

*Use of ICT in Education for  
Development of Rural Community*

Author

Prof. Dipak U. Tatpuje

Secretary

VidyaDeep Foundation, Satara (M.S)

E-mail: [str\\_tdipak@sancharnet.in](mailto:str_tdipak@sancharnet.in)

Cell 094220 38403 Ph. 02162 284284

URL: <http://vidyadeep.tripod.com>

*Use of ICT in Education For Development  
of Rural Community*

The development of Rural Community is possible by imparting ICT skills:

1. In Primary and secondary education
2. In Technology Entrepreneurship education to empower rural youths.

This field study is carried out in these two basic areas.

*Use of ICT in Primary and  
Secondary Education*

The first step of computer literacy campaign needs to do the research on setting the priorities of IT Skills. "Research Oriented Analysis of Information Technology Curriculum (Marathi Medium) of Standard V to VIII" is the research project carried out in the Satara district during 2002-2003.

The top priority ICT skills, information about knowledge level of the primary and secondary students, Infrastructural limitations, need of training to the secondary teachers are the parameters that gives major recommendations to design further action research. This unique field study is carried out in five rural schools and two urban schools to find fundamental aspects of the IT education.

### *Use of ICT in Technology Entrepreneurship education to empower rural youths:*

In order to eliminate digital divide and also to remain sustained in the Open market policy, ICT revolution is necessary. The project implemented in the Satara district during 2000- 2004 gives focusing on improvement of incomes amongst the rural youths. The Model of Technopreneurship is come out with this experience.

The model of Technopreneurship specifies that the separate training of Technology and Entrepreneurship in traditional EDPs doesn't serve the purpose. The part of Technopreneurship training is missing. It needs to be developed by designing participatory research.

### *Case Study Research Oriented Analysis of "Information Technology Curriculum" of Standard V to VIII*

Prof. Dipak U. Tatpuje

Chief Investigator

Dr. Vasudha Kamat

Guide

This project was sponsored by M. S. Bureau of Textbook production & Curriculum Research, Balbharati, Pune

### *Necessity and Importance*

- ü 1. Fundamental Research was necessary for newly started curriculum of Information Technology.
- ü 2. Research was necessary because of "IT Curriculum" implemented at VIII th standard before the Vth Standard.
- ü 3. Methodical and sequential relativity was essential in the IT curriculum form Vth to VIII th Standard.

### *Essentials*

- 1. Absence of Fundamental principles in the Curriculum of IT.
- 2. Sequential Relativity was absent in the IT curriculum of Vth to VIIIth Standard.
- 3. Improvement in the modules of "Teacher training " was necessary.
- 4. Information about the "Understanding Capability of the students" at this level was unavailable.

## *Objectives*

- 1. Research oriented analysis of “ Present IT curriculum of Vth to VIIIth Standard”.
- 2. Recommend and suggest the necessary modifications in the Present Curriculum of IT.
- 3. Suggest limit, scope and allotment of topic-wise hours for teaching of the same subject.
- 4. Suggest the teaching-methods.
- 5. Suggest the evaluation methods of assessment for development of IT Skills

## *Research Methodology*

### *Area of Operation:*

1. *Five Schools from the Rural Sector*
2. *Two Schools from the Urban Sector*
3. *Experts from IT sector.*

### *Sample Group:*

1. *Experts of IT from Maharashtra and other States (10).*
2. *IT trained Secondary level Teachers (90).*
3. *Vth Standard students’ (105) from Satara district.*
4. *IT Experts (10)*

## *Methodology.... Steps..*

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- 1. IT Curriculums of Gujarat, Andhra Pradesh, Karnataka, Tamil Nadu states, and NCERT Guidelines for Analysis of Present Curriculum.
- 2. Designing and setting priorities of criteria for analysis.
- 3. Information collection about opinions, criteria priorities, implementation difficulties and other details, through Questionnaire form IT Experts (10), IT trained teachers at secondary level from rural and urban sector about the curriculum.
- 4. Designing the New IT curriculum of Vth to VIIIth Standard.

## *Methodology.... Steps.....*

- 5. Field try-out of New IT curriculum at Vth standard level students’ (105) of the two urban and five rural located schools of the Satara district.
- 6. Evaluate the IT skills development of the students.
- 7. Know the Findings and give the recommendations.

### *Criteria's considered for analysis during Research Project*

- i. Fundamental Concepts and Operations
- ii. Social and ethical Issues
- iii. IT Tools
- iv. Communication Tools
- v. Technology Research Tools
- vi. Tools for Problem Solving

### *Top Priority IT Skills with standards*

Standard	First Priority Skill
• i. V th Standard	Use of Mouse
• ii. VI th Standard	Use of Mouse (Single, Double Click), Use of specified keys of Key-Board Multimedia keys
• iii. VII th Standard	Use of Mouse (Left Click) Other Keys Use of Computer, Importance of Anti-virus package, Use of Educational Games

### *Top priority Skills.....*

Standard	First Priority Skill
• iv. VIII th Standard	Use of peripheral devices, Importance of Internet, Use of Scanner, and Printer etc.

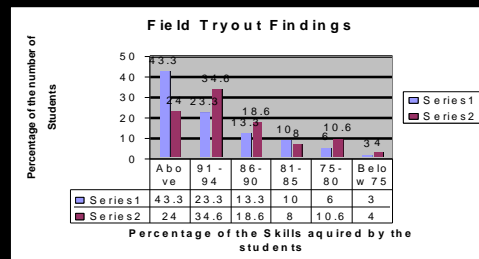
### *Suggested Method of Evaluation*

- i. Skill based
- ii. Through Innovative Projects
- iii. Practical Orientation.
- iv. Oral

### List of the Schools Involved in the Field-tryout

1. New English School, Charegaon
2. Shree Shivaji Vidyalaya, Karve
3. Shree Anandrao Chavan Vidyalaya, Potele, Tal Karad
- 4. Madhyamik Vidyalaya, Belawade, Tal. Karad
5. Vidhamata Vidyalaya, Karad
- 6. Malojirao Vidyalaya, Lonand Tal. Khandal
7. Anant English School, Satara

### Academic Findings of the Field-tryout



### Few Important Findings

- Average number of computers in the rural schools is two
- Information about CAL packages is absent
- Learning Material in print form of the IT subject in Marathi is not available in appropriate terms.
- Present evaluation scheme is not based upon the desired IT skills.
- Concept of Computer student ratio for practicals and its importance is absent

### Findings.....

- Lack of Infrastrural Facilities.
- Schools located at the rural areas are suffering with minimum adequate facilities.
- Unknown with the use of Computer as media for other subjects.
- Students of the Rural area are equally smart to work with Computer Systems compared with students of Urban area.

### *Recommendations*

- Use of CAI packages should be encouraged.
- Online Training of the Teachers is necessary.
- Field tryout of the new designed curriculums of VI to VIII standard is also recommended.
- Skill based Curricula needs to be updated after every two years.
- Proper attention is necessary towards adequate facilities.

### *Post Research Activity*

With the findings of this Research Project, Satara Education Society's Primary School has started IT education from the I st Standard. The skill based curricula gave best results in the area of Edutainment (Education Through Entertainment).

Activity oriented Print Materials written by the same author and his team are made available.

### *Case Study – 2*

*Use of ICT in Technology  
Entrepreneurship education to  
empower rural youths*

### *Introduction*

- Education for Knowledge, Skills, Values, Behavior to achieve stability
- Present system of education is unable to create employment and enterprise opportunities.
- Reorientation of Education system
- Campaigning of Rural Entrepreneurship.
- Education to meet the challenges of Open Market Policy.

### *Methodology*

- Model of Technopreneurship
- Skill Components:
  1. Vocational Education
  2. Technopreneurial Education
  3. Entrepreneurship Education
  4. ICT Education

### *Project Implementation: Steps*

- Self – Assessment
- Listing of Occupations
- Training of Technopreneurial Modules
- Use of Instructional Materials
- Field Work Experience
- General Entrepreneurial Training

### *Tools Used .....*

- Career Test ( 5 PIE Career Test)
- Selection of Occupations based on Research Data
- Instructional Materials of the selected Technopreneurial Courses
- Courseware of the General Entrepreneurship
- Field work Manual
- ICT Materials

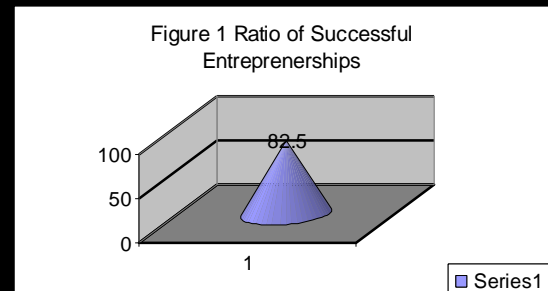
### *Implementation Stages*

- Pre-Education Phase
- Education – Training Phase
- Post Training Follow –up

## *Sectors For Micro-enterprises*

- Information and Communication Technology
- Service Sector
- Agro-based Micro-enterprises
- Rural Enterprises
- Trading sector

## *Results*



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3. Du Gay 1993 *Entrepreneurial Management in the public Sector* Sage

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*Thank you for patience*

