

**CARIBNET:
A CARIBBEAN-U.S. TELECOMMUNICATIONS NETWORK
FOR EDUCATION, TRAINING, AND CULTURAL EXCHANGE**

I. TITLE

CARIBNET: A Telecommunications Network for Enhancing Educational, Training, and Cross-Cultural Exchange Between the Caribbean and the United States

II. OBJECTIVE

This paper proposes that the United States undertake to upgrade and expand a Caribbean audioconferencing network created by AID in 1983 and link it directly to the U.S. for an intensive program of continuing educational exchanges in support of Caribbean development efforts. This network would constitute a powerful tool for enhancing educational, economic, and social development in the region and the implementation of U.S. development assistance programs by:

- o providing cost-effective educational and training opportunities to Caribbean citizens
- o increasing the number and range of Caribbean citizens receiving U.S.-sponsored education and training
- o improving the capability of the University of the West Indies to provide educational services to the English-speaking Caribbean
- o providing direct support to development programs and policies in the region, particularly those of USAID
- o enhancing the effectiveness of regional organizations and the sharing of resources among Caribbean countries
- o opening a channel for continuous, multinational communication between the U.S. and Caribbean nations for the sharing of expertise and information.

III. BACKGROUND

A. Caribbean Situation

After centuries of colonial status, the islands of the English-speaking Caribbean slowly gained their independence in the period from 1962-1983. All are relatively young nations striving to cultivate an inherited democratic tradition, promote economic and social growth, and rise above the limitations of past experience and scarce resources. Almost all face balance of payments deficits that are a heavy weight upon their economies. All suffer from severe unemployment (7-30%) and chronic underemployment, inadequate social services, and growing populations. All are in need of strengthening their governmental and private sector infrastructures and finding means of improving the skills of their work force, retaining the well-trained people they do have, and attracting foreign investment that will be a positive force for development. Slow economic growth and chronic unemployment also create social and political tensions that could erupt and weaken these fragile democracies and even further inhibit the attraction of needed investment and aid.

B. U.S. Interests in the Caribbean

The United States has long been involved in Caribbean affairs and interested in the progressive development of stable, democratic governments that foster healthy and growing economies. As the largest and richest country in the hemisphere, the U.S. has always taken some responsibility for enhancing the development of the region. The U.S. also has certain economic, cultural, and political interests in this area on the U.S. doorstep that make the problems of the Caribbean a cause for concern at the highest levels of the government. The proximity of the Caribbean to the U.S. brings it within the inner circle of U.S. security interests. Vital sea lanes pass through this area as well as a significant portion of imported oil. While the population and wealth of the area is not great, it is a fairly significant area for U.S. trade (\$1 billion) and tourism. With changes in British immigration law, the U.S. has also come to be a recipient of much of the emigration from the Caribbean.

In 1983, Grenada demonstrated the fragility of these fledgling democracies and how the hard-pressed peoples of this area can fall to the temptation of easy and emotional "solutions" to old and deep problems. The U.S. is cognizant of the fact that these small democracies can become stable and self-sufficient only if they fully address the underlying causes of their present situations with an integrated development approach that will bring about major changes in the economy and social structure. This restructuring can only occur if there is sufficient trained manpower to design and carry out these changes and increased Caribbean access to U.S. expertise and information.

C. U.S. Aid to the Caribbean

Current U.S. aid policy to the Caribbean is largely based on two Congressional acts: the Caribbean Basin Initiative (CBI) and the Central American Initiative (CAI). Passed in 1983, the Caribbean Basin Initiative created a program of trade, economic assistance, and tax measures designed to generate economic growth through increased private sector investment and trade. It provided for duty-free customs access to the U.S. market for twelve years for 22 countries in the region and established investment and tourism incentives.

In 1984, the National Bipartisan Commission on Central America (NBCCA) proposed that the U.S. launch a multibillion dollar program to promote economic and social development and political stability in the area. The report recognized that support for education and training would have to be an essential ingredient of this approach and made a number of recommendations on aid for basic education, vocational/technical and management training, and higher education. The report also noted significant increases in Soviet activities in the area including a massive increase in the number of Central Americans going to the Eastern Bloc for study while at the same time the number of U.S.-sponsored education and training opportunities had drastically declined.

Based on the NBCCA report, Congress created the Central American Initiative, a five-year, \$8.4 billion program. In cooperation with CBI and other economic assistance programs, CAI aimed to promote export-fueled economic growth which would lead to significant increases in GDP and employment, foster economic self-reliance, strengthen democratic institutions, and encourage national environments conducive to free enterprise growth.

D. U.S. Aid for Education and Training

Regarding U.S. aid for education and training activities, CAI emphasized three major areas: (1) support for primary education for increasing enrollments and completion rates, improving teaching skills and print materials, and upgrading facilities; (2) provision of specialized training in vocational education and management to directly improve the skills of the work force; and (3) major increases in U.S.-based participant training programs.

The first two priorities have been addressed by a variety of AID projects including the the Caribbean Education Development Program carried out by the University of the West Indies (UWI), the Regional Nonformal Skills Training Program conducted jointly with the Organization of American States (OAS), and the Regional Development Training Program II implemented by the Barbados Institute for Management and Productivity.

The largest participant training program has been the Caribbean and Latin American Scholarship Program (CLASP) which seeks to bring 12,500 people to the U.S. for degree and non-degree training. A subproject of CLASP is the Presidential Training Initiative for the Island Caribbean (PTIIC) which will assist 1,750 Caribbean citizens. The goals of these programs are to provide educational and training opportunities to citizens of the Caribbean, particularly those from disadvantaged groups, counter the Soviet-backed education campaign, and cultivate a positive image of the U.S. A crucial aspect of all the participant programs is an "Experience America" focus that aims at enabling students to develop lasting friendships with Americans and an understanding of American institutions and values.

IV. THE PROBLEM

The current delivery of educational and training opportunities to the Caribbean entirely depends on expensive, face-to-face contacts. Citizens of the Caribbean are brought to the U.S. for short and long-term study; U.S. and Caribbean experts fly to various islands to advise and train. A total reliance upon this strategy necessarily limits the numbers of U.S. and Caribbean citizens that can participate in these activities and the number and scope of the activities that can be carried out. Slightly over 1000 Caribbean participants have received training from FY 1985-87.

Costs for sponsoring long-term degree participants average \$21,000 per year while costs for short-term training participants can be up to \$10,000 per person. Transportation and per diem costs also make it too expensive to run short training programs that could be extremely valuable and effective. The additional use of distance education strategies and systems could vastly increase the number of Caribbean and U.S. citizens participating in U.S.-sponsored training programs and greatly expand the range of educational opportunities offered, thus making a greater impact upon the people of the Caribbean.

Approximately \$150 million per year is allocated for U.S. assistance to the English-speaking Caribbean islands. From FY 1985 to FY 1987 over \$36 million was spent directly on Education and Human Resource Development. Other projects, of course, also spent significant amounts of funds on training. While these efforts have been successful in supporting U.S. objectives in the region, they have been too exclusively focused on expensive face-to-face contacts and thus necessarily limited to a very small group of participants and trainers. A teleconferencing network could provide cost-effective training to thousands of Caribbean citizens each year, support ongoing development programs, deliver follow-up programs for people who have studied in the U.S., and provide for a continuing flow of expertise and information between the islands and the U.S.

V. THE PLAN

A. Building on the Success of UWIDITE

Under the AID Rural Satellite Program, AID established an audioconferencing network for six of the Caribbean members of the University of the West Indies: Jamaica, Barbados, Trinidad, Antigua, St. Lucia, and Dominica. Grenada was added to the network through other funding sources. This network, the University of the West Indies Distance Teaching Experiment (UWIDITE), has been in operation since 1984 and is highly regarded as a very successful demonstration of the use of telecommunications in support of education and training. UWIDITE uses a single, two-way voice channel to link small meeting rooms at each participating site. It can currently accommodate a total audience of 200 at a time in the seven nations. It is used for the delivery of undergraduate and graduate courses and certification programs, administrative meetings, and in-service training activities.

UWIDITE has also been successfully used by non-university groups to support development projects. The Johns Hopkins Program in International Education in Gynecology and Obstetrics conducted a series of in-service training activities that reached over 500 nurses and doctors. Project Hope has utilized the network to run more than a dozen seminars on health issues such as aids and health management following natural disasters. UWIDITE filled a great need for the delivery of academic and professional training programs to the relatively small and isolated populations of these islands. **Following its first year of operations, it was awarded the prestigious 1985 Gleaner prize for its "most dramatic impact on the quality and improvement of life not only in Jamaica but the entire Caribbean, enhancing the education of the people of the region."**

UWIDITE successfully demonstrated that teleconferencing technology could be used in the Caribbean for a variety of programming purposes and was an acceptable and effective means of providing educational opportunities to many different audiences at an affordable cost. For example, a one week training course for 30 people could be delivered by UWIDITE for only \$6,000 versus \$19,000 for a face-to-face training. In addition, more participants can be added to UWIDITE workshops for a small incremental cost while additions to a face-to-face workshop increase costs arithmetically.

B. Creating a U.S.-Caribbean Educational Communications Network

Based on its success with UWIDITE, which has been operating for over two years without any direct U.S. support, the U.S. government should undertake to build upon the UWIDITE experiment and greatly expand the network's capabilities and coverage. This paper proposes that AID undertake to extensively upgrade the UWIDITE network and link it directly into the U.S. telecommunications system so that U.S. resources can be easily tapped to support Caribbean development. This upgrading would involve the following steps:

1. **EXPANSION** to other major English-speaking UWI members (i.e., Belize, St. Vincent, and perhaps St. Kitts)
2. **UPGRADING OF THE TECHNICAL CAPABILITIES** by adding one-way video, multichannel audio, and high speed data transfer capacity.
3. **IMPROVEMENT OF NETWORK QUALITY AND RELIABILITY** through the installation of small satellite dishes at the classrooms
4. **TELECOMMUNICATION LINK TO THE U.S.** that would provide access

VI. IMPACT OF THE PROJECT

A. Creation of a U.S.—Caribbean "Educational Community"

The creation and operation of this network would provide AID, UWI, and many institutions in the U.S. and the Caribbean with a communications capacity that could reach thousands of people each year with a wide range of activities including:

- o in-service training programs for doctors, nurses, teachers, lawyers, and other professionals.
- o academic courses between U.S. and Caribbean universities and schools
- o educational programs by and for specific AID projects
- o follow-up programs for PTIIC and other participant "alumni groups" in each country
- o medical consultations and backup support
- o seminars for government officials, labor leaders, journalists, etc.
- o on-call expert support in many fields such as medicine, agriculture, engineering, commerce, etc.
- o access to thousands of U.S. data banks such as the National Library of Medicine, ERIC, etc.
- o administrative, planning, and evaluation meetings
- o extension services by U.S. and Caribbean institutions

This network would have the capacity to reach almost all professionals in the Caribbean and involve them in a U.S.-sponsored educational event. Thousands of people who would not normally be directly affected by U.S. aid programs, including many women and disadvantaged groups, could experience a beneficial relationship with U.S. citizens and institutions. Because the system would rely heavily on compressed video, audio and computer conferencing, it would be very cost-effective compared to face-to-face and two-way video links. Such a network could directly contribute to educational and economic development in the Caribbean and would be a high visibility program that would win many friends for the United States. Because it would be managed by UWI and Nova University and focus on education, training, and cultural exchange, it would not be seen as a means of U.S. "intellectual imperialism" but as a vital educational resource provided by the U.S.

B. Maintenance of U.S. Leadership in Education and Training

The United States has long been the world leader in the development of telecommunications technologies. Telecommunications have been used for domestic educational purposes in the U.S. for decades, but have not yet been used in a significant way for international educational linkages. International telecommunications networks for educational exchange will develop no matter what the U.S. does. Other nations are already actively planning such networks. The British and Canadians are spearheading a

movement to create a Commonwealth-sponsored "open university". Forty-eight countries have signed on as members, and millions of dollars have been allocated for a headquarters in Canada. Another consortium for French-speaking countries is now in the process of development. The U.S. is in danger of losing its leadership role in the provision of educational services to the Third World.

If the U.S. wishes to maintain its position of leadership in education and training under the present budgetary limitations, it is important that it seriously look at utilizing the international telecommunications network as a way to supplement the traditional face-to-face delivery system. A natural first step for AID would be to build upon its success in the Caribbean and launch its first planned international educational network with English-speaking countries that have experience with this mode of learning. The project is assured of success, but will nevertheless prove extremely valuable in identifying how such international networks can be developed and institutionalized.

C. Development of a Model for Future U.S.—Third World Networks

During the life of this project, demonstrations could also be carried out with Latin American and African countries using the Nova and Jamaican earth stations. Latin America, Africa, and the Caribbean are all covered by the same satellite. CARIBNET would serve as a pioneering effort in defining how such regional networks could be operated, funded, and institutionalized. CARIBNET might also experiment with the simultaneous delivery of educational programming in several different languages as a way to increase outreach and decrease delivery costs.

VII. THE COST

The cost of installing and operating the network for a period of five years and running and evaluating a full range of educational and training programs would be approximately five million dollars. The "hub" stations in Florida and Jamaica will be the most expensive hardware items. The other sites will be much less expensive—approximately \$250,000 per location.

During the project period, CARIBNET will strongly encourage the widest participation possible by AID projects; other U.S. agencies, educational institutions, and private sector groups; and international and regional organizations. It will seek co-funding for many of its programs and serve as a delivery system for programs fully funded by other projects.

One of CARIBNET's major goals will be to ensure its survival after five years by attracting support from user groups and developing an economic model that will allow it to generate enough income to allow it to continue to serve Caribbean needs after the end of AID funding. There is absolutely no doubt that CARIBNET can be successful in attaining its educational and cross-cultural goals. UWIDITE and many other networks have shown that it can be done. As the first network to link the First and Third Worlds together on a regular basis, however, CARIBNET will be breaking new ground and will have to discover its own solutions to the problems of institutionalization and economic self-sufficiency. In meeting these challenges, CARIBNET will pioneer the way for the creation of similar networks that will address the educational and training needs of developing nations in Asia, Africa, and Latin America.

VIII. CONCLUSION

A multibillion dollar international telecommunications network is already in place linking almost all of the countries of the world together. The question is whether the U.S. is farsighted enough to see that this network can be utilized for distance education and training in support of development. The U.S. is already investing tens of millions of dollars to provide educational opportunities to a limited number of Caribbean citizens. With a U.S.--Caribbean teleconferencing network, the U.S. could provide a wider range of educational services to an almost unlimited audience.

Such a network could deliver in-service training to all the doctors, nurses, lawyers, judges, and scientists in the Caribbean within a few years. It could reach thousands of teachers, businessmen, and government officials. Managed by UWI and Nova, CARIBNET would focus on meeting the expressed educational needs of all sections of Caribbean society. It would be U.S.-sponsored, but need-directed, thus ensuring that it would be seen as an invaluable contribution to human resource development in the Caribbean and not a mere public relations effort. By directly reaching people at many different levels of society with interactive educational experiences that enhance their personal and professional lives, CARIBNET will do more to win fast friends for the United States than any conceivable public relations campaign, and it will set the stage for the expansion of U.S. educational services to all regions of the world.