

Technology Tools for Teaching and Training

Implanting the will to become.



dot -EDU

EDC

3A



The dot-EDU T4 project

dot-EDU a cooperative agreement initiated by USAID and part of the DOT-COM Alliance, was created to fortify education systems on a global scale. dot-EDU seeks to provide access and enhance equity for girls and the rural poor through carefully planned applications of digital and broadcasting technologies. It is implemented by EDC (Education Development Center, Inc.), a US-based NGO with the support of USAID. This programme uses technology in ways that more directly improve learning and increase access to vulnerable populations.

Working in close coordination with SSA (Sarva Shiksha Abhiyan), the flagship programme of the Government of India and the State Governments, dot-EDU supports Information and Communication Technology-aided education across public and private sectors. T4's multiple media and multi-channel strategy is based upon Indian and international talent and experience which emphasizes on introducing high quality, project/activity-based instruction into learning environments everywhere. The programme initially works in three states: Karnataka, Chhattigarh and Jharkhand.



REACHING THE UNDER-SERVED

Challenges of :

-  Equity
-  Quality
-  Access
-  Retention

India's 2001 Census counted over one billion people within its borders. Between 1991 and 2001, its population grew by 21.34%. At the local level, such growth poses a considerable challenge to the Indian State to provide education and promote literacy, particularly in rural areas. Many girls and lower caste children continue to remain out of the school system or receive a second class education. Over the past decade, and in tandem with the Education For All (EFA) Declaration, India has taken great steps in improving literacy rates and providing quality.

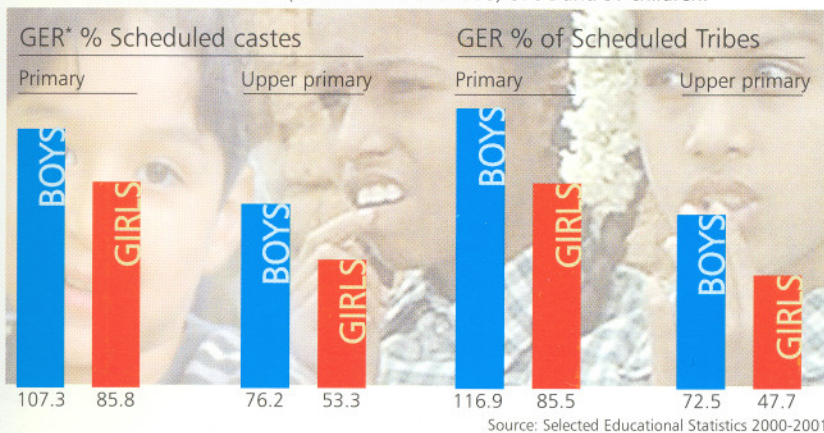
The three-year project will improve the reach and quality of primary school education in Chhattisgarh, Karnataka and Jharkhand. The (T4) project in India will provide teachers with in-service training to improve content and methods, and multi channel instruction in English, Maths and Science using media from interactive radio to mobile video.



The figures below estimate that boys continue to far outnumber girls in upper grades. Furthermore, as overall enrollment rates for girls decline as they get older, dropout rates for both boys and girls increase. This indicates that not only fewer girls have access to school, but also that of those who are able to attend, over half drop out before finishing their primary education.

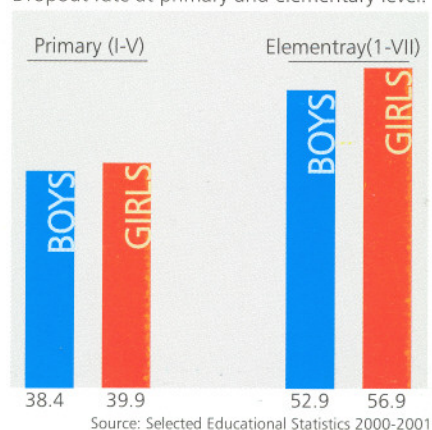
Gender differentials:

Gender differentials in the GER (Gross Enrolment Ratio) of SC and ST children.



Dropout rate:






Dropout rate at primary and elementary level.



$$*GER = \text{Gross Enrolment Ratio} = \frac{\text{No. of Children Enrolled in Class I to V}}{\text{Total no. of Children in the age group of 6 to 11}} \times 100$$

Why dot-EDU/T4 programme?

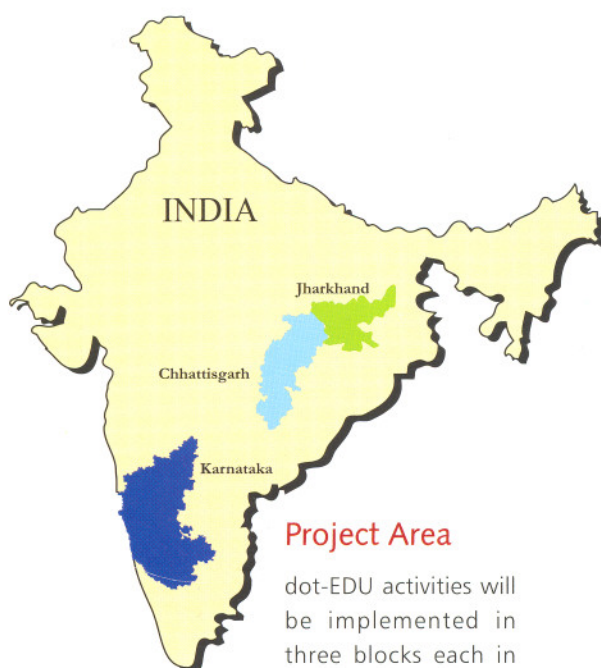
In order to reach the most vulnerable sections of society, the teaching learning process needs to be innovative and dynamic. T4 will enable this feature through the below-mentioned methods.

-  Use of multiple technologies for teaching and learning
-  Innovative teacher training/learning programmes using media
-  Development and adaptation of appropriate teaching-learning materials and complementing them with games, activities
-  Making learning a joyful experience
-  Orientation of parents, community and local NGOs towards creating a conducive atmosphere for learning





The T4 strategic approach



Project Area

dot-EDU activities will be implemented in three blocks each in three states viz. Karnataka, Chhattisgarh and Jharkhand.

Stakeholder Dialogue and Participation

Before the T4 initiative was launched, national and state level stakeholder meetings were held to determine what type of learning technology strategy could best reach marginalized populations, especially girls. These discussions formed the basis of T4 activities, and have provided a framework for active collaboration between state representatives, education practitioners, policy makers and EDC staff and its partners. In order to build on this collaboration, policy research, workshops and pilot initiatives involving these stakeholders encouraged meaningful dialogue at the national and intrastate levels.

Multiple Media for Diverse Populations

In Karnataka, Chattisgarh, and Jharkhand, the T4 Education initiative is working with local organizations to develop educational products and systems such as interactive radio instruction, TV video programming, and computer based radio-TV-multimedia hybrids for English, Mathematics, Social Studies, Science, and Teacher Training for primary school. A "dual audience" approach ensures that when students learn a particular subject, the programme also provides simultaneous teacher training support. The systems are being evaluated to determine effectiveness and then taken to scale so that they will reach millions of students across all three states.

Community Participation and Outreach System

The T4 initiative increases and targets community-school collaboration through a series of workshops and strategies at the local level, particularly in areas where the most vulnerable children live. It focuses on communities where children are most vulnerable for trafficking, child labor or abuse and works closely with non-governmental organizations.

Activities planned












Following activities are planned for implementation under the T4 project in India.

1. Educational Video and IRI (Interactive Radio Instruction)

Educational Video and IRI (Interactive Radio Instruction)





This is a low-cost methodology that enables learning and improving primary school students' academic achievement through carefully designed audio/video programs. Some of its characteristics are:

-  Uses media-based technology for qualitative education
-  Increases learning, reduces equity gaps
-  Guides structured active pedagogy through daily activity
-  Pauses during programmes to ensure and increase participation and time on task
-  Uses stories, games and other interactive techniques
-  Designed or adapted locally
-  Multi-channel and dual-audience approach.
-  Instruction guides students and teachers through interactive learning
-  Is a hands-on teacher training tool



Why IRI?

The Interactive Radio Instruction is based on certain assumptions regarding the strength and limitations of radio as a uni-sensory medium, as given below:

-  Radio is an affordable medium for the masses for both the distance education institutions and the students.
-  At the local level, it can cater to the area-specific needs of the students and involve them in selecting problem areas for discussion.
-  The decentralized approach of local broadcasting can develop a sense of bonding and warmth between the resource persons and the students.
-  The disadvantaged groups—poor, physically and visually challenged, and women—who find it difficult to attend face-to-face academic counseling sessions can be reached by the interactive radio instructions.

2. Digital Hybrid Programmes

IRI –multimedia hybrids will be developed to increase relevance and effectiveness of information communication technologies (ICTs) to enrich the IRI educational model.

The hybrid includes a computer based component that enables teachers and students to use tools for more interactive software. They can thus follow up activities initiated by the IRI programmes, create products, conduct research and share ideas on subject matter or pedagogical approaches with peers.

3. Digital Library

The T4 initiative is also investing in the possibility of facilitating methods of storing documentation of the video work and IRI programs in the form of a digital library of learning objects. The library would be available on the web or on CD-ROMs and would provide an index of discrete learning modules searchable by curriculum objective, subject matter or format.

4. Monitoring and Evaluation

The project has the following monitoring mechanisms:

- ◆ Impact studies of learning gains across equity indicators
- ◆ Qualitative studies measuring changes in the condition of teaching and learning
- ◆ Formative and summative evaluation on all products and systems
- ◆ Local committees will be formed at different levels for monitoring the field level activities and providing feedback

Activities in Three States:

1. Chhattisgarh

'English is fun' IRI programmes will be introduced in the following blocks initially:

Abhanpur	- Raipur district
Kanker	- Kanker district
Kondagaon	- Bastar district.

The beneficiaries will be primary school teachers and children of class I&II.

In collaboration with the State Government, IRI programmes will be produced for introductory English at the primary school level. Broadcasts will begin in Raipur, Kanker and Bastar districts, and later in the state's tribal regions.



2. Karnataka

In Karnataka, the T4 project is being implemented in Devdurga taluk in Raichur district, Sedam taluk in Gulbarga and in Chamarajnagar district.

The project will use satellite TV, computer-based instructions and interactive radio instruction.

1. In association with the State Government, T4 is preparing IRI programmes for Mathematics, General Science and Environmental Studies for IV and V classes.
2. With the Karnataka Government's EDUSAT project, the T4 initiative will produce an educational TV and video series on Environmental Studies and Mathematics for the 4th and 5th multigrade classes. The series is being tested in Chamarajnagar and in the north-eastern districts of Gulbarga and Raichur.
3. The dot-EDU T4 initiative will also assist VII and VIII class students to create their own educational TV and video programmes in an effort to empower young people at risk of marginalization and to make educational material more relevant. These materials will be shared with other students in India.

3. Jharkhand

Over the course of school year 2004, the T4 initiative is adopting the IRI English programmes created in Chhattisgarh to Jharkhand schools in Hazaribagh, Ranchi and Saraikala districts. In addition, as a small pilot project, T4 and the State of Jharkhand are embarking on the integration of computer-based education into learning systems in Jharkhand. Based on the successful SARI projects in Tamil Nadu, T4 will introduce 10 wireless telecenters and will leverage existing networks of computers in schools in an effort to make digital technologies accessible and meaningful to teachers and students in 10 pilot sites.



Education Development Center, Inc. (EDC)

EDC is an international non-profit organization that has been a pioneer in building bridges between research, policy and practice for the last 4 decades. EDC has been chosen to execute the dot-EDU T4 project in India, in cooperation with the Government of India and the various State Governments.

Through strategically devised education programmes, EDC aims to strengthen different facets of the society like Early child Development, K-12 education, health promotion, workforce preparation, community development, learning technology, basic and adult education, institutional reform and social justice.

Based at Bangalore, it has extension offices at Raipur and Jharkhand for facilitating the production and implementation of T4 project initiatives.





Education
Development Center



*For more information about this project and
other EDC International Educational Systems Projects, visit our website:*

<http://ies.edc.org>

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