

**SMVDU – J&K - India**



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**Educational technology and its acceptance level among  
the students and teachers in some rural areas**

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University**



**& the best of comfort**



**Smart classrooms  
for smart students**



**Intense interaction**



**And the other side of the coin!!!**



**Self explanatory !!!!!**



# VSAT-Enabled Mobile e-Learning Terminals

a project under  
National Mission on Education through Information and Communication Technology  
of  
Ministry of Human Resource Development  
Government of India

The prime objective of the project is

To make available to the students e-lectures and knowledge e-contents of their interest free-of-cost using VSAT-Enabled Mobile e-Learning Terminals (MeLTs).

The prime target of the project is

The school and college students living in remote areas where data connectivity is unsatisfactory in terms of bandwidth and / or reliability.

# List of Network Institutes lead by IIT Roorkee

**University IET, Panjab University, Chandigarh.**

**Sant Longowal Institute of Engineering & Technology, Longowal**

**National Institute of Technology, Jalandhar**

**HNB Garhwal University, Srinagar (Uttarakhand)**

**Birla Institute of Applied Sciences, Bhimtal**

**Rajasthan Technical University, Kota**

**Shri Mata Vaishno Devi University, Jammu**

**National Institute of Technical Teachers' Training & Research, Chandigarh**

**Mahatma Gandhi Central Library, IIT, Roorkee**

**Dharmsinh Desai University, Nadiad, Gujarat**

## Need Assessment Survey [05 states]

<b>NI</b>	<b>Districts</b>	<b>States</b>	<b>Total Institutions reached</b>
<b>NITJ</b>	02	01 PB	42
<b>SLIET</b>	02	01 PB	50
<b>UIET</b>	06	02 PB HR	117
<b>GNB GU</b>	04	01 UR	64
<b>BIAS</b>	02	01 UR	50
<b>RTU</b>	03	01 RJ	66
<b>PEC</b>	02	01 PB	50
<b>SMVDU</b>	03	01 JK	55
	<b>22</b>	<b>05</b>	<b>~500</b>

**Total Number of students covered under pilot survey is 22089 [5000]**

# Deployment parameters for MeLTs and basis for NAS

**Physical access**

**Teacher student ratio**

**Infrastructure availability**

**Availability of the relevant e-content**

**ICT access**

**Computer student ratio**



MeLT

Mobile e Learning Terminals



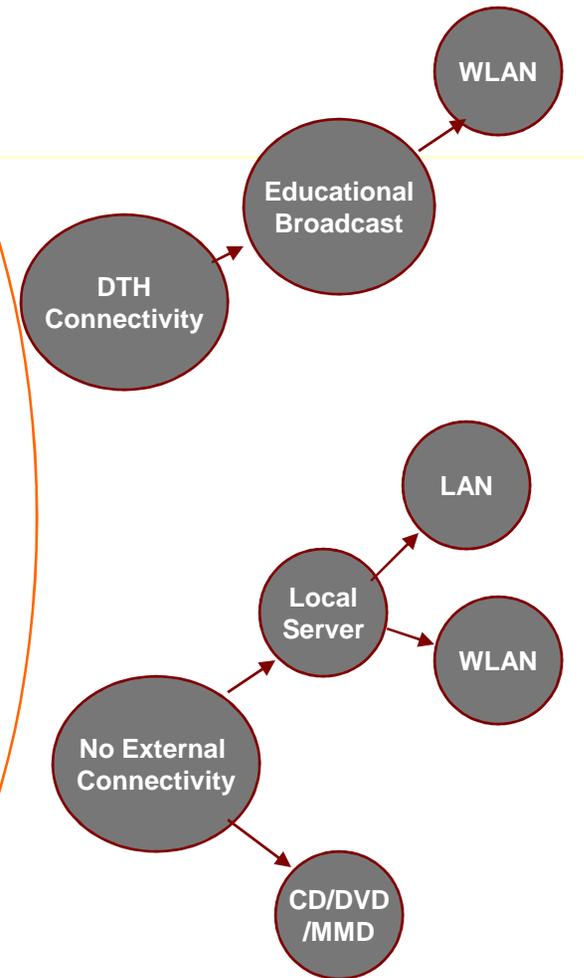
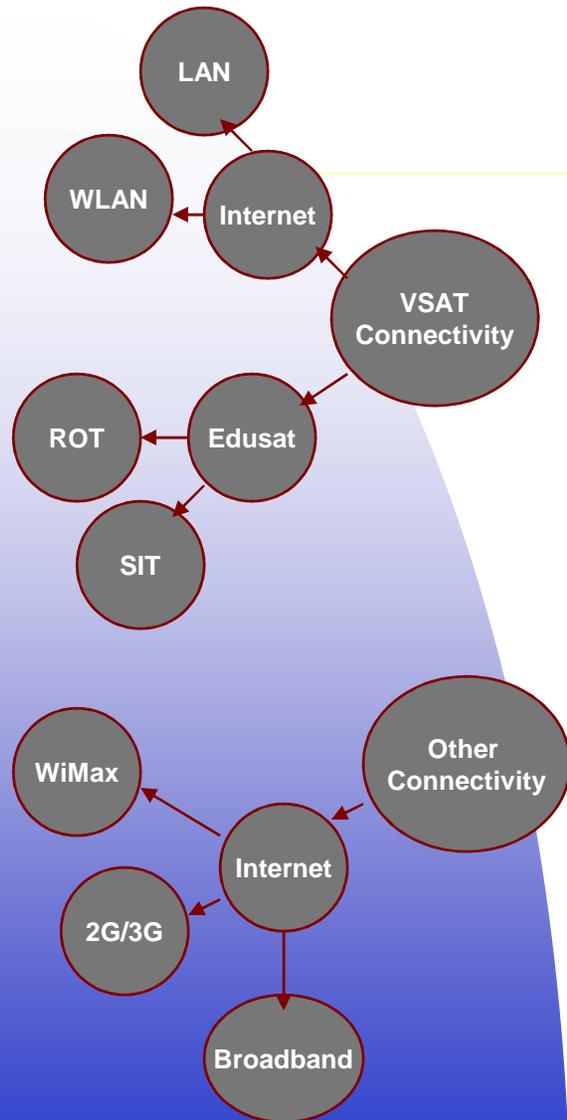
# MeLTs



VAN Based



BUS Based



**Modes of e-learning supported by MeLT**

# MeLT in action in partner NI



# Impact Assessment

The third party study team selected the four NIs for the study:

HNB Garhwal University, UR

SMVD University, J&K

RTU, Rajasthan

Birla Institute of Technology, UR

# Impact Assessment

**The objectives of impact assessment study were**

**To determine the profile of the beneficiaries of the MeLT project.**

**To study the nature of e-content utilized through VSAT Enabled Mobile E-learning Terminals**

**To study the reactions of students, teachers and administrators towards various modalities used in delivering e-content**

# Tools used for the impact assessment

A set of four bilingual questionnaires, one each for Principal of the school/ college, Teachers, students and Project Personnel were designed to elicit the necessary data and information.

Data collection was done after providing the technology exposure to students of selected schools.

<b>General Information (Principals)</b>
<b>Number of Students (Principals)</b>
<b>Number of Students &amp; Teachers (Principals)</b>
<b>Quality of e-content (All)</b>
<b>Benefits of e-content (All)</b>
<b>Problems faced (All)</b>
<b>Attitude Towards Integration of Technology (All)</b>

# Response from the principals

## Important Results

Principals (100% respondents of the study said that)  
MeLTs created interest for the subject among the students

MeLTs increased motivation for further study

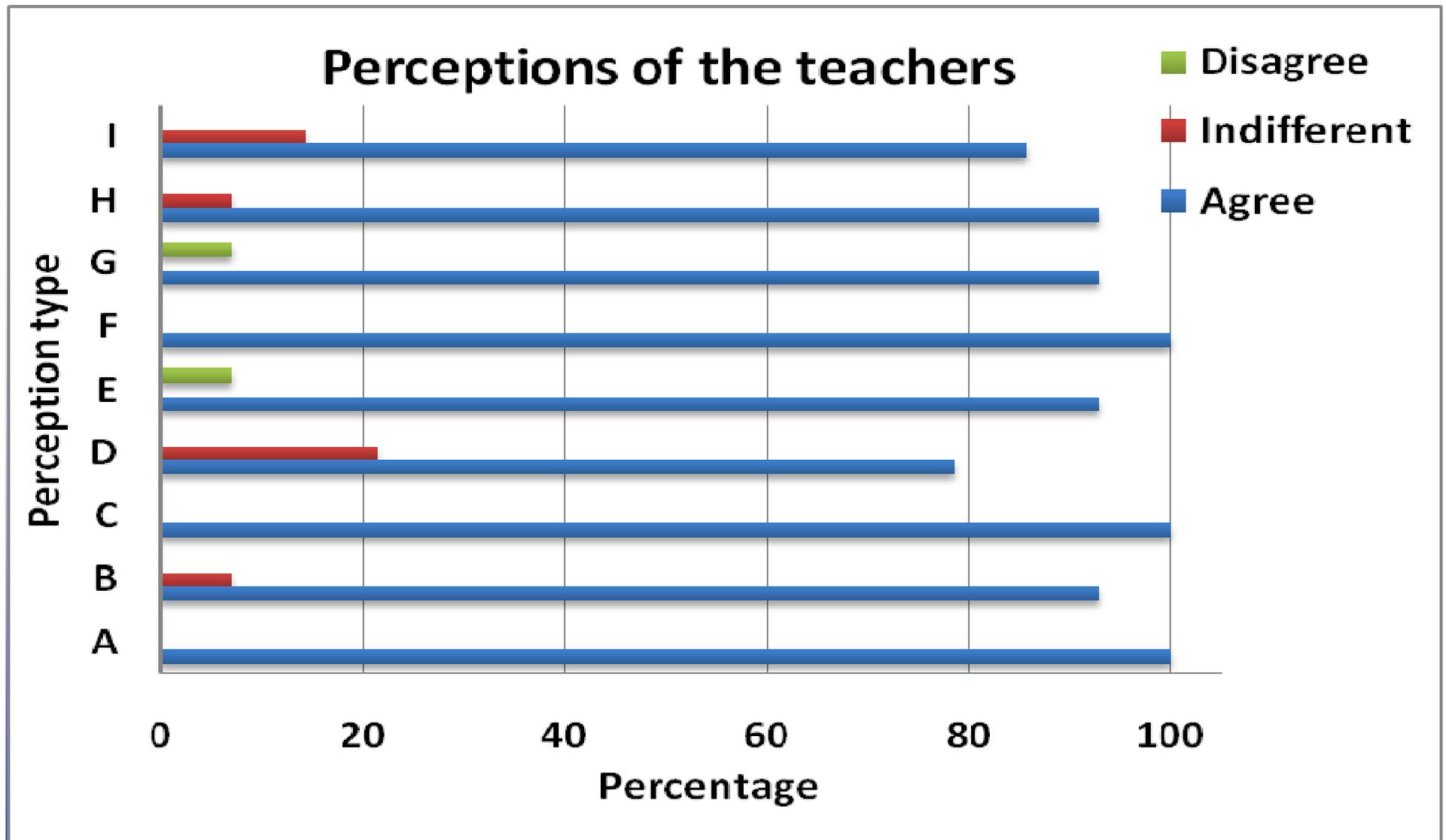
Generated interaction among the students

Supplemented classroom instruction

Created awareness regarding technology among the teachers

Enhanced skills in use of computers

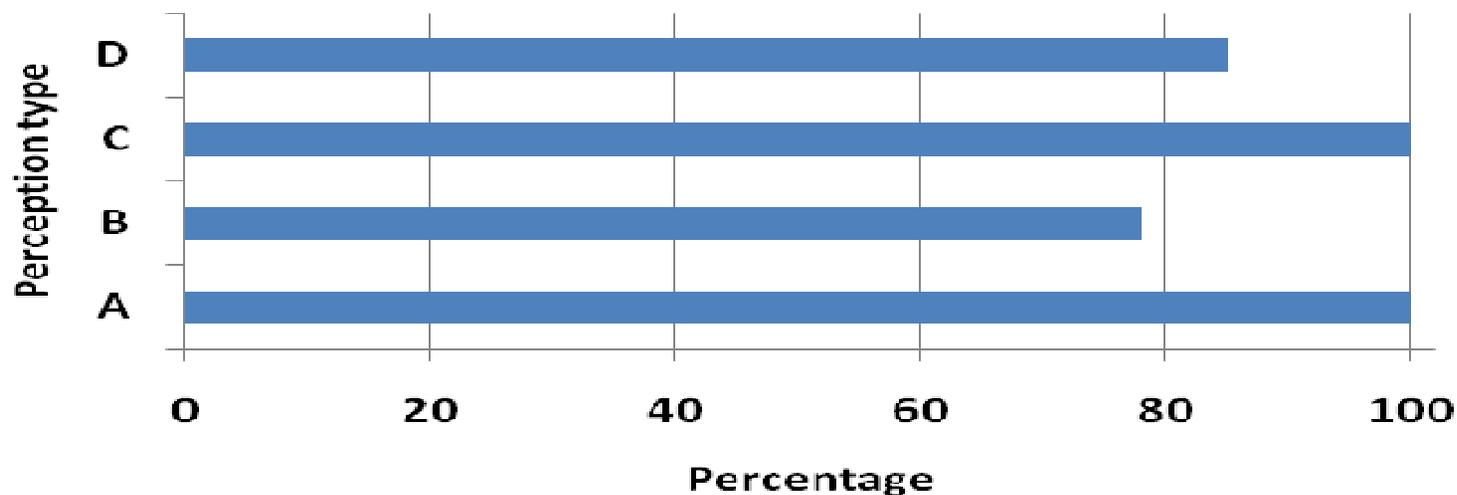
# Response from the teachers



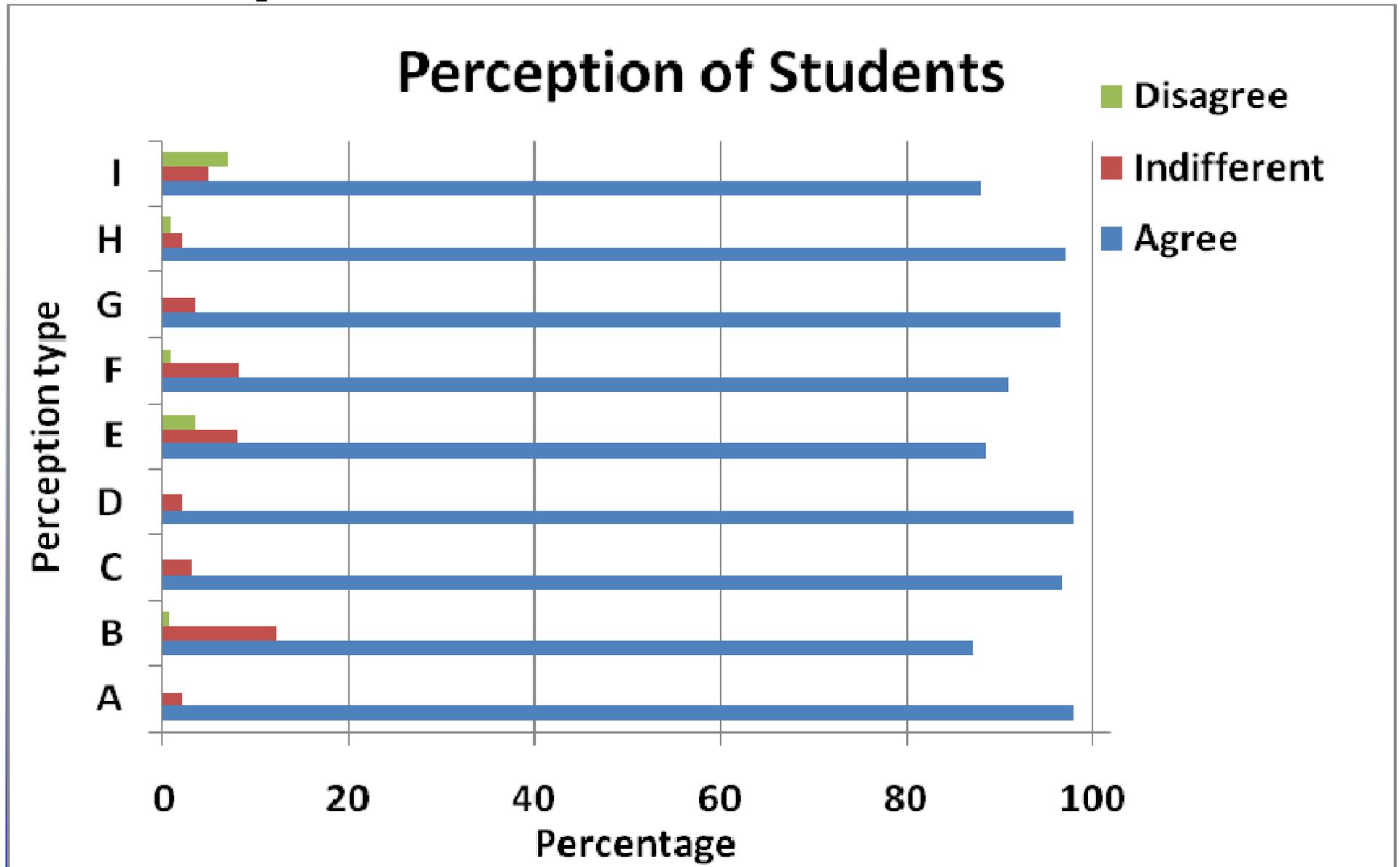
# Response from the teachers

A	Use of e-content is a waste of time (100%)
B	e-content delivery is just a fun for students (78%)
C	e-contents do not provide opportunities to students to clarify their doubts (100%)
D	Sitting and listening to e-contents is boring (85%)

**Perception of teachers (Disagreed)**



# Response from the students



# Attitude towards Integration of Technology in Teaching - Learning

*Majority of the students agreed that:*

use of technology in teaching-learning results in enhancing access to education

Supplements classroom learning

Provides that extra input which otherwise is missing

Use of technology - lot of queries - enhanced levels of interaction with the teachers and peers.

Learn at their own pace

Enhanced learning due to multi-media environment

Motivated them to learn and has made learning more enjoyable than learning in their traditional classroom

*Majority of the students disagreed that:*

use of e-content is a waste of time

e-content delivery is just a fun for students

## Lessons Learnt

On the whole, the technology exposure provided to the students and teachers through V-MeLT has been appreciated and well received by Principals, students and teachers.

As a matter of fact this happened to be the first intervention of its kind to have reached these schools as was opined by most of respondents.

One of the significant remarks made by the Principals include the following *“Students are getting lot of benefits of educational technology through MeLT project. This project needs to be continued. I strongly recommend this MeLT project to continue so that students may get most benefit of it”*.

On the basis of the findings and suggestions made by Principals, teachers and students, it is observed that identification of network institutions in various regions proved to be one of the most critical reasons behind the successful implementation of the project and enhanced efficiency and effectiveness of the intervention.

# Lessons Learnt

**Study that selection of e-content should be based upon the needs of the students and the context.**

**The e-content should be preferably developed in regional or local language involving local teachers especially in case of school students to make it more effective.**

**The available e-content developed at the international level by various organizations should be dubbed in local language to make it easier for the students to understand for the students.**

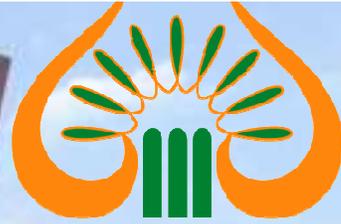
**There is a strong need for e-content covering variety of subjects and which would inculcate curiosity and creative thinking among the students rather than focusing alone on standard e-content being developed by most of the agencies.**

**MeLTs should be planned primarily for remote areas with inadequate educational facilities, disadvantaged or minority groups lacking educational facilities or time, physically challenged groups not in a position to take advantage of existing facilities and economically weaker sections of the society.**

# Acknowledgements

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# Thank You



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*Lets move and work together  
for a better tomorrow*