills in order to gain information about how to combat the challenges that communities face. There were immediate smiles on several faces.

One man asked, "So we could get computers and training if we wanted to tackle some of these problems, using information off the computer?" The facilitator said exactly. He asked how many already used computers and the Internet everyday. No one. He asked how many would be willing to learn how to use computers in order to extract the

information from wherever it exists. Everyone except a man over in the corner, whose level of disability is fairly extensive, agreed.

Then one of the men, who said he had been retired for 15 years, made a very relevant statement. He said, we can help our community, but first we have to learn the skills so that we can use them well for the things that affect us every day. The facilitator asked what that was. The man said a good example is taxes. He said he gets a 30% reduction each year because of his age. He said a lot of seniors don't

know about this. "If we had computer skills, we could learn about other things like this and tell all our friends." Others agreed.

The facilitator asked how many would be willing to learn the computers so that they could help themselves and their communities. There was an enthusiastic and positive response.

One man asked whether NCCU was already doing some of this. The facilitator described prof. Mary Hawkins who is on phased retirement. He said she has expressed an interest in teaching some classes to seniors. Three or four of the participants said they knew her. One asked would she have the patience it would take to teach people their age. The facilitator said he was sure she could, as both Ms. Hawkins and he are getting close to retirement, so some of them are our peers. The facilitator said, "We know how to teach folks like ourselves."

Someone asked how soon they would know whether the proposal was funded. The facilitator said the proposal would go in by March 22, and it would be the fall before we would learn. But he said, he would see about getting something started before then.

Someone started to applaud. The facilitator said he knew it was time for their lunch so he would get back to his office and get started. One of the men asked for a contact number. The facilitator gave it to them, and thanked them for their time. As he was leaving, they gave him a big round of applause. He heard someone say, "Boy, this sounds interesting!"

TOP-CAT BUDGET

Personnel	1st Year	2nd Year	3rd Year
Co-Principal Investigators	29,888.00	29,888.00	29,890.00
Project Manager -- ½ time	20,273.00	20,273.00	20,272.00
Project Assistant -- ½ time	12,364.00	12,364.00	12,363.00
Fringe Benefits	11,662.00	11,662.00	11,663.00
Student Stipends - \$9 per hr x 42 wks	20,000.00	20,000.00	20,000.00
Community Supervisor	29,061.00	29,061.00	29,063.00
Community Monitor	20,664.00	20,664.00	20,662.00
Evaluator	23,686.00	23,686.00	23,687.00
Computer Technician	10,297.00	10,297.00	10,297.00
Equipment	53,523.00	0.00	0.00
Supplies	7,500.00	7,500.00	7,500.00
Other	61,200.00	61,200.00	61,200.00
Eagle Village Development Corp.	9,000.00	9,000.00	9,000.00
Travel (Local)	6,350.00	6,350.00	6,351.00
Travel (PI)	2,000.00	2,000.00	2,000.00
Year-End Conference	2,627.00	2,627.00	2,627.00
Contractual (Phone/Cable)	7,400.00	7,000.00	7,000.00
TOTAL DIRECT COST	327,495.00	273,572.00	273,575.00
Indirect Cost	14,537.00		
ANNUAL TOTAL	342,032.00	273,572.00	273,575.00
GRAND TOTAL	889,179.00		

