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A PIONEERING REGIONAL HUMAN DEVELOPMENT REPORT ON
PROMOTING ICT FOR HUMAN DEVELOPMENT IN ASIA 2004: REALISING THE MILLENNIUM DEVELOPMENT GOALS

ICT AND EDUCATION: Asian Experiences

"There is a danger that technological tools can distort priorities and mesmerise decision-makers into believing that gadgets can fix all problems. A computer in every classroom is a noble goal – provided there is a physical classroom in the first place. A multimedia computer with Internet connectivity is of little use in a school with leaking roofs – or no roof at all…we must therefore take a few steps back from the digital hype and first try to bridge the 'Analog Divide' (to coin a phrase) that has for so long affected the less endowed communities in developing countries (and even in some developed ones)" – Sir Arthur C Clark

ICT by itself cannot universalise education, but it is a powerful tool which offers numerous possibilities for "reaching the unreached" and making lifelong education feasible for all. In Asia, governments have realised the importance of integrating ICT in education policies. In **China**, more than 200 schools are conducting distance learning lessons, while in **Indonesia, Thailand and India**, this concept has already proven its success. Governments are also investing in ICT infrastructure for schools and creating network links between educational institutions.

REDUCING PHYSICAL BARRIERS TO EDUCATION

ICTs have the capability to deliver instruction, manage administrative services and provide support for learners. Smart schools, online education and virtual universities are becoming more a norm in industrialised countries and developing countries are fast catching on. In June 2003, the Government of **India** announced an ambitious programme titled '*Vidya Vahini*', to create computer laboratories with facilities like internet access, an online library, academic services and web-casting across 60,000 schools in the country. **Vietnam** has also invested to develop a computer based information network system for education called Educational Network (EduNet) and improve computer facilities at educational institutions. EduNet is the country's first step towards developing a computer based information network system for education.

DECREASING SOCIAL BARRIERS TO EDUCATION

ICT can assist in circumventing social barriers to education since they can complement the traditional modes of education. Realising that **India's** explosion of student population could not be adequately reached through merely classroom education, the Countrywide Classroom was launched in 1984 where *Doordarshan*, Indian's national public service television channel, was used as a means to supplement classroom teaching. In 1995, **Thailand** launched SchoolNet which has connected 4758 schools throughout Thailand. SchoolNet Thailand is using the Internet to improve the overall standard of education in the country by reducing the gap in quality of education between schools in urban and rural areas. **Pakistan's** US $5.18 million Education Network, initiated in 2003, provides connectivity across universities, secondary and primary schools. **Indonesia's** Southeast Asian Ministers of Education Organization established the regional open and distance learning centre to supplement or substitute conventional classroom instructions. The Gobi Women's Project in **Mongolia** uses radio to provide non-formal distance education to some 15,000 nomadic women, giving useful instruction on health, commercial skills, family planning, traditional crafts and environmental issues.

PROMOTING EFFICIENCY IN EDUCATION

With ICT the curriculum becomes student centered with a self-learning environment, enabling the student to customised his/her own learning experience. The **Sri Lankan** Government runs several key initiatives connecting 92 education centres across provinces, regions and sectors to the ministry, and is developing computer training centres at 800 selected schools which is to be completed by 2004. **Malaysia's** Smart School concept is a learning institution that aims to foster self-assessed, self-paced, and self-directed learning through its applications.

IMPROVING THE QUALITY OF LEARNING

ICT can be used as a training tool for teachers, enhancing the quality of teaching. **India's** Goa Computers for Schools Project has been successful in raising the levels of computer access and literacy among teacher and students. In **Malaysia**, the electronic book pilot project studies how the electronic book appliance that stores textbook contents and links users to the internet, can be used to improve teaching and learning.

POINTERS FOR POLICY

The need for linking ICT to education policies cannot be stressed enough. Although internet connectivity represents innovative public sector leadership, and ministries of education around the world have made the commitment to computerise schools, few have developed coherent strategies to fully integrate the use of computers as pedagogical tools in the classroom.

- Education policies have to reflect alternate and new teaching paradigms that ICTs can offer in terms of providing a more effective, relevant and flexible mode of learning to not just the underprivileged but the general masses
- Policies must take into account the re-training of teachers incorporating use of ICT in education. Teachers need to consciously redesign learning environments so that students can transfer their newly gained ICT skills to other applications that can be used in an ICT rich environment.
- Most educational policies reflect the need for ICT infrastructure but the need for local **educational content** is often left out. The development of instructional content-ware

remains a neglected area, affecting investments in hardware and resulting in a heavy economic and educational loss.

- The focus of developing countries should be on how ICTs can be used to compensate for the factors that are lacking in education, namely, well-trained teachers and the resources to pay for expensive equipment. The task at hand is to concentrate on technological alternatives that, at low cost, bring to students the imagination and creativity of a few excellent teachers.