

# American Discovery Center: Enhancing Teaching and Literacy through ICTs



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By

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## Abstract:

*American Discovery Centers (ADCs) are partnerships between the Public Affairs section of U.S. Embassy in Islamabad (Pakistan) and host country secondary and elementary schools. They provide access to current and reliable information from and about the U.S. via book collections, the Internet, and through local programming to the academic communities in Pakistan. Sponsored by U.S. embassy, an ADC unit serves as an information outpost similar to a school library reference service. The multi-media, and book collections are open and accessible to those determined by the host institution. ADCs are an effective means to provide information about United States history, government, society, and values; to provide access to computers and the Internet; and to explore the educational software and CD-ROMs. This article aims to highlight the U.S. Government efforts to bridge the digital divide in Pakistan.*

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A top U.S. diplomat says the freedom to innovate, create, and share ideas is critical to development. He describes how the U.S. government is utilizing information and communications technology to achieve development goals.

*"In the new century, growth will be based on information and opportunity. Information drives markets, ensures a rapid reaction to health crises like SARS, and brings new entrepreneurial opportunities to societies.... The keys to prosperity in an information economy are education, individual creativity, and an environment of political and economic freedom. An environment of economic and political freedom is the *sine qua non* for the kind of progress we are talking about."*<sup>1</sup>

Secretary of State Colin L. Powell  
Before the World Economic Forum  
June 22, 2003

Information and communications technology (ICT) is a key weapon in the war against world poverty. When used effectively, it offers huge potential to empower people in developing countries and disadvantaged communities to overcome development obstacles, address the most important social problems they face, and strengthen communities, democratic institutions, a free press, and local economies. Yet a digital divide separates those who can access and use ICT to gain these benefits, and those who do not have access to technology or cannot use it for one reason or another. There are wide ranges of projects underway aimed at bringing ICT to people in developing countries. But in order for ICT to have a real impact on people's lives, it is crucial that development efforts go beyond computers and connections to ensure that people have *real access* to ICT so they can use it effectively to improve their lives.

## **American Discovery Center: An Introduction**

American Discovery Centers (ADCs) are partnerships between the Public Affairs section of U.S. Embassy in Islamabad (Pakistan) and host country secondary and elementary schools. They provide access to current and reliable information from and about the U.S. via book collections, the Internet, and through local programming to the academic communities in Pakistan. Sponsored by U.S. embassy, an ADC unit serves as an information outpost similar to a school library reference service. The multi-media, and book collections are open and accessible to those determined by the host institution. The fundamental function of the ADC is to make information about the U.S. available to elementary and secondary school students at large. The U.S. Embassy has gifted 185 American Discovery Center units to high schools in rural and urban areas of Pakistan. The ADC project is a half a million-dollar program and each educational package -- appropriate for classes 1-12 -- comprises a wooden cabinet with bookshelves showcasing an outstanding collection of educational material including a Pentium 4 computer, fun filled interactive educational software, CD-ROMs and DVDs featuring instructive materials. The ADC unit gives an opportunity to Pakistani students to broaden their knowledge about the United States and U.S. education. The educational material is considered suitable for students of elementary and secondary schools and ranges across a variety of subject areas, including Mathematics, Science, English, Geography and History. It also provides access to several well-reputed encyclopedias. Internet access is available to the students at large.

## **Reaching the Distant Communities: Selection**

The focus to distribute these units was to reach the distant and disadvantaged educational communities in urban and rural areas of Pakistan. For selection of the schools, the ADC team made extensive visits of the rural and urban schools in all the provinces of Pakistan and met with the students, teachers and the administration of the institutions. Certain checkpoints were laid down to evaluate the computer competency and tendency of the students and teachers to be familiar with such technologies.

For selections of the institutions in the remote and neglected areas in Skardu, Balochistan regions and hilly areas of North Western Frontier province was given special attention. The students and the administration showed great enthusiasm and interest in receiving the ADC units.

The ADC team kept into consideration certain checkpoints regarding the medium of instruction in the institution, availability of electricity and an independent telephone connection for internet. The emphasis was on to provide these contents to distant and disadvantaged educational schools in remote areas fulfilling the pre-defined criteria.

The team also observed during the visits of those schools the initiative and interest of the school administration to accept the ADC units. The geographical distribution and the ratio of the male and female schools were also given importance.

**Objectives:**

Since education is such an effective means of promoting better understanding, U.S. Embassy in Pakistan developed a digital reference collection called an “American Discovery Center.” These centers have been donated to over 185 Pakistani schools over the past year, enabling students to learn more about their subjects, the U.S. and rest of the world.

A major part of U.S. interest - and one that gets to the heart of the topic of building bridges among societies - is a major concern, particularly in these troubled times, to increase understanding between the U.S. and states with predominantly Muslim populations to create harmony, tolerance, and democratic values. In this sense, South Asia is one of the most important area of focus, given the large populations of Muslims in this region. There is currently much too much mistrust and lack of understanding and need to reduce these gaps in understanding. As people coming from different cultures, religions, and historical experiences, one may not always agree with the other; but one must strive to listen better, and attempt to understand the other's point of view. The broader objectives of the ADC project are:

1. The application of ICTs in the fields of basic education, especially to reach the unreached;
2. Creation of a network of the use of ICTs to foster interactions and experiences and sharing of resources;
3. Training of teachers and administrators in the use of ADCs; and
4. To strengthen cooperation and networking between U.S. Government and recipient institutions in harnessing ICTs to promote literacy through ADCs.

**Contents of an ADC Unit:**

ADC comprises of educational software on CD-Roms, DVDs, prize winning children's books, Pentium IV computer with Internet accessibility and a laser jet printer. The software with copyright licenses were procured through the vendors from the United States. The educational software included are: Complete Space & Astronomy Collection; Galileo's Planetarium; High School Biology; NASA Space Museum; Next Step Mars; The Oceans; StudyWorks Science Deluxe; The Universe; StudyWorks Mathematics; High School Advantage; National Geographic Complete 102 Years set; U.S. Geography; Virtual New York City; Learn American English; American Reference Library; Complete History of America's Wars; Civil War Explosion; Five Foot Educational Pack; The Complete World War II; Grolier Multimedia Encyclopedia; Encyclopedia Encarta; World Book 2002; World Book Discoveries; The Standard Deviants Math Basics; Touring Through Great National Parks of America, Books and Atlases.<sup>2</sup>

The contents of the ADC unit were selected keeping in view the course contents of the schools and with the consultation of teachers and the school administration. They were highly useful for students and teachers in terms of latest developments in the curricula. We set the following criteria for selection of the material:

- Use a modular approach to building ADC collection
- Choose materials with a long shelf-life
- Include the essential computer equipment module
- Develop an Internet equipment module that works

### **Programming:**

While there was wealth of programming ideas, getting them into action took a lot of coordination and planning. ADC programming included the following activities:

- An effective and interactive presentation ceremony
- Organize discussion groups on many topics
- Multimedia travelogs to scenic places of the U.S. (National Parks, Historical places, etc.)
- Educational fairs displaying materials
- Holiday events, quizzes, competitions using ADC software

### **Back Up Support:**

Most of the ADC recipients were novice to computer aided teaching and studying. Therefore, after-sale services were negotiated with the vendors to provide the back up support if the system crashes or the operating system software sometimes becomes corrupt. The vendor is responsible to provide all the back up support and troubleshooting onsite. The Schools were given the contact details of the vendor in case of any emergency for system support.

A semi-annual “ADC Newsletter” keeps the institutions updated on various software, gives tips for troubleshooting and the effective ways to benefit from the “American Discovery Center” unit.

Apart from above methods, each ADC recipient institution has specific email address for seeking advice, update on new developments, software updates and for time-to-time consultancy. This also allows the team to have a continuous follow up on effectiveness and usage of the ADC unit.

### **Training:**

Simply handing over the ADC to the schools and organizing a ceremony in the presence of media was not enough to achieve the objectives. After signing the MOU ceremony, a well-organized workshop was arranged to train the teachers and selected students. Teachers and students were greatly involved during different training sessions of educational software through interactive quizzes and tests. The duration of the training session was kept 3-4 hours long. Multimedia projectors were used to address a large group of students.

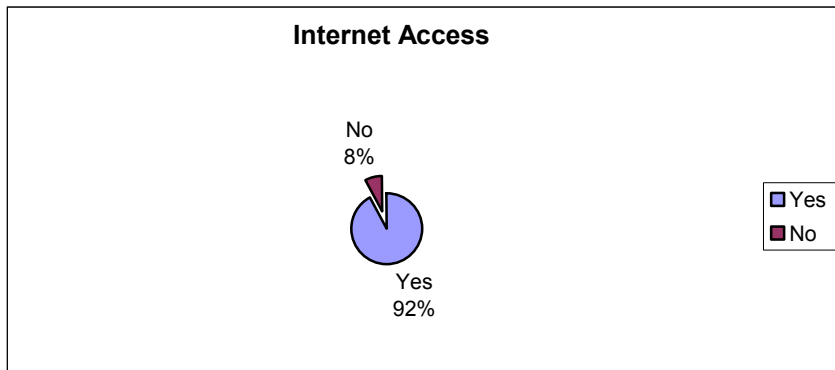
### **Sustainability:**

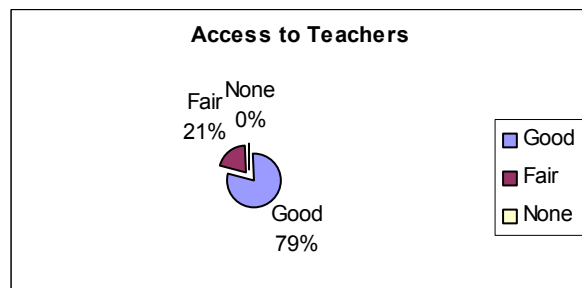
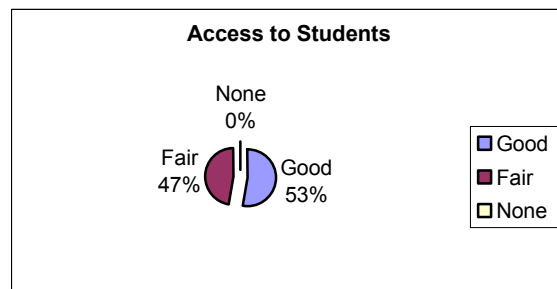
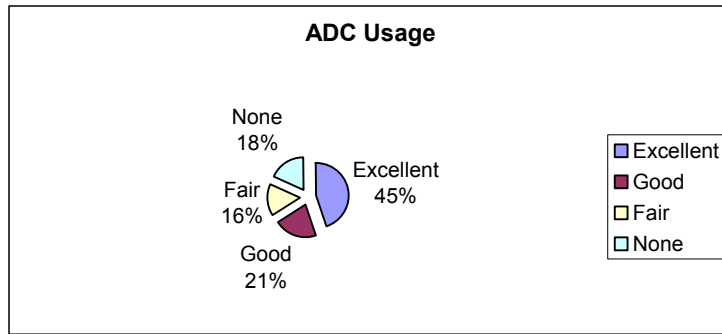
Sustainability is an important issue for the wider benefits of ADC to the students recognizing that low maintenance of an ADC was very important for continuous usage keeping in view the long term needs of the institutions. It was also very important to provide ongoing support. For the long-term sustainability of ADC unit, the frequent monitoring and evaluation visits were planned.

### **Monitoring and Evaluation:**

ADC Project team comprising of IRC Islamabad staff conducted monitoring and evaluation visits from 3<sup>rd</sup> to 20<sup>th</sup> December, 2003. During this period the team visited 38 institutions in Islamabad, Rawalpindi, Murree, Muzaffarabad, Abbottabad, Haripur, Skardu and Wah. Most of these schools and colleges were presented with ADC during May-October, 2003. During these spot visits IRC staff met with librarians, students, teachers, and the head of the institution and provided them guidelines on ADC usage. The team also checked presence of ADC materials on the shelf; were boxes unsealed to use the software; is access given to students and teachers; checked the provision of telephone line and provision of Internet; were any presentations (lesson notes, quizzes, tests, etc.) developed with the help of ADC software; and evaluated the actual usage of ADC. The following graphical presentation shows that how well the ADC resources were used. The monitoring and evaluation visits in other parts of the country are still underway. The graphical statistics below show the results of monitoring and evaluation visits in Islamabad and adjacent areas only. The following guidelines helped a lot while making these visits:

- Develop real partnerships with host institutions
- Build sister library relationships
- Provide regular follow-up including visits
- Create ADCs' e-mail discussion list
- Develop a web site to promote the ADCs
- Empower and motivate ADC staff in-charge.





## Conclusion:

Stocked with reference materials and high-speed Internet access, **ADCs** are essentially information clearing houses. An **ADC** is a friendly and lively unit that promotes dialogue and mutual understanding between Pakistanis and Americans. The recent monitoring and evaluations visits to recipient institutions show that the 'American Discovery Centers' are an effective means -- (1) to provide information about United States history, government, society, and values; (2) to provide access to computers and the Internet; and (3) to explore the educational software and CD-ROMs.

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<sup>1</sup> Gross, David A. The Digital Dimension of Development: A Strategic Approach. *Electronic Journal of Department of State*, 8(3), pp. 5-8. URL: <http://usinfo.state.gov/journals/itgic/1103/ijge/gj01.htm>

<sup>2</sup> American Discovery Center: An introductory Booklet, 2003.