Draft Program Document

Program Title:	United Nations Promoting the Culture of Peace and Community Empowerment through Bridging the Digital Divide
Program Number:	
Program Framework Topic:	Culture of Peace and Community Empowerment
Type of Program:	Global
Duration:	Three Years (initial phase)
Start Date:	
Location:	Least Developed Countries, Landlocked Developing Countries, Small Island Developing Countries, Countries in Transition and Developing Countries in general
Executing Agency	FITC
Funding Partner:	To be decided according to the country requesting this program
Proposed Budget:	To be decided according to the country requesting this program

Brief Description:

The present program is in conformance with the United Nations Resolutions A/Res/53/25 and 53/243 which set up a decade long global vision and a program of action to create a culture of peace and non violence for the children of the World. The Resolutions' objectives are straightforward and compelling; namely: to make the world a better place to live with responsible and better citizens and empowered communities living in better socio-economic conditions.

The program as proposed here addresses 3 vital concerns; bridging the Digital Divide, the Culture of Peace and Community Empowerment in order to benefit from their synergy and mutual support. Providing access to education, information technology and economic opportunity for youth and community members is a critical factor in preventing conflict. Such capacity-building activity also leads to the development of an informed civil society, a key factor for a country to build its human, social and economic capital.

The program's starting point is to create knowledge/education networks, primary and secondary school programs, and learning communities, and to integrate these into the human infrastructure. Enabling youth and community groups to use information and communication technologies (ICTs) will contribute to post-conflict development efforts. The program will establish dual-use Internet Learning Centers, open to teachers and students during school hours, and to the community during non-school hours. The program will offer training in the use of ICTs to teachers, students and community members to promote local economic and social development aimed at capacity-building, cross-cultural communication, and employment.

The program will focus on the Least Developed Countries (LDCs), Landlocked Developing Countries, Small Island Developing States, and Countries in Transition.

On behalf of	**Signature**	**Date**	**Name/Title**
Executing Agency	_____	_____	_____
Funding Partner	_____	_____	_____

I. Background, Context and Program Justification

A. Background

For the past few years, Information and Communications Technology (ICT) has been at the forefront of the development agenda. Statistically, industrialized countries, with 19 % of the world's population, account for 71 % of global trade in goods and services, 58 % of foreign direct investment and 91 % of all Internet users. In many cases, developing countries have taken the lead by providing concrete policy inputs based on successful program implementation. Although skepticisms on the role of ICT as a tool to achieve the various development goals and targets still persists, many developing countries have already embarked on efforts to harness the potential of ICT.

This document is a global program whose main objectives is to help developing specific national projects, gather and share acquired experiences and help monitor, coordinate and evaluate global achievements in relation to the United Nations Resolution A/Res/53/25 initiated a global project spanning the decade 2001-2010 with the purpose of creating the Culture of Peace and Non Violence for the Children of the World. The objective of this resolution is to make the world a better place to live, with responsible and good citizens, and empowered communities living in better socio-economic conditions. Subsequently, Resolution 53/243, Declaration and Program of Action on a Culture of Peace were adopted by the General Assembly and officially initiated this global campaign. This resolution employs six unifying and interrelated issues common to all societies, cultures and nations:

- **Respect all Life,**
- **Reject Violence,**
- **Share with Others,**
- **Listen to Understand,**
- **Preserve the Planet, and**
- **Rediscover Solidarity.**

The United Nations has also been emphasizing the importance of bridging the digital divide as well as the need for promoting the Culture of Peace and social development.

The Millennium Declaration of the United Nations, in particular the Millennium Development Goals (MDGs) number 8, calling for good governance in international affairs as well as to Target 18 specifically on partnerships in ICT, adopted in 2000 by the largest gathering in history of heads of state and government underscored the urgency of addressing these issues.

Indeed, Goal 8 calls for an open, rule-based trading and financial system, more generous aid to countries committed to poverty reduction, and relief for the debt problems of developing countries. It draws attention to the problems of the least developed countries and of landlocked countries and Small Island developing states, which have greater difficulty competing in the global economy. It also calls for partnership arrangements and/or cooperation with the private sector, the UN, Governments and the Civil society to address youth unemployment, ensure access to affordable, essential drugs, and make available the benefits of new technologies, especially information and communications.

Effective communication among individuals and groups involved in the development process is not possible without the necessary infrastructure. Giving people the means to exchange their experiences and to learn from each other will guarantee a higher return on investment and avoid problems such as duplication and lack of information. The use of ICT also has many other positive development effects. It can make governments more transparent and therefore reduce corruption and improve governance. It can help people in rural areas to find out about market prices and sell their products at a better and fairer value. It can also

overcome traditional barriers to better education by making textbooks available online and opening the door to e-learning.

The donor community can help developing countries realized the full potential of ICTs for development, but only if their own ICT programmes and strategies are more clearly focused on the MDGs. Donor agencies need to ensure that their ICT programmes and strategies are better adapted to the specific needs and circumstances of individual developing countries and to become better informed through more information sharing and more rigorous analysis of recent experience of ICTD programmes

The concept of this project entitled United Nations Promoting the Culture of Peace and Community Empowerment through Bridging the Digital Divide **was conceived and initiated by Ambassador Anwarul Karim Chowdhury, former Ambassador of Bangladesh, and former Chairman of the group of 49 Least Developed Countries and current High Representative of the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States. Subsequently, the concept was translated into a project in consultation with the Socio-Economic Development Management branch, Division for Social Policy and Development, DESA and was implemented for the Pilot program in Ethiopia.** (See *Annex B* for detailed description of the current and anticipated phases of the Ethiopian Pilot).

B. Context

The resolutions and recommendations adopted by the General Assembly which set the stage for this program were the following:

- **United Nations Resolution A/Res/53/25 – International Decade for a Culture of Peace and Non-Violence for the Children of the World.**

- Commission on Human Rights Resolution 1998/54, "Towards a Culture of Peace"

- **United Nations Resolution A/53/243 – Declaration and Program of Action on a Culture of Peace** further

- Calls upon relevant United Nations bodies to promote both formal and non-formal education at all levels that fosters a Culture of Peace and non-violence;

Another aspect of United Nations activity leading to the initiation of this program was the **establishment of the ICT Task Force by Secretary General, Kofi Annan.** The Task Force was established to find new, creative and quick-acting means to spread the benefits of the digital revolution and avert the prospect of a two-tiered world information society.

The start up of the ICT Task Force established a pivotal role for the UN system in the ICT area; it provided the interface between the information technology community and the development community; it brought together the private sector, the foundation and donor community to develop initiatives to provide ICT capacities for developing countries, in order to achieve socio-economic development and community empowerment.

C. Program Justification

More than 600 million people worldwide have some sort of access to the Internet. That is an astonishing number, and reflects the rapid growth of the network since it was invented in the 1970s. However, that still leaves about 5.5 billion people who do not use the net and who have no access. Most of these people live outside the developed Western countries. While over half of UK households are online, only 0.1% of homes in Bangladesh can claim the same. Few politicians now talk about the digital divide as a major development issue, and there is a growing sense that it is yesterday's problem.

As the cost of computers and of network connectivity has come down in the West, there is an unexamined assumption that the network is on its way to being generally available to all who want it. This is not the case. The gap in the access to and use of the latest information and communications technologies - computers, mobile phones, digital networks, even interactive television - is as wide as ever, and the consequences are being felt in all the poorer parts of the world. It may seem inappropriate to consider access to technology in the same light as access to other resources, like clean water, adequate health care, sufficient food, or educational opportunities, all of which are thought to have priority in development plans. However, it does not make sense to separate things out this way. If the growth of the net in the West has demonstrated anything it has shown how access to information and communications opportunities has an impact on all aspects of life. School children in New York or Paris with net access from home have an advantage in doing research for homework, and a Punjab village with a working internet connection has an advantage in monitoring weather patterns, knowing what the tides are doing or getting help with pest control.

Sometimes technology is part of the problem, not part of the solution. In the 1970s, many developing countries were encouraged to base their farming on the heavy use of chemicals and machines. But as the tractors broke down and the costs of pesticides rose, the result was famine and despair. The same thing could happen with computers and networks, if we encourage dependency on technology, which cannot be maintained and does not meet real needs. This is less likely to happen if the computers are deployed sensitively, and if the impetus comes from local people who are solving the problems that matter to them. While getting internet access to remote hill villages in the Andes or in India may not be as important in itself as getting clean water or effective healthcare, the net - through e-mail or the web - is often a gateway to other resources and to self-reliance.

A mother who is worried about her child's health can find out about childhood illnesses. A farmer can take a beetle he finds on his crop and check it against a comprehensive catalogue on a CD-Rom in his village. Children can learn about local history, world events or scientific advances in school, using resources that would never be available in print because of the cost and the problems of distributing books. Perhaps it is time to update the old adage: "If you give me a fish, you feed me for a day. If you teach me to fish you feed me for life". Maybe it should now say: "If you give me information, you answer one of my questions. If you get me online, you let me answer my questions for myself." "Digital divide" is recognized today as a major development issue as it affects all aspects of life. The gap in the access to and use of the latest information and communications technologies is as wide as ever, and the consequences are being felt in all the poorer parts of the world, therefore, bridging that gap will greatly contribute to the eradication of poverty and the improvement of the livelihood of population in the less privileged countries.

The program proposed will lead to the enlightenment of adults and children who will help create a more perfect society, free of ignorance, poverty, violence and despair.

We are all aware that the task of the international community is to save future generations from the scourge of war. To reach that goal, it is paramount to move towards a "culture of peace", which consists of values, attitudes, and behaviors that reflect and inspire social interaction and sharing, based on the principles of freedom, justice and democracy, tolerance and solidarity, rejection of violence as well as endeavoring to prevent conflicts by tackling their root causes to solve problems through dialogue and negotiation.

We recognize the enormous harm and suffering that is caused to children through different forms of violence at every level of society throughout the world and that a culture of peace and non-violence promotes respect for the life and dignity of every human being without prejudice or discrimination of any kind.

The role of education in constructing a culture of peace and non-violence, in particular the teaching of the practice of peace and non-violence to children is very important as well as its promotion, through which children learn to live together in peace and harmony that way contributing to the strengthening of international peace and cooperation. The "culture of peace" assists the efforts of the international community to foster peace, harmony, respect of human rights, democracy and development throughout the world.

One of the principles of the "culture of peace" doctrine includes the "empowerment of communities". It is a construct shared by many disciplines and arenas: community development, psychology, education, economics, and studies of social movements and organizations, among others. It is a multi-dimensional social process that helps people gain control over their own lives. It is a process that fosters power (that is, the capacity to implement) in people, for use in their own lives, their communities, and in their society, by acting on issues that they define as important.

These three components are basic to any understanding of empowerment. Empowerment is multi-dimensional, social, and a process that it occurs within sociological, psychological, economic, other dimensions and at various levels, such as individual, group, and community. It is a social process, since it occurs in relationship to others where the individual and community are fundamentally connected.

The uniqueness of this project lies in its 3 inter-related aspects of bridging the digital divide, promoting the culture of peace, and improving socio-economic conditions of communities.

The Least Developed Countries of the 21st century will need to address a number of strategic issues in their overall development. It is evident that concrete education and training constitute the major means of enhancing the full development of the people of the Least Developed Countries. Young people need to be trained, especially in the skills that will make them better and more productive citizens, and encourage them to fully participate in their respective societies and the larger world community. Based upon globalization and rapid technological change that has made knowledge a critical element of competitiveness, it is imperative for the international community to play a central role in assisting countries to prepare for the knowledge economy so that they can exploit the opportunity of the knowledge revolution and not fall further behind technologically. Therefore, careful assessment of linkages between needs, skills, and potentialities is absolutely necessary for capacity building. Even in the United States, all agree—the President of the United States, the National Education Association, Communities, Employers, Parents, and the Nation, that utilizing technology effectively helps to determine the level of success of individuals, businesses, and entire countries. Schools and Communities, in their endeavor to prepare children for the future, must now provide students and teachers with technology know-how in addition to other basic skills. Computer literacy is not a luxury; it is an absolute necessity.

"Some say it is unfair to hold disadvantaged children to rigorous standards…it is discrimination to require anything less… It is the soft bigotry of low expectations."
(President George W. Bush, August 2001. Back to School Moving Forward. U.S. Department of Education)

FITC's unique program has been successfully providing exemplary educational services, technology-based after-school and in school programs for over 28,000 children and youth at 37 New York City Housing Authority Community Centers (NYCHA) and at different schools. This award winning technology driven, multidisciplinary model whose additional foci are professional development, curriculum implementation and parent training has been extensively utilized in support of participant high need New York City students, special education supervisors, teachers, staff developers, administrators, paraprofessionals, librarians, and parents from individual schools as well as school districts and community centers.

II. Program Strategy

The present program titled **Promoting the Culture of Peace and Community Empowerment through Bridging the Digital Divide** is aimed at bringing together these three important areas, bridging the digital divide, the Culture of Peace, and Community Empowerment, thereby benefiting from their synergy and mutual support. It is intended to infuse and integrate emerging information technology with the goals and objectives of the culture of peace and community development. The program expands the dimensions of their potential by the involvement of children, youth, adults, civil society, the private sector, international and regional organizations, and governments. The starting point is to create knowledge, education networks, primary and secondary school programs and learning communities and incorporate these into the human infrastructure of societies. Education is one amicable way, and technology an effective tool for achieving worldwide peace and good citizens by bridging different communities, nations and cultures. This unique approach will establish learning communities around the world, develop common activities and share mutual concerns based on the Culture of Peace, draw upon effective technological expertise and foster global information exchange and cooperation.

The program will focus on the Least Developed Countries (LDCs), Landlocked Developing Countries, Small Island Developing States, Countries in Transition and Developing Countries in general. It has fully taken into account the decisions and resolutions of the United Nations in these areas as well as the objectives of the ICT Task Force. It brings together participants, specialists, organizations and grassroots entities.

At the field/country level, it will tap on the experiences of other UN agencies such as UNESCO, UNDP, UNICEF and World Bank which have been implementing these types of activities for a number of years in many developing countries. This collaboration will take place at no additional cost to the program.

Drawing initially upon the extensive research, resources, and cooperation of accomplished experts in the fields of education, both nationally and internationally, technology and policy development for the world community, the program is currently working to develop a network of sponsoring countries, corporations, colleges and universities and partner organizations. The formulation of the model was initially developed and refined through the extensive analysis of comparable programs in high poverty areas of New York, the United States, and internationally. The initial concept paper for the program was presented to and commented upon by the Education Steering Committee of the ICT Task Force. The approach proposed in the development and implementation phases of the program is interactive. It draws upon the expertise, initial input and ongoing involvement of all concerned stakeholders in order to develop an effective and responsive program. Additionally, many country representatives in the fields of technology, education and training, NGOs and several major university representatives in the field of education and technology from Yale, New York University and Long Island University reviewed the program. This program has also been reviewed and critiqued by SWEFOR and the UN Regional Center for Peace, Disarmament and Development in Latin America and the Caribbean. Further, as part of the efforts to proceed effectively and responsively, the program is involving schools, teachers, parents and private sector partners throughout the program's development phases. Grassroots participation and feedback will continue as local country entities provide culturally responsive educational materials and themes. This approach is further highlighted as we seek to establish a five country pilot program in Asia, Africa and Latin America as part of the UN Regional Center For Peace. *Annex B* represents a detailed description of the current and anticipated phases of the Pilot program in Ethiopia. This pilot process encourages feedback, analysis and program reconfiguration as required depending upon the responses of the participants

The Main Points Of The Program Strategy Are:

- Make available customized, technology driven, country specific, socially/culturally responsive training materials in multiple languages along with pedagogical techniques highlighting the principles of the Culture of Peace and Community Empowerment.

- Provide training and ongoing support to educators to integrate technology and country specific educational programs with the principles of the Culture of Peace, Social Development and Community Empowerment. Innovative local program ideas could include such things as sponsoring collaborative student/teacher program contests that creatively incorporate the goals of the Culture of Peace and Community Empowerment.

- Strengthen and enhance the social/educational/economic capacity of participants from the Least Developed Countries through the creation of learning communities worldwide. Our partners will develop, implement and monitor world wide, virtual, online communities that will provide access and information to all program participants over time.

- Strive to reach and impact the most vulnerable participants in the Least Developed Countries, Landlocked Developing Countries, Small Island Developing States, Countries in Transition.

- Provide specialized technology training for parents, community members and partner organizations. This will include such training as basic and advanced computer literacy for parents and community members, training assistance for women entrepreneurs, and training for NGO's specifically focusing on HIV/AIDS.

- International Corporations, International Foundations, the United Nations System, Local Universities, and other grassroots financial, social and educational organizations and institutions will work collaboratively to develop mechanisms for sustaining programs over time.

III. Objectives of the Program

A. Development Objectives

The long-term objective of the program is to contribute to achieving the goals set out in the relevant UN resolutions to make the world a better place to live in, with responsible and good citizens and empowered communities living in better socio-economic conditions. The program aims to bridge the digital divide while promoting the culture of peace and enhancing socio-economic conditions of communities in the Least Developed Countries, Landlocked Developing Countries, and Small Island Developing States. Working closely with individual countries, grassroots organizations, the program will operationalize the vision of linking education, technology and social development. By infusing essential technological skills into the mission of the Culture of Peace, the program is designed specifically to work towards eliminating the digital disparity between the most developed and least developed countries of the world.

The specific long-term goals are:

- To implement sustainable, technology-driven, social/educational programs in countries around the world;
- To operationalize the vision of the Culture of Peace integrating education, technology and social learning;
- To create education networks and learning communities worldwide;
- To connect students and teachers around the world;
- To design and implement programs that teach students how to resolve conflict through dialogue and diplomacy and make them better citizens;
- To design and implement programs that teach students how to access information, enabling them to participate in the decisions that affect their lives;
- To implement programs that strengthen civil society by helping the world's poorest children and youth bridge the divides in information technology and understanding;
- To develop a country/region specific customized curriculum incorporating and integrating the goals and principles of the Culture of Peace and Community Empowerment;
- To fully integrate the program into individual country school curriculums and programs;
- To provide comprehensive training and ongoing support for teachers in order to improve overall teaching and learning;
- To provide programs that lead to employment by providing experiences for students to develop the knowledge and skills needed to take advantage of income generating opportunities;
- To provide "state of the art" programs for parents and community members from all segments of society;
- To provide programs that link people to peers in the international community;
- To provide a monitoring and evaluation component in order to guarantee continual program improvement.

B. Immediate Objectives

Objective 1: Design a multi media presentation including supporting literature in order to introduce the program worldwide in at least five venues

Output 1.1: A brochure and multimedia presentation

Activities:

1.1.1 Gather all pertinent information
1.1.2 Design and prepare brochure
1.1.3 Develop presentation methods
1.1.4 Present program at a minimum of 5 major events

Objective 2: Implement a local and customized plan for each country, on a technology-driven education curriculum, responsive to special needs considerations and integrating the goals and principles of the Culture of Peace and Community Empowerment in a minimum of 200 schools per country for at least 5 countries

Output 2.1: Introduction of customized and technology driven curriculum in five pilot countries

Activities:
2.1.1 Selection of pilot countries
2.1.2 Study and evaluate each country infrastructure
2.1.3 Develop Architectural Framework and Detailed Design
2.1.4 Explore menu of program options
2.1.5 Define Direct Measures of Quality and other reporting elements
2.1.6 Select pilot schools for implementation in accordance with specific environmental and service delivery capabilities
2.1.7 Prepare Delivery Plan
2.1.8 Solidify details of program implementation with delivery team
2.1.9 Initiate school programs
2.1.10 Installation, testing and training of all program elements

Objective 3: Implement a Community Center Program Model in 5 countries
Output 3.1: Situation analysis and needs assessment

Activities:
3.1.1 Selection of sample countries
3.1.2 Study and evaluate each country infrastructure
3.1.3 Develop Architectural Framework and Detailed Design
3.1.4 Study country & local variables (education statistics & technology capability)
3.1.5 Develop Detailed Program Plan

Output 3.2: Action plan for training/learning center

Activities:
3.2.1 Determine sites for center
3.2.2 Identification and selection of local service providers
3.2.3 Identify site- specific input variables
3.2.4 Identify site -specific environmental and service delivery capabilities
3.2.5 Explore menu of delivery options
3.2.6 Define reporting elements
3.2.7 Prepare Delivery Plan
3.2.8 Solidify details of implementation with delivery team
3.2.9 Initiate customized program in centers incorporating the Culture of Peace
3.2.10 Installation, testing and training of all program elements

Objective 4: Develop and implement a Strategic Planning Session for an International Summer Symposium with universities' possible collaboration.

Output 4.1: **D**etailed Action Plan Supporting the Development & Implementation of symposium.

Activities:
4.1.1 Expert group meeting to review plan including FITC, LIU and country liaisons
4.1.2 Final paper with concrete details
4.1.3 Seek optional funding
4.1.4 Prepare details of Symposium
4.1.5 Identify participants
4.1.6 Initiate details of Symposium

IV. Inputs

The following inputs will be provided in the framework of this program:

- **Personnel:**
- International Consultant/program manager – 36 work months
- National consultants/local program managers for school programs
  36w/mx2x5 = 360 work months
- National consultants/local program managers for community center programs
  36w/mx2x5 = 360 work months
- Support staff

- **Hardware, software, and set-up costs:**
- 30 Computers per school
- 20 computers per community center
- Software

- **Manuals and Supplies**

- **Miscellaneous Costs**

V. Coordination, Duration, Monitoring and Evaluation of the Program

- The program will be funded by _____.
- The Executing Agency, _____ will be responsible for implementation and overall coordination. It will work closely with the Funding Partner in this regard.
- The program will be executed during a period of three years.
- Program monitoring and evaluation will be regularly measured to identify variances from original plans.
- UN financial rules and reporting procedures will be applied. Tripartite reviews, monitoring and evaluations will be conducted jointly by the Executing Agency and the beneficiary countries.
- Monitoring and evaluation missions will take place every 3 to 6 months, and tripartite reviews every 12 months.
- In-depth evaluation by external consultants will also be organized in order to adjust the goals, inputs and outputs of the program as required, or at the end of the second year.

VI. Guidelines for implementing the program

The following specifies the steps involved in implementing the program in each country:

A. Implementing the Overall Model

- **FITC** receives a subcontract to deliver the program in a specific country
    1. They will develop a contract with a regional entity/country representative
    2. The entity will be drawn from a pool of 75 international service providers located in close proximity to the Least Developed Countries. These providers have multiple years of experience in delivering school and community center program world-wide.
- **The Regional Entity** is identified and receives a contract from FITC
    1. They will evaluate LDC infrastructure – Needs assessment/feasibility study
    2. Works with local organizations to gather information
    3. Reports on findings
- **FITC** prepares detailed initial Program Plan and Proposal Design
- **The Regional Entity** appoints a local NGO or local, grassroots, private organization to directly implement the program
- **Local Organization**
    1. Receives and reviews overall program model elements
    2. Explores local cultural needs and capabilities
    3. Provides additional information to assessment
- **FITC, Regional Entity, and Local Organization** work collaboratively
    1. Design and develop a customized program that responds to local needs and considerations, and capabilities
    2. Designs specific, detailed program plan
    3. Specified timelines are discussed and agreed upon
- **FITC** finalizes details of curriculum and technology considerations
    1. Kick-off of program at agreed upon sites

B. Implementing Summer Symposium

- A partner university designs and develops initial proposal document
- This university convenes expert group to review plan
    1. Planning group consists of FITC, and selected country representatives
    2. Final report is prepared
    3. Detailed plan is agreed upon
- This university explores funding sources for the symposium
    1. Funding proposals are prepared
- A detailed action plan is prepared

VII. Work Plan

(Please See Chart)

Output/Activities		Y.	Y + 1	Y + 2	Y + 3
Output 1.1	Brochure and multimedia presentation				
Activities:					
1.1.1	Gather all pertinent information	√	√		
1.1.2	Design and prepare brochure	√	√		
1.1.3	Develop presentation methods	√	√		
1.1.4	Present program at a minimum of 5 major events	√	√	√	√
Output 2.1:	Introduction of customized & technology driven curriculum in 5 pilot countries				
Activities:					
2.1.1	Selection of pilot countries	√	√		
2.1.2	Study and evaluate each country infrastructure	√	√		
2.1.3	Develop Architectural Framework and Detailed Design	√	√		
2.1.4	Explore menu of program options	√	√		
2.1.5	Define Direct Measures of Quality and other reporting elements	√	√		
2.1.6	Select pilot schools for implementation in accordance with specific environmental and service delivery capabilities	√	√		
2.1.7	Prepare Delivery Plan	√	√		
2.1.8	Solidify details of program implementation with delivery team	√	√		
2.1.9	Initiate school programs	√	√		
2.1.10	Installation, testing and training of all program elements	√	√	√	√
Output 3.1:	Implementation of Community Center Programs				
Activities:					
3.1.1	Selection of sample countries				
3.1.2	Study and evaluate each country infrastructure	√	√		
3.1.3	Develop Architectural Framework and Detailed Design	√	√		
3.1.4	Study country and local variables such as education statistics and technology capability	√	√		
3.1.5	Develop Detailed Program Plan	√	√		
Output 3.2:	Action plan for training/learning center				
Activities:					
3.2.1	Determine sites for center				
3.2.2	Identification and selection of local service providers	√	√		
3.2.3	Identify site- specific input variables – such as special needs Population considerations	√	√		
3.2.4	Identify site -specific environmental and service delivery capabilities	√	√		
3.2.5	Explore menu of delivery options	√	√		
3.2.6	Define reporting elements	√	√		
3.2.7	Prepare Delivery Plan	√	√		
3.2.8	Solidify details of implementation with delivery team	√	√		
3.2.9	Initiate customized program in centers incorporating special needs considerations and a curriculum incorporating the Culture of Peace	√	√	√	√
3.2.10	Installation, testing and training of all program elements	√	√		
Output 4.1:	A detailed Action Plan to Support the Development and Implementation of an international summer symposium				
Activities:					
4.1.1	Expert group meeting to review plan including FITC and country liaisons	√	√		
4.1.2	Final paper with concrete details	√	√		
4.1.3	Seek optional funding	√	√	√	√
4.1.4	Prepare details of Symposium	√	√		
4.1.5	Identify participants	√	√		
4.1.6	Initiate details of Symposium and organize symposium	√	√	√	√

ANNEX - A

PROGRAM PARTNER

Consistent with the intent of the program to build upon and enhance existing successful activities, programs and collaborations, **United Nations Promoting the Culture of Peace and Community Empowerment through Bridging the Digital Divide is** undertaking this initiative in partnership with FITC. It is anticipated that more agencies, organizations and universities will be involved as the program moves forward.

FUTURE ITC CORPORATION (FITC)

Founded in 1983 by educators from UCLA's Academic Advancement Program, FUTUREKIDS classes are taught in public and private schools as well as in Learning Centers. Each week, hundreds of thousands of children receive technology instruction from FUTUREKIDS in their classroom settings as well as in after-school and weekend Learning Centers. FUTUREKIDS has direct linkages to more than 10 major universities (leaders in the field of education) to ensure that the latest teaching methodologies and strategies are incorporated into their staff development, school and after-school programs.

Drawing upon its educational program expertise, its international network of program providers and proven successes as an information technology, professional development leader, FUTUREKIDS New York City provides the programmatic and organizational leadership for the **FITC** Corporation operation. FUTUREKIDS NYC has extensive experience in providing training to administrators, teachers and parents in schools and in delivering a menu of programs in community centers for children, young adults, parents and seniors. FUTUREKIDS NYC has the necessary expertise to develop a customized program model as well as to provide the necessary incentives and management support to implement a sustainable operational structure.

With more than 21 years experience and involvement in delivering successful educational programs and practices that have been researched and field tested, both nationally and internationally, FUTUREKIDS has been a trusted and valued partner in education to over 2,000 schools in 75 countries worldwide. FUTUREKIDS is a world leader in helping schools use technology to transform education. This is accomplished by working with schools to integrate technology for the direct purpose of improving student performance.

FUTUREKIDS NYC opened its Manhattan headquarters location in 1995 on First Avenue and 85th Street. Through its Learning Center, after-school community programs, as well as its in-school curriculum and teacher training programs at New York City's public and private schools, FUTUREKIDS teaches children ages three through teens, adults and seniors to master computer technology. It has successfully operated academic enrichment, technology-based after-school and in school programs for over 28,000 children and youth in New York City that took place in the schools and at 37 New York City Housing Authority locations. These programs have yielded over 120 publications, newsletters, on-going telecommunications exchanges, forums and school day extended programs/applications.

FUTUREKIDS New York City has been providing exemplary educational services for over seven years in the New York City Schools. This model of technology driven, multidisciplinary, focused professional development, curriculum implementation and parent training has been extensively utilized in support of participant, high need New York City administrators, special education supervisors, teachers, staff developers, paraprofessionals, librarians, and parents from each school.

In addition to working in the New York City Schools, in late 1999, based upon research and an assessment of community needs by Public Private Initiatives, Inc, (PPI), the Community Operations Department of the

New York City Housing Authority (NYCHA), the Department of Information Technology & Telecommunications (DoITT) and the New York City Mayor's Office, identified the need for an after-school, community-based computer training program for low-income youth.

Between February 2000 and February 2001, FUTUREKIDS operated a pilot program at 37 NYCHA community centers serving over 2000 low- income youth in grades 6-8. The program provided 45 hours of curriculum technology training to introduce and orient low-income students to computer usage and specific types of computer applications. The pilot program complemented other educational and recreational activities that NYCHA provided to youth at its community centers. The program was so successful that it won the 2000 Housing Urban Development "**Best of the Best"** Best Practices Award in a national competition.

FUTUREKIDS NYC brings to the **FITC** Corporation, extensive expertise in operating and managing educationally aligned, technology-driven programs in the after-school, in-school, adult education and professional development arenas in both rural and urban areas.

FITC's curriculum is being developed by experts in the field culled from various parts of the world. In addition, FITC utilizes consultants to help implement the Program in various countries. These consultants have extensive experience in both development of educational materials as well as highly advanced technological skills required for the proper procurement of technology and necessary build out of the infrastructure in countries falling within the Program's ambit.

FITC's operational staff is lean. Its operations do not require a large infrastructure as much of the work is subcontracted out. Thus, with respect to technology that will be utilized and placed in the schools in various countries, FITC requests bids and, based on the UN prices that may be charged, chooses the appropriate company for the implementation of a specific technological need. The specific needs are mapped out by FITC personnel and advisors based upon the information from the Country and an independent survey done after a few field trips to the host country.

FITC thus does not have to do much more than engage in general oversight of the proper build out of infrastructure in the various school systems. This significantly reduces FITC overhead and allows FITC to focus on developing the curriculum, fundraising and other basic activities.

FITC (or "Company") will be the prime liaison between developing countries the United Nations Agencies, Government and World NGOs (the "Agencies") for implementation of the educational development in such countries through the Agencies' Culture of Peace Program to Bridge the Digital Divide (the "Agencies Program")

FITC will have a contract with the Agencies to be the agent and company to implement the Culture of Peace program.

FITC is taking a multi-pronged approach to provide all the necessary requirements for implementation of the Agencies Program, including:

- Conducting, in conjunction with the country's department of education an analysis of the needs for such country
- Helping the country build the required technological and other infrastructure in its schools for the implementation of the educational programs
- Providing a detailed and in depth curriculum uniquely tailored for that country's schools
- Training the necessary individuals on a continuous and ongoing basis
- Procuring, if necessary, the required capital form donor states to fund the implementation of the Program

FITC is a uniquely company whose team has vast experience in successfully developing and implementing educational programs around the United States.

FITC also has many significant relationships with various premiers and head of state, as well as members of the Unites Nations that make it uniquely capable of helping to promote the Agencies Culture of Peace Program through Bridging the Digital Divide in third world countries.

FITC has participated in many discussions with members of the Agencies and has proven to them its ability to successfully implement educational advancement through deployment of new technology and unique programs with a goal to teach students how to utilize such technology and thus bring them more in line with more advanced western countries.

❖ **The three main objectives of FITC are as follows:**

- To become the main facilitator for development of advanced educational and technological programs in third world and underdeveloped countries.

- To become an important player in procuring financial capital from third parties for such countries in order to implement the Program in each country.

- To help promote the culture of peace and, ultimately, other programs and advancement in such countries.

A – School Programs Model

The key to effective use of technology in any learning environment is to ensure that teachers, administrators, students and parents/caregivers have the **skills** to use the technology and the knowledge of how to **APPLY** those skills (collectively) to promote problem solving, creative expression and communication. Experience proves that when these skills are not present, the use of computer technology is not very effective and certainly not used to its fullest extent. Recognizing that technology integration is not an easy or simple task, The Culture of Peace School Program offers a model of integration that is specifically tailored to meet the unique needs of each and every individual school that incorporates this program. The hallmark of these products and services is the individualized attention and ongoing mentoring and support schools need to be successful on a long-term basis, in order to blend essential elements of the Culture of Peace while bridging the digital divide. By combining the School Programs development and training expertise with multidisciplinary curriculum infusion, the program equips teachers with the tools they need to infuse technology into lesson plans. The result is a radical transformation in how teachers educate and how students learn. The School model emphasizes and incorporates the focus that education is the way and technology the ultimate tool for achieving worldwide peace by bridging different communities, nations and cultures without regard for race, religion, nationality or gender. Technology, in combination with the human dynamic of interaction, can fuse remote communities, encouraging understanding and increasing tolerance.

The School Programs approach has **five** major components to ensure that computer technology is effectively implemented and used and that the Culture of Peace goals are fully integrated into all elements of the program: (1) a **comprehensive, 45 hour accredited** staff development course in technology for educators which provides the foundation for effectively using and applying technology, (2) a 10 hour per age group, **student grade appropriate curriculum training for teachers** that will integrate technology with a program-centered thematic approach incorporating Education for Peace as the major theme. (3) **Integration training and (mentoring)** support for teachers to help them take their programs and activities in all academic areas and add the use of computer technology in the classroom and in the lab, (4) a 30 hour **Family Technology Literacy** course including multi-generation shared family/community oral history and scrapbook investigations/ programs, and (5) A 40 hour **Mind Lab**® training for teachers to help them implement a modular learning program of interactive, multi-solution games, accessories and activities designed to acquire and enhance thinking skills as well as strengthen life skills.

1. Comprehensive Professional Development Training

The School Programs Professional Development program is the culmination of years of research and evaluation. The end result of this extensive study and development is a hands-on training course that responds to the specific needs of professional educators around the world.

The training is designed to allow teachers to quickly become productive technology users. Teachers learn as they work on programs, such as creating a Venn diagram using graphics, critically evaluating Web sites, creating a technology integrated lesson plan and generating multimedia presentations for their classrooms.

These activities allow teachers to understand the value of technology and to experience the software and learning strategies connected with each skill. From these activities, teachers glean ideas on how to infuse technology into their own lesson plans. Immediately, teachers increase their own productivity, improve their teaching methods and learn how to pass these technology skills on to their own students. They learn that education and effective use of technology enables them to help students bridge the digital divide.

This comprehensive 45-hour Accredited Professional Development program is designed to train professional educators at all grade levels in the basic fundamentals of computer literacy. The training is not designed to make participants experts on a specific software application, but rather to introduce and familiarize them with the basic concepts or skills in 10 technology areas: operating systems, telecommunications (Internet), word processing, graphics, spreadsheets, desktop publishing, databases, multimedia, applied technology and programming. The course is given in either PC or MAC format and is activity-oriented, relevant, individually responsive and enjoyable. Both professional tasks (keeping grade books, creating lesson plans and communicating with various educational groups) and classroom teaching (complementing the current curricula) are addressed. Participant teachers review, observe and initiate efficient teaching practices as part of their training. The Professional Development Curriculum uses a comprehensive assessment tool to evaluate teacher skill level both before and after the course. The tool allows us to group teachers to maximize learning potential, monitor growth during the course, and develop further technology-training plans to ensure the ongoing success of students. This training is offered to teachers in groups of 12 participants.

2. Integration and Mentoring Training

With the assistance of an Integration Facilitator, teachers learn to infuse technology into all academic areas. The Integration facilitator or "mentor" can also support his/her group of up to 12 teachers in: selecting a thematic unit of the ongoing curriculum to be technology infused or developing activity outlines, especially emphasizing the Culture of Peace elements. Furthermore, the Integration facilitator or mentor provides active, on-site support and mentoring during and after the implementation of the activities. The Integration facilitator supports teachers at their school sites in the development of technology infused activities, so that teachers model their own customized curricula incorporating the School Programs Framework. Furthermore, the Facilitator demonstrates and models lessons in class with teachers and students. This five tiered professional development approach, planning, creating, presenting, supporting and sustaining, is ideally suited to the extensive menu of comprehensive professional development services to achieve its use of instructional technology in the classroom and to enhance an existing school's academic curriculum.

The School Programs Model helps classroom teachers begin to infuse technology into all subject areas as well as school events. The goal of Integration Facilitation is to generate activity outlines revolving around one central curriculum theme for implementation in the computer lab or the classroom. The model includes modules focused on exceptional teacher developed, literacy driven practices and the use of The International Society for Technology in Education standards.

A trained facilitator/"mentor" guides teachers through this process while emphasizing the Culture of Peace and Non-Violence for the Children of the World's mission:

- **Planning**

The Integration Facilitator meets with up to 12 teachers who are grouped by grade or by subject area. Drawing from existing curriculum, the teachers select a thematic unit of study to be infused with technology. Teachers identify required content objectives and discuss how the activity can be enhanced with technology.

- **Creating**

Based upon the planning, the Integration Facilitator either works independently or works with the teachers to create activity outlines around one central theme. Each outline identifies key learning objectives and describes the technology-infused activities that have been created.

- **Presenting**

The Integration Facilitator meets with the teachers to preview the activity outlines and to address any questions or concerns. The role of the facilitator is to prepare educators to teach the activities. Training modules particularly the implementation and school district leadership ones are designed to increase the capacity of the school community and participant school district to provide its own professional development.

- **Supporting, On-Site Mentoring & Demonstration Lessons**

The Integration Facilitator provides ongoing support and mentoring during and after the implementation of the activities. Teachers have the opportunity to discuss any technical problems that they encountered while teaching as well as the effectiveness of the lessons. The Integrations Facilitator also models appropriate technology lesson instruction in the classroom with the students.

- **Sustaining**

Working with the Integration Facilitator on activity outlines, teachers are immersed in the development of technology-infused activities. As active participants in this process, teachers learn to model future lessons using the framework constructed by the Integration Facilitator. With this knowledge, teachers are then able to sustain technology integration and evolve their own school customized, exemplary technology infusion practices.

This Integration and Mentoring training is offered to groups of 12 teacher participants; 10 hours per teacher.

3. Student Curriculum Training

The student curriculum training emphasizing themes based upon the six Culture of Peace Principles will be offered to a school site computer laboratory instructor / lead teacher. This training will include 10 hours of training per age group; ages 3 to 5 years, 5 to 8, 8 to 11, 11 to 14 and 14 years through young adult. Curricular units are built on a framework of over 400 learning outcomes in the ten technology areas that integrate and emphasize the goals that we should **Respect All Life, Reject Violence, Share With Others, Listen to Understand, Preserve the Planet and Rediscover Solidarity.** Lesson plans provide challenging age-appropriate programs for students and assessment tools that measure the growing mastery of technology along with demonstrating the learning identified with the Culture of Peace Global goals. Each curricular unit incorporates learning objectives that are defined in a scope and sequence database in the ten technology areas covered in the comprehensive professional development course.

This student curriculum encourages the development of students' ability to work collaboratively, to think critically, to solve complex problems and to communicate clearly and creatively. The laboratory instructor will incorporate this curriculum training into ongoing work with students and teachers.

4. Family Technology Literacy Training

School Programs Training For Parents will provide continuing education for parents and community adults of all ages. Program offerings will consist of Culture of Peace goals while integrating literacy education, basic technology training, computer skills workshops and technical skills development needed for technical and professional work. Topics will include Computer Basics and Operating Systems, Keyboarding, Word Processing, Telecommunications, Desktop Publishing, Spreadsheets, Databases, Multimedia, Software Evaluation and a final program of the parents' choice. Parents will participate in a 30 hour Family Technology Literacy course as well as a program of shared family literacy / technology experiences to be offered in ten, 3 hour sessions. Parents will learn practical software skills that support family literacy while becoming immersed in the vision of creating a global society. They will also be guided to use technology to foster family literacy and support their children's school based learning as well as furthering their own skill development. Parents need to be successfully informed and enabled so that this process can achieve goals for their children that are consonant with overall family goals. In order for student technology/academic achievement standards to increase, parents/caregivers need to become knowledgeable, contributing members of technology literate communities. This program presents an opportunity for that to occur.

5. Mind Lab® Training

As educators, our task is to instill into our children those values, which further both self-betterment and universal moral standards. Using state-of-the-art Artificial Intelligence (AI) programs, the Mind Lab® can transform the game experience into a thinking and awareness stimulator whose positive multi-faceted results will be felt throughout one's lifetime. Mind Lab training is designed to provide hands on experience for classroom teachers or computer laboratory instructors/lead teachers in offering an all-encompassing modular learning program for the imparting of thinking skills to all pupils in an independent and curriculum-compliant way. The Mind Labs include an exceptional administrative computerized and internet-based kit called "The Thinking Trainer©" that equips the teacher or instructor with complete learning administration and control.

From an early age, children are eager to learn to acquire a culture of thinking, attentiveness and tolerance. Under appropriate instruction the wide range of educational games can act as a multi-cultural simulative catalyst, which trains the children towards mutual respect and peaceful coexistence.

Mind Labs take educational standards to a higher macro level of consciousness and awareness, which places weight emphasis on individual moral standards and universal global concerns. Through the exploration of multi solution games and related materials, teachers will be trained in a curriculum that emphasizes the following:

- **Respect All Life**

At the heart of Mind Lab's educational rationale lays the urgent need to respect and recognize the sanctity of all forms of life. This is the Mind Lab's founding principle without which any other manner of personal growth and enrichment would certainly miss its primary target.

- **Reject Violence**

Mind Labs clearly demonstrate that all grievances can be redressed by rational methods without the need to resort to senseless violence. The creation of an atmosphere of mutual tolerance can ensure that coexistence will prevail.

- **Share with Others**

The Mind Lab experience draws attention to the fact that personal growth and enrichment is augmented when shared with others. There are no true winners when profits are hoarded for the benefit of a privileged and select few. A win-win situation is achieved when even distribution of knowledge is provided.

- **Listen to Understand**

The physiological fact that we have been blessed with two ears and one mouth is the clearest indication of the need to first listen and only then to speak. Mind Labs stress that listening and attentiveness to our colleagues is the primordial means of information gathering. When furnished with a greater degree of understanding open dialogue can then be conducted.

- **Preserve the Planet**

The development of scientific thinking techniques, which are built into the Mind Lab program, takes the user to higher levels of ecological awareness. The urgent need to rally behind Environmental Science and planet preservation cannot be understated in order to guarantee a healthy global future for our children.

- **Rediscover Solidarity**

The internalization and fusing of all the Mind Lab elements will ultimately create an atmosphere of unity, harmony and cohesion from the family unit up to the global community.

B – COMMUNITY CENTERS PROGRAM MODEL

Each Community Center will offer a menu of services including technology training for preschoolers, 3-5 year olds, after-school, weekend and summer training for children ages 6-12 and 13 through young adult, Mind Labs, parent/adult education technology programs and programs for senior adults that emphasizes the Culture of Peace and non violence for the children of the world's mission:

- Respecting All Life
- Rejecting Violence
- Sharing with Others
- Listening to Understand
- Preserving the Planet
- Rediscovering Solidarity

These services will be offered either in the form of direct instruction to children and adults or training will be provided to trainers "train-the-trainer" model, so that they will be prepared to implement these services.

Offering students supplemental, rewarding, challenging, enjoyable and age-appropriate activities in a structured, positive environment will enable them to become more motivated learners. Specifically, these programs prepare students to do better in school by encouraging them to successfully participate in technology infused learning activities that provide hands on experience in technology awareness and focuses on bridging the digital divide. Not only are the programs intrinsically motivating, but a built in system of rewards, megabytes, passports and certificates, adds to the excitement of achievement.

Specifically, the proposed program approach of age appropriate, scope and sequenced curricula exposes students to an environment rich in language and print, producing documented improvements in reading and mathematics achievement and a desire to succeed in related academic and social areas. It further encourages students to share their newly acquired skills by engaging them as peer-tutors, co-facilitators, and active participants.

Therefore, the **Community Center** program is designed to provide the following components:

- Basic technology activities that will increase educational attainment through technologically/academically integrated social and cultural experiences highlighting the Culture of Peace mission;

- The necessary technology hardware, software and supportive equipment that encourages the acquisition of age appropriate technology skills;

- Program opportunities for supplementary support to students to improve their overall academic performance and achievement of high standards and increased academic success;

- A system of program achievement incorporating motivational teaching tools that are built into the program.

- Programming will generally take place once a week for 2 hours per session for ages 9 and above and 1 hour once a week for ages 3-8.

The Culture of Peace Program will help shape the futures of community children and adults by offering a program featuring highly developed computer skills, complemented by essential supportive academic and social assistance.

The Major Goals of the Community Centers: To provide ongoing learning opportunities for community participants around the world; to increase mutual understanding by enhancing creativity, a knowledge base and technological literacy; to develop a model technology center program that will demonstrate the effectiveness of increased use of computers and information technology for low income children, youth, and adults in the Least Developed Countries; to provide activities that will increase educational attainment for children, youth and adults through technological/ academically integrated social and cultural experiences that will be enhanced by a global communication design using the Internet. These community centers are also positioned to offer opportunities for the development of self-sufficiency through career development, job preparation and the development of business opportunities for youth, parents and adults from the community. The specific goals and objectives are as follows:

- **Goal 1** – **Community Centers** will introduce, develop and initiate a year round technology based program for children, youth and adults that will increase educational attainment through technology and an array of support services aimed at bridging the digital divide.

  Objectives – 1) to offer after-school, evening, weekend and summer technology-focused programs for children, youth and community adults, 2) to provide technology related, continuing education/literacy courses to adults, 3) to provide technology integrated academic enrichment activities.

- **Goal 2** – **Community Centers** will offer opportunities for the development of self-sufficiency through Career Development and Job Preparation activities.

  Objectives – 1) to provide Career Development workshops, 2) to provide employment readiness training, 3) to provide technology specific school-to-work training, 4) to offer advanced critical technology skills.

- **Goal 3 – Community Centers** curriculum will emphasize the themes of tolerance, respect, non-violence and, peace, through means of advanced technology.

  Objectives – 1) to provide specific technology integrated social/economic curriculum that offers a new paradigm for diversity education, 2) to provide interactive opportunities for participants to incorporate the vision of achieving worldwide peace into every aspect of their activities, 3) to provide activities that encourage students to include the Culture of Peace vision and to create their own program design and response including the elements of tolerance, conflict resolution without violence, establishing networks of cooperative communities and building bridges for peace.

  The Culture of Peace offers a model program that will demonstrate the educational effectiveness of supporting the availability of computers, technology, and technology based academic activities for children, youth and adults particularly from economically distressed communities in the Least Developed Countries. The program will provide the following technology-focused educational services and activities to participants who would otherwise lack these resources:

1. Adult Education and Family Literacy

Continuing education will be provided for parents and community adults of all ages. Program offerings will consist of Culture of Peace goals while integrating literacy education, basic technology training, computer skills workshops and technical skills development needed for technical and professional work. Parents will participate in a 30 hour Family Technology Literacy course as well as a program of shared family literacy /technology experiences to be ***offered evenings and weekends.*** Parents will be able to learn practical software skills that support family literacy while becoming immersed in the vision of creating a global society. They will also be guided to use technology to foster family literacy and support their children's school based learning as well as furthering their own skill development. Parents need to be successfully informed and enabled so that this process can achieve goals for their children that are consonant with overall family goals. In order for student technology/academic achievement standards to increase, parents/caregivers need to become knowledgeable, contributing members of technology literate communities. This program presents an opportunity for that to occur.

2. Mornings, early afternoons, weekend and summer Activities for children (ages 3-5)

In addition to providing essential technology training, the program will also be assisting in the development of reading, math, verbal expression, and fine motor skills proficiency for children of this age group that integrates Culture of Peace social elements. Reading, talking, writing, listening, viewing, and developing hands on programs is encompassed in a standards based/technology driven early learning experiences and strategies. This program will be ***offered mornings, early afternoons, weekends and during the summer.***

Research shows that technology-supported learning stimulates enthusiasm for learning in any situation and that it promotes self-confidence and independence. With this in mind, the program does the following:

- Provides a multidisciplinary, authentic, student-centered, "state of the art" program approach for young children
- Supports emerging literacy with age appropriate computer training;
- Assists in the development of reading and math readiness and verbal expression;
- Develops fine motor and visual discrimination skills;
- Offers activities that address specific teaching objectives; learning numbers, shapes, colors, letters, and recognizing patterns
- Facilitates a positive learning environment that nurtures teaching and learning.

3. After-school, weekend and Summer Activities for children (ages 6-12)

The program will provide a content driven technology program with a spotlight on reading, math, science and arts activities, that is immediately accessible to multi language speakers and special needs populations. Students will learn basic computer literacy skills, such as graphics, word processing, telecommunications (Internet), word processing, multimedia, desktop publishing, spreadsheets, databases, and web page design. The program which will be ***offered afternoons, weekends and during the summer,*** will enhance educational opportunities by using technology as a tool for engaging students in academic and enrichment activities that highlight and integrate themes and programs for achieving worldwide peace. Students will create programs in an environment that is rich in language and print with quality research-based tutoring programs. The program will also offer homework assistance and other support to promote academic achievement.

In addition to engaging students in program-based, academically enriched computer training, they will become involved with **Mind Labs®**, a unique program designed to enhance thinking skills. This exciting program will introduce children to numerous hands-on, computer based, interactive games and accessories while providing activity pattern feedback which can improve thinking skills, enhance awareness to various processes, and help students cope better with his/her emotional world. Experiencing an enjoyable and gripping game can carry each student into far-reaching levels of thinking and understanding. Unique multi-solution games are explored individually or with several friends.

Each child is challenged and coached to take the game to new levels of play and excitement with the help of the computer and each other. The comprehensive methodology enables students to improve on skills such as problem solving, decision-making, mathematical thinking, memory retention, investigative skills and cooperation while incorporating the Culture of Peace goals of **Respecting All Life, Rejecting Violence, Sharing With Others, Listening to Understand, Preserving the Planet and Rediscovering Solidarity.**

4. **Career Development and Job Preparation (ages 13 through young adults)**

Moving from basic technical skills training, to more advanced skills, older students and adults will work with a technology-focused curriculum written with a school-to-work emphasis. These classes will be ***offered late afternoons, evenings and weekends.*** Students will develop resume writing skills, as well as job search and, interviewing conversational skills and work environment preparation. Participants will also attend Career and Employment Readiness Workshops.

5. **Small Business Activities**

The program will provide older students and community adults with the opportunity to acquire basic business related computer skills as well as experiences with information technology pathways that will give them the foundation for exploring small business startup and E-Commerce activities. These classes will be ***offered evenings and weekends.***

6. **Programs for Senior Adults**

Given appropriate training, adults of any age can learn to use and to enjoy computers. At Culture of Peace Centers, seniors can discover the ease and joy of learning to use the computer as a tool for their own enjoyment or as a tool for becoming actively involved in the Culture of Peace initiatives. They will develop new usable skills and they will be better equipped to enjoy daily life in a technology-driven global society. These classes will be ***offered late afternoons, evenings and weekends.***

All programs include a package of incentives and motivational tools. Specifically these include the following:

- Megabytes

Instructors award learning incentives called "Megabytes" to the students. Megabytes can be earned for active participation, peer tutoring, collaborative work, and other forms of creativity. At the end of the program students trade in the accumulated Megabytes for special prizes such as 35-mm cameras, sweatshirts, or backpacks amongst 15+ prizes. In an attempt to boost attendance, the program also offers Megabytes incentives for students to recruit their friends and other peers into the program.

- *Passports*

Each participant receives a passport when entering the program. The passport includes a picture of the student, his or her personal information and includes spaces to "stamp in" for an attendance record, as well as spaces to place Megabytes. The program uses this concept to further the understanding that computer knowledge can be transferred and utilized worldwide. This passport certifies that the student is a member of the class and hence strengthens group cohesion.

- *Certificates*

The students receive a certificate of completion, at the culmination of the program recognizing their accomplishments.

C – MIND LAB PROGRAM MODEL

For those Least Developed Countries who thus far have limited technological resources, they can initiate programming by beginning with the operation of the initial phase of the Mind Lab.

- **Design**:

Mind Labs are special physical learning-environments within a school, community center, or extra-curricula facility. Set up in either a classroom or a designated workspace, the Mind Labs offer an all-encompassing modular learning program for the imparting of thinking skills to all pupils in an independent and curriculum-compliant way through the use of games.

- **Mind Lab Benefits:**
  - Develops awareness to our emotional state
  - Facilitates social cooperation and understanding
  - Clarifies inter-personal communication processes
  - Boosts creative and critical thinking skills
  - Memory training
  - Strengthens grouping and sequencing techniques
  - Develops spatial thinking and competencies
  - Teaches probability studies
  - Familiarizes the children with research methods
  - Brings about interdisciplinary transference
  - Develops cognitive skills which enhance:
    - Problem solving
    - Mathematical and scientific thinking
    - Decision making
    - Planning and execution
    - Conceptualization and Articulation

- **Mind Lab Components:**

✓ Staff Training – In addition to participating in the games, staff are trained on how to integrate the games and processes into the diverse range of school subjects.
✓ Game Kits – The Mind Lab contains scores of thinking games and demonstration accessories of various sizes that enable each learner to experience the thinking process by way of a game suitable to age and level.
✓ Reading material – The Lab is equipped with accompanying literature for each learning program. This includes text and exercise books for children and professional enrichment literature for teachers.

Methodology

- ***The Cognitive Field***

The use of intelligent games as part of Mind Lab's teaching method has been proven to facilitate the acquisition and improvement of various thinking skills such as: problem solving, decision-making in a variety of strategic environments, mathematical and statistical calculation, creative and critical thinking, strategic and tactical planning, conceptualization and articulation.

- ***The Social Field***

In this technological age in which children tend to spend enormous amounts of time in front of televisions and computer screens, increased importance has been attached to games as a means of enhancing social relationships: cooperation with friends and adversaries, concern towards your fellow's actions, and understanding the "I" in social situations.

- ***The Emotional Field***

Games are a stage where children tend to display a spectrum of emotions: anger, frustration and disappointment on the one hand, and joy, satisfaction and pride on the other. Analysis and understanding of these situations effect a noticeable improvement in one's emotional intelligence level.

ANNEX - B

THE ETHIOPIAN PILOT

A – Basic Facts about the country

❖ **History, Politics and Administration**

In February 1974, as severe famine affected Welo and Tigray and in an atmosphere of labour and student unrest and military discontent, the Government was overthrown. Until September 1974, a government held office under the nominal authority of the Emperor, until the Armed Forces finally deposed him, dissolved Parliament and established a Provisional Military Administrative Council (PMAC), better known as the "Dergue". After considerable turmoil, particularly from 1976 to 1977, Col. Mengistu Haile Mariam emerged as the country's ruler.

In December 1974, the PMAC announced a programme under which the entire economy was to be in the hands of the state. All major industrial, financial and commercial companies, including land and extra houses, were nationalized in 1975. Neighbourhood Associations (Kebeles) and Peasant Associations were to implement policy and assist in the administration of town and country respectively. Large estates were confiscated, and the Government embarked on programmes of "villagization" and re-settlement from the Highlands in lowland areas; some 600,000 people were re-settled, mostly unwillingly, before the policy was abandoned in 1986.

The unpopularity of PMAC policies in rural areas was compounded by the long-standing insurgency of the secessionist Eritrean Peoples Liberation Front (EPLF) and the start of a new revolt by the Tigrayan Peoples Liberation Front (TPLF). An invasion of south-eastern Ethiopia by Somali forces in 1977-78, although pushed back, was a further drain on resources. Despite this, with famine again ravaging large areas in the north, the Workers Party of Ethiopia (WPE) was established in 1984, with Col. Mengistu as Chairman. The People's Democratic Republic of Ethiopia (PDRE) was founded in 1987, with him as its first President, just as the balance in the two civil wars began to tip inexorably against the central Government. Major successes were achieved by the EPLF in Eritrea from late 1987 onwards, and the TPLF dislodged Government forces from Tigray in 1989. An attempted military coup in May 1989 failed to oust Col. Mengistu, but in February 1990 the port of Massawa was taken by the EPLF and the northern third of the country, with the exception of an enclave around Asmara, was entirely lost to Government control.

On 28 May 1991, the forces of the Ethiopian People's Revolutionary Democratic Front (EPRDF), a coalition of opposition groups led by the TPLF, entered Addis Ababa as resistance by Government troops collapsed one week after Col. Mengistu had fled the country. EPLF forces had already taken control of Asmara and the port of Assab.

A conference on a peaceful and democratic transition in early July, 1991 approved a Transitional Charter, and formed an 87-member Council of Representatives, composed of representatives of numerous ethnic and political movements. The Charter provides for basic human rights, as well as self-determination by all "nationalities" within Ethiopia who so wish. The Council elected Mr. Meles Zenawi, leader of the TPLF, as President of the Transitional Government; the Prime Minister is Mr. Tamrat Layne.

Although public administration has continued functioning as before, many of the political structures created after the 1974 revolution have ceased to exist. New ethnic, regional and local alignments developed, and many changes took place over the next few years.

During the July 1991 conference, agreement was reached on Eritrea's right to self-determination, ending nearly 30 years of civil war. A referendum in Eritrea in April 1993 established Eritrea as an independent country.

❖ Economy

Ethiopia's Gross Domestic Product (GDP) was estimated at Birr 11.5 billion (us$5.6 billion) in Financial Year 1991/92. Annual growth during the 1980s was about 2 per cent. Per Capita GNP in 1989 was estimated at US$120.

Agriculture is the mainstay of the economy; it provides a livelihood for some 90 per cent of the population and accounts for perhaps 45 per cent of GDP and, despite fluctuations in coffee prices, about 70 per cent of exports. Services represent some 40 per cent of GDP and 7 per cent of employment. Manufacturing only contributes 7 per cent of GDP and 3 per cent of employment.

About 9.5 million hectares, or 8 per cent of land area, is under cultivation at present; about 100,000 hectares are irrigated. Peasant holdings still account for over 90 per cent of crops by area and production. The yield is primarily used by farmers themselves, and only a small proportion of the produce reaches the markets. Since the changes of mid-1991, the State Farms, Production Co-operatives, parastatal marketing organizations and price-control mechanisms established following the 1974 Revolution have changed radically.

Grain crops (the most important of which is teff, a species endemic to the Ethiopian Highlands) account for some 80 per cent of the area cultivated under major crops, and over a third of the value of total agricultural production. Although drought causes marked fluctuations from year to year, cereals production has remained around the 7.5 million metric tons mark until the exceptionally good rains of 1995 and 1996, which along with increased fertilizer use, increased production to around 11 million tons in 1996.

Coffee, still accounting for about 70 per cent of exports, is mainly produced in Wollega, Kaffa, Illubabor, Gamo Gofa, Sidamo and Harerge. Other important agricultural products are cotton, sugar cane, oil seeds, vegetables and fruits. Ch'at, a mildly narcotic leaf, is an important cash-crop in Hararge. Ethiopia's livestock population, estimated at more than 70 million cattle, horses, donkeys, sheep, goats and camels, is the largest in Africa. In addition to leather, (16 per cent of exports), canned and frozen meat and livestock on the hoof are exported, mainly to the Arabian peninsula. Fisheries are still insignificant, although the potential of Ethiopia's rivers and lakes is considerable.

At the beginning of this century, forests covered probably as much as 40 per cent of the Ethiopian highlands and large areas in the lowlands. During the past 40-50 years, however, the forests have been reduced at an alarming rate to only about 4 per cent of the total land area. Reforestation programmes to restore forest cover and to supply fuel wood have been started in many parts of the country, but progress is slow.

Manufacturing involves processing of agricultural and livestock products, textiles and clothing, construction materials and metal goods, and is mostly publicly-owned. There is, however, an increasing number of small privately-owned businesses.

Although only a small part of the country is geologically mapped, mineral deposits are probably considerable, including gold, platinum, lead, tungsten, and copper. A large gold mine has come on stream in Sidamo, and official exports of gold trebled to reach perhaps Birr 75 million in the 1990/91 financial year. Exploitable non-metallic deposits include marble, limestone and industrial minerals such as kaolin and silica, while the volcanic deposits of the Danakil Plain contain sulphur, sodium and potassium salts, gypsum, rock salt and potash.

Petroleum and natural gas occurrences in the east and south-east and extensive geothermal resources in the Rift Valley are not yet exploited. Ethiopia's rivers are its main source of commercial power. The hydro-electric potential is estimated at over 60 billion kwh a year; the capacity installed so far is 1.2 billion kwh, mainly at Fincha in Wellega and on the Awash and Wabe Shebelle rivers.

Since mid-1991, the TGE has given greater attention to economic and social development, with an emphasis on the rehabilitation of drought- and war-affected regions and groups and on the move away from central planning to a mixed economy.

❖ **International Organizations and Bilateral Mission Activities**

The Resident Representative of UNDP is also Resident Co-ordinator for the United Nations System's Operational Activities for Development in Ethiopia. Since the 1984-85 famine, the Resident Representative has also chaired the inter-agency Emergency Prevention and Preparedness Group (EPPG)- now the Disaster Management Team (DMT). The UNDP office and the offices of the World Food Programme (WFP), the UN Fund for Population Activities (UNFPA) and the UN Industrial Development Organization (UNIDO), International Labour Organization (ILO), United Nations Children's Fund (UNICEF) and United Nations Educational, Scientific and Cultural Organization (UNESCO) are all located in the Africa Hall complex which is the Headquarters of the UN Economic Commission for Africa (ECA). In addition, there are representative offices of the Food and Agriculture Organization of the United Nations (FAO), the United Nations High Commissioner for Refugees (UNHCR), the World Health Organization (WHO), the World Bank (IBRD) and International Telecommunications Union (ITU). The International Monetary Fund (IMF) is to open an office in 1993.

Addis Ababa is a major centre for international organizations, notably the headquarters of the Organization of African Unity (OAU), in addition to the ECA. Addis Ababa is also co-host to the International Livestock Centre for Africa (ILCA - recently renamed international Livestock Research Institute - ILRI), the Desert Locust Control Organization of East Africa (DLCO), the All-Africa Leprosy Research and Training Centre (ALERT), and the Association for the Advancement of Agricultural Sciences in Africa (AAASA).

More than 90 diplomatic delegations from Africa, Asia, the Middle East, Europe, and the Americas, as well as the Holy See, can be found in Addis Ababa. There is a Delegation of the Commission of the European Community (EC) and a country office of the African Development Bank, as well as representatives to OAU of regional and sub-regional groupings and liberation movements.

Official Development Assistance (ODA) in 1989, both loans and grants amounted to 741.9 million USD (source OECD 1991). This assistance originated from multilateral aid organizations such as the U.N. agencies and the development banks (40.8%) bilateral governmental donors (55.4%) and non-governmental (3.8%). Among the bilateral donors, the largest volume of assistance was recorded from Italy (US$ 94.4 m). The top ranking 4 sectors of foreign assistance to Ethiopia were: Humanitarian aid and relief (19.7%); Industry (18.2%); Energy (14%); and Agriculture (11%).

Numerous non-governmental organizations (NGOs) have offices in Addis Ababa, mainly dealing with emergency relief assistance. Most of them co-ordinate their activities through a grouping known as the Christian Relief and Development Association.

B – Implementation of the School Net Program in Ethiopia

FITC is currently developing its curriculum for the Pilot program in Ethiopia. This following part gives a detailed description of the various items that have already been concluded in Ethiopian Pilot. These actions have been taken at the initiative of the Ethiopian government and various private businesses in Ethiopia.

To date, $41,000,000 has been invested in Ethiopia for implementation of the Pilot. FITC will take over the reins of the Pilot and develop the rest of the Pilot.

To successfully achieve this, FITC will finalize the curriculum that is currently being developed for Ethiopia. In addition, FITC is in contact with various donor countries and philanthropic organizations to provide some initial seed capital to complete the first Phases of the Pilot in Ethiopia. Such discussions have been going very well and FITC believes that it will be able to complete the first Phase of the Pilot within the next six to twelve months.

❖ Program Mainframe

In order to reach the goal of halving the poverty by 2015 an 8-year mainframe is suggested for Ethiopia schools and communities (as a model for all Africa).

Three main sub frames are included:

a) The first sub frame includes the creation of all initial infrastructures on which communities and primary schools will be based later. The R&D, training, evaluating, call and service systems will be mostly based on existing institutions being upgraded to the advanced missions. The implementation of all segments of the program will be done in full cooperation between the local and the international partners. Each of the secondary schools will be supplied with an advanced ICT center including all necessary materials to enhance performance of students, teachers, administrators, and other community members and entities. The number of students at schools and community needs will affect the capacity of the ICT center at each school. The ICT center at schools will work as many hours per day needed to support the school and the community (morning and afternoons). Those centers will be used to push the community into the 21 century.
b) The second sub frame main goal is to push community members out of secondary schools to be connected and to use ICT opportunities to achieve the goals and objectives described above. The community adult members will be motivated to use the ICT platform to join the most advanced features of the developed world in order to improve them and the community quality of life.
c) The third sub frame should complete the mission of narrowing the digital divide between Ethiopia (Africa) and the world. Young children from age 4 and up will be using the ICT platforms. The use of computers at those young ages will create a change of subjects taught at secondary schools and create a second wave of decreasing the poverty further on. The last frame will affect the community's wellness in 10-15 years after it started. During this time the first and the second sub frames should do the work.

After 2010 the program full-scale operation will be maintained by the parties aiming to the target of 2015.

❖ The Initial Sub Frame (ISF) Plan

The ISF is built upon 5 main types of centers:

- **The National Educative centers (ICDR, EMA, and the NT&EC)** – operates as the headquarters of the ISF. The ICDR will decide the curriculum, adapt and develop materials, and evaluate the materials at experimental schools in Addis Ababa. EMA will develop the E-learning materials, Internet sites programs for the Internet and Video broadcasting programs. The NT&EC will be located at the Addis Ababa TTC (Teaching Training College. The NT&EC will be in-charge to the national trainers, to evaluate the achievements of program goals, and to train and supervise Addis Ababa secondary schools (22 schools) experts. ICDR, EMA and NT&EC will lead the technological revolution in education all over Ethiopia.
- **The Regional Training Center (RTC) located at 6 Regional TTCs**. – Operates as a headquarters to a group of schools (for grades 11-12: 18 schools at Tigray and 2 schools at Afar are supervised by 6 RTC experts located at 2 Tigray TCCs, 24 schools at Amhara and 5 schools at Benshangul are supervised by 11 RTC experts located at the Amhara TCC, 30 schools at Southern are supervised by 10 RTC experts located at Southern TCC, and: 69 schools at Oromiya, 2 schools at Dire Dawa, 2 schools at Gambella, 2 schools at Ethiopian Somale, and 1 school at Harari are supervised by 26 RTC experts located at 2 Oromiya TCCs). The 6 RTCs will be constructed and equipped in parallel to the NT&EC.

- **The Data and Call Centers (DCC) at EMA -** Links all centers and partners to each other. The DCC is connected by a cable to the communication corporation that is connected to the school VSTs through a satellite. The DCC includes a communication hub that keeps all:
    1. Data servers –Evaluation results, Scores, Personal data,
    2. Shared programs server – keeps all shared and public programs,
    3. EL – Electronic Library keeps articles and knowledge,
    4. Digital connectivity (Internet, Internal connections),
    5. Permissions – security, priority, entrance, firewalls,
    6. Technical support – long distance infrastructure maintenance, hardware and software troubleshooting.
    7. Call center - human operators to operate the telephone lines,
    8. Video – studio production adaptation and broadcasting, Internet sites supervision, maintenance, and production.

- **The Formal TEC –** an area in the secondary school main building or out of it, may include one (schools smaller then 1200 students) to six laboratories (schools with 6000 students and more). The TEC is operated by 1-6 teachers in-charge of teaching and training other school staff, 1 IT expert (also the head of the TEC) and 1 technician (in-charge to all hardware power, water systems and air condition).

- **The In-Formal TEC** – at after school hours the formal TEC may be used by out or in school members. The interaction between school and community is mutual.

➢ **<u>The ISF is divided into four phases:</u>**

1. **Phase 1** includes three main sub phases:

   Part a of phase 1 includes: Connecting all secondary schools to satellite, Initial teacher training, connecting the E-learning systems and starting to put generators at schools with main problems are all a part of phase 1 part a.

   Part b of phase 1 includes updating the ICT curriculum and textbooks for grades 11-12, final Connections to the VSTs, complete the in school electrical system, add computers for the preparatory Internet schools connected in a local chain add a laser B/W printer to each laboratory, add safety equipment to the laboratory to prevent theft and fire, train the national trainers, constructing and operating The DCC, The NT&EC, and 6 RTCs at the TCCs.

   Part c of phase 1 includes: completing hardware at the laboratories, adding backup power systems to schools, putting air condition to laboratories, plan evaluation phase.

   <u>At the end of phase 1:</u>

   - All Technical, preparatory and ordinary high schools will be connected to e- learning facilities so the 9-12 grade students can be empowered to promote the Culture of Peace (Respect all life, Reject violence, Share with others, Listen to understand, Preserve the planet, Rediscover solidarity) and Community Empowerment (Increase Human Development Index –HDI, Promote the use of adequate sanitation facilities, decrease infant mortality, lower the gender gap, decrease poverty, decrease food shortage by educating to agricultural improved methods, decrease HIV/AIDS and other illnesses, Improve family planning).
   - The 11-12 grade students at the preparatory schools will be also equipped with an Internet bi-directional laboratory or laboratories (depending on the number of users per school) to become ICT and WWW literate and to empower the goals mentioned to achieve by using the E- learning facilities.

2. **Phase 2** (2005) – Includes three main sub phases:

   Part a of phase 2 includes: completing the TEC (preparatory schools), training 3-8 teachers from each school at the TCCs.

   Part b of phase 2 includes helping EMA to produce new E-learning materials, equipping the TECs at the chosen schools, Constructing and wiring TECs at additional schools.

   Part c of phase 2 includes: equipping TEC's at the additional schools, starting to work with the communities (Second Sub Frame).

   At the end of phase 2:

- All Technical and Ordinary high schools will be equipped with Internet bi-directional laboratory or laboratories (depending on the number of users per school) so that all students at grades 9-12 all over Ethiopia will become ICT and WWW literate and to empower the goals mentioned to achieve by using the E- learning facilities. At this phase grades 9-10 and grades 11-12 will use the same curriculum developed for grades 11-12 at the preparatory schools at phase 1.
- A national formatting evaluation plan will start to give results and to assure the program being on track.

3. **Phase 3** (2006) includes: building new curriculum and textbooks for grades 11-12, training the national and the regional experts to use the new curriculum, evaluating and increasing the interconnection between schools and communities, converting old E- learning materials to be based on the culture of peace concepts.

   At the end of phase 3:

- All secondary schools will be connected strongly to the local communities to ensure that administrators, young students and parents have the skills to use the technology as well as acquire knowledge of how to apply those skills in promoting problem solving, creative expression and communication. The community and school will help each other to decrease poverty to increase health care and to improve the living level through bridging the digital divide. The program involves members of the community (children, youth, and adults), the civil society, and the private sector.
- An advanced curriculum to be used for grades 11-12 will be developed for the students that were already ICT literate at the end of grade 10 or 11.

4. **Phase 4** (2007) includes: training the Regional experts and school experts to use the new curriculum, Equipping TEC's with additional materials, achieving full capacity at all secondary schools, ending evaluation and writing a final report, transferring all responsibilities to the Ethiopian Education Ministry.

   At the end of phase 4:

- All preparatory schools and Technical schools will be equipped and trained to use the advanced curriculum for grades 11-12.
- Final corrections and changes will be done to prepare the program to its on-going phase.
- Summarizing evaluation will be reported and acknowledged.

The implementation period for all four phases is estimated to be less than four years ending on 2007. After this time, the Ethiopian government will be responsible for ensure the sustainability of the

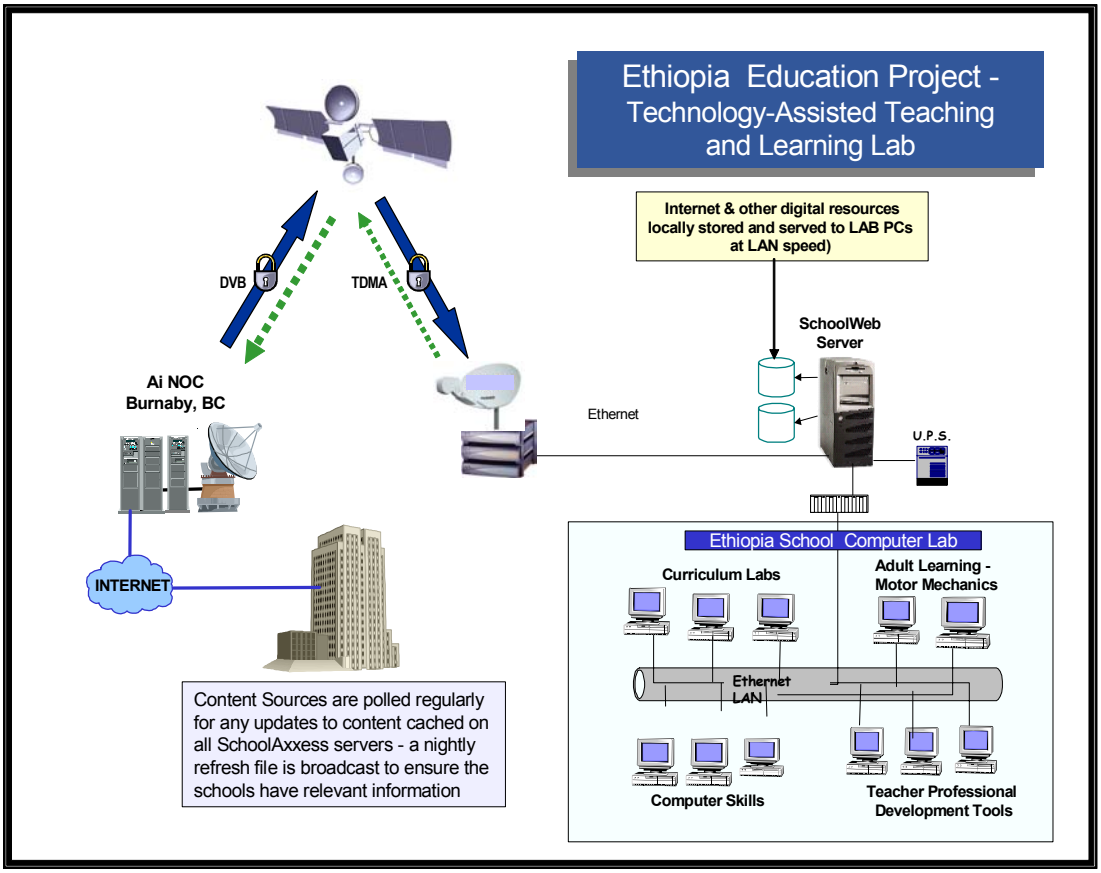
program. The implementation period is also very much connected with the result of funds flow and existing infrastructures.

❖ The Educational Technologies

➢ Computers and peripheral equipment:

The following technology is to be installed in each school:

a. Satellite feed
b. Satellite dish, receiver
c. 1 Server - including 2 X 36 GB SCSI drives and 512 MB memory
d. 1 UPS – APC VA700 (or equivalent)
e. 20 Pentium IV PCs w/Windows XP Professional with integrated CD burner
f. 24 Port 10/100 Mbit Switch or Hub
g. 1 Digital Camera
h. 1 Colour Laser Printer
i. 1 Monochrome Laser Printer
j. 1 Flatbed Scanner
k. 1 Tape Backup System
l. 1 36" Digital TV (should be connectable to Teacher's PC as large screen classroom monitor that brings Internet and other digital resources to life)
m. 1 VCR – recommend that all content be digital (wherever possible), so it can be updated in all schools simultaneously via broadcast refresh capability



Teaching will be done in one up to six educational spaces (ES). All ES are or basic used by grades 9-10 (ES1) or advanced used by grades 11-12 (ES2). Both ES are connected to the Internet and are a part of the TEC. The number of ES1 rooms and ES2 room is changing between schools as a factor of number of students. In schools with less than 1200 students just one physical space will include ES1 and ES2 together. At most there will be 50 students per ES.

ES1 includes 25 computerized stations (each of the stations can act as a stand alone computer including CD burner) that are connected in through a local net to a master computer which holds all data and is UPS protected (includes also DVD burner, DVD driver, better screen and video card with analog video input/output and a television card. Each station is used for 2 students.ES1 also include: a TV, a VCR, and a stereo system to be used by the community at after school hours

If school has more than 1200 students then a second Educational space is used otherwise the next activities are added into ES1. If the school includes more then 2400 students then additional ES1s are added. The number of ES1 is increasing according to number of grade 9-10 students and the number of ES2 is increasing depends on the number of years 11-12 students.

The advanced educational space, if not a part of ES1 (more than 1200 students per school), will include:

17 terminals (stations) connected to a master computer using a local net, a color laser printer, a flatbed scanner, 8 headsets, 8 Internet cameras, 1 digital camera, 1 video camera,. In addition 8 not computerized stations are added.

➢ The Educational Materials

At ES1 basic Microsoft application software is taught using programs and missions based on the culture of peace concepts and dealing with Innovations and Initiatives as a tool to decrease poverty, health program and research, agriculture and environments issues in order to encourage students to use the tools. The software used at ES1 are Windows, Word processing, explorer, Power point, Excel, Front page, mail, ICQ. researching the environment will need some hardware (data logger and sensors).

Three main subjects are to be added at ES2

- Site producing and Internet advanced activities, includes: Special purpose software such as: Page Maker, Dream Weaver, Marketing and E-commerce.
- Technology literacy that does not use computers includes: educational kits such as: Introduction to Electricity, Introduction to Sound, Basics in Mechanics, Using Solar Energy.
- Computerized technologies include subjects such as: Controlled Environments, Introduction to Communication, Robotics, Data Collecting and Analyzing.

In order to implement the program, necessary conditions are to be checked and assured:
All rooms and spaces must be made of bricks or stone in order to keep rooms dry and to be able to operate air conditioning for the computers, all rooms will be furnished, safe, supplied with stable electrical current, air conditioned.

❖ The Backbone -Training and Evaluation

In order to create an on-going program that will put Ethiopia on track, a backbone should be developed. Those knowledgeable participants will lead the way.

It is very important to create a wide range of experts that will have enough mass in order to be able to lift a national program of this scale.

- **Five levels of experts will be trained:**

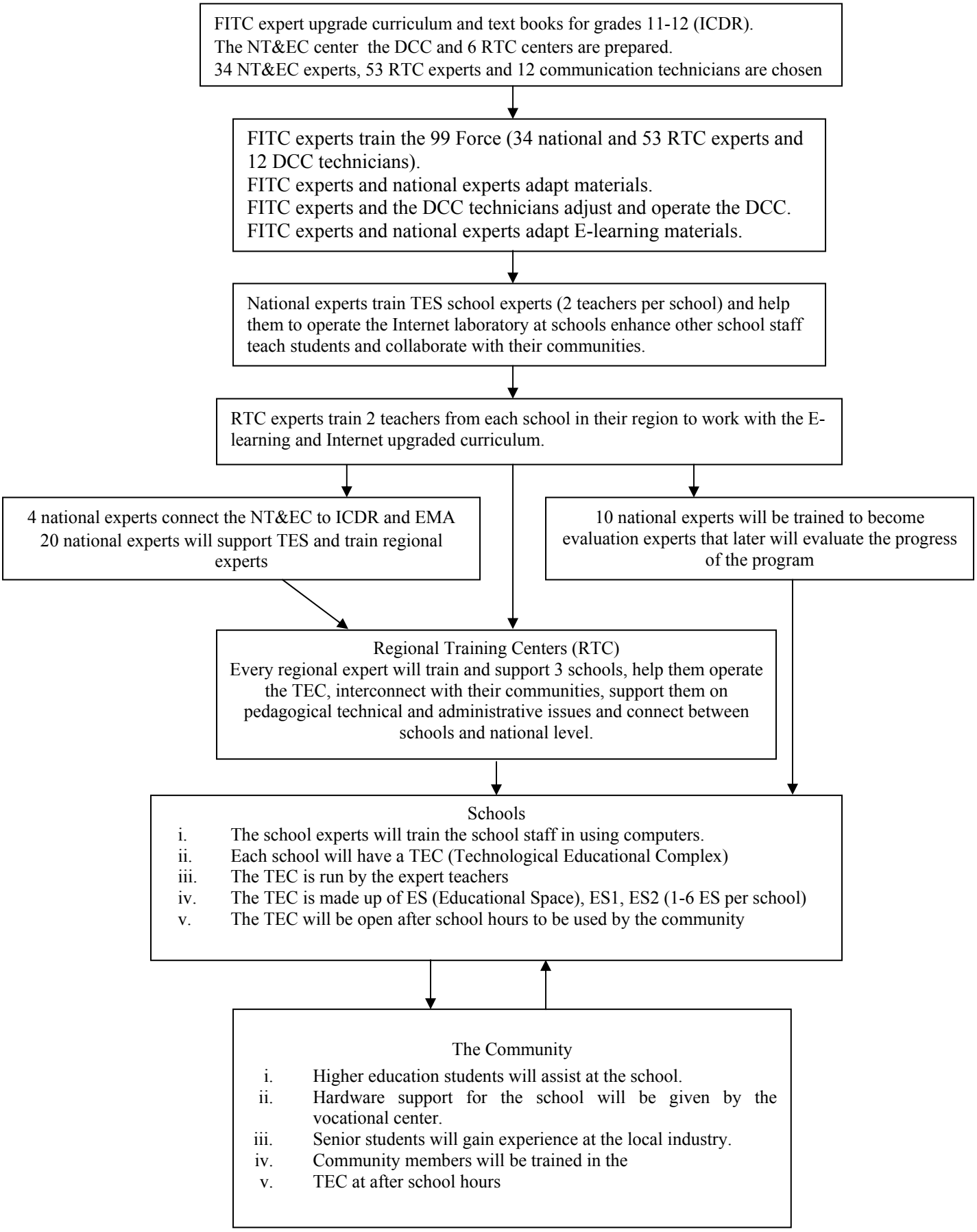
1. 34 experts at national level. Those should be later the national leaders. Those leaders will enhance the regional experts, adapt new materials, and evaluate results, achievements, programs, and methods. Those national experts will also guide the communication center technicians. The national experts will work very close with Future ITC experts.
2. 12 technicians to work at the DCC will be trained too.
3. The Regional experts are those that will deliver the new era to schools. They will be divided into Regional Training Centers (RTC) and they will be the middle link between schools and the national level and between schools and communities. The regional experts will also be used as a backup for the national level.
4. The RTC experts will train the school experts (except the experts from the 22 TES which will be trained and supervised by the national experts directly). Those school experts (3-8 from each school) will operate the TEC at schools will teach the students that will be in-touch with the communities and make all other school staff literate at IT.
5. Future ITC experts will supervise the implementation at schools.

- **The experts will be divided into 7 groups:**

1. 10 of the national experts after phase1 is finished (meaning all materials adapted, first group of RTC experts are trained the TES experts are trained and 22 TES are working) will be trained to become the national evaluators. Those 10 experts will evaluate the program starting at phase2.
2. 20 of the national experts will train and support TES at Addis Ababa, train new RTC experts (after first batch (53 experts) which will be trained by FutureITC experts.), and supervise all RTC centers.
3. Last 4 national experts will connect the NT&EC to the other national centers (EMA and ICDR).
4. 12 members will serve as technicians at the DCC.
5. One school expert from each school (the best teacher) will be trained to become the IT expert. Those school experts will become the head of the TEC at school, the people to assure that the computers at schools are working, to maintain software and connectivity, and to maintain interconnection with the communities.
6. One school expert (the next best teacher) will be trained to become the hardware technician. Those experts will take care that the power is there; water is running in pipes, communication wires are repaired, air condition is cleaned and repaired, educational hardware and computers are working and school can operate even being far away. The technician will be connected to external experts, to vocational training centers, and to private entities,
7. The remaining school experts will assure the best training, teaching and transfer of knowledge so as many students and community members will become IT literate and will push Ethiopia forward.

Finally, the next chart describes the training flow of the program in order to achieve trained and working secondary schools (and community centers) as described above.

In conclusion, FITC received all the necessary information from Ethiopia on its school systems. This information was placed into a database and analyzed. The information included the number of schools, the size, the number of students, the location, the current infrastructure in place etc. FITC consultants (one being an MIT professor) devised the appropriate plan of implementation for the school, including the appropriate after school programs. FITC is also currently developing the curriculum for Ethiopia high school students. The curriculum will be revised to the degree necessary for other countries. In addition, FITC also intends to move forward with development of a curriculum for Ethiopian students in the K-8 level.


FITC expert upgrade curriculum and text books for grades 11-12 (ICDR).
The NT&EC center the DCC and 6 RTC centers are prepared.
34 NT&EC experts, 53 RTC experts and 12 communication technicians are chosen
FITC experts train the 99 Force (34 national and 53 RTC experts and 12 DCC technicians).
FITC experts and national experts adapt materials.
FITC experts and the DCC technicians adjust and operate the DCC.
FITC experts and national experts adapt E-learning materials.
National experts train TES school experts (2 teachers per school) and help them to operate the Internet laboratory at schools enhance other school staff teach students and collaborate with their communities.
RTC experts train 2 teachers from each school in their region to work with the E-learning and Internet upgraded curriculum.
4 national experts connect the NT&EC to ICDR and EMA
20 national experts will support TES and train regional experts
10 national experts will be trained to become evaluation experts that later will evaluate the progress of the program
Regional Training Centers (RTC)
Every regional expert will train and support 3 schools, help them operate the TEC, interconnect with their communities, support them on pedagogical technical and administrative issues and connect between schools and national level.
Schools
i. The school experts will train the school staff in using computers.
ii. Each school will have a TEC (Technological Educational Complex)
iii. The TEC is run by the expert teachers
iv. The TEC is made up of ES (Educational Space), ES1, ES2 (1-6 ES per school)
v. The TEC will be open after school hours to be used by the community
The Community
i. Higher education students will assist at the school.
ii. Hardware support for the school will be given by the vocational center.
iii. Senior students will gain experience at the local industry.
iv. Community members will be trained in the
v. TEC at after school hours