

A-VIEW

Amrita

Virtual Interactive E-learning World

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Overview

- ⦿ Virtual University + Extensions
- ⦿ A-VIEW (Amrita Virtual Interactive E-Learning World)
 - Generic Framework
 - Applications:
 - University: Amrita, EDUSAT
 - Corporate: Training, Mobile Devices
- ⦿ Conclusion

Virtual University

⦿ *“...the infrastructure that provides students a learning experience for an online course...”*

❖ e-Kampus

⦿ *“...An organization that provides higher education on the Internet...”*

❖ Wikipedia

Virtual University: Types

- ◎ Live Lectures
- ◎ Recorded Lectures
- ◎ Recorded Audio with Multimedia Content
- ◎ Various Combinations

Amrita: Live Lectures

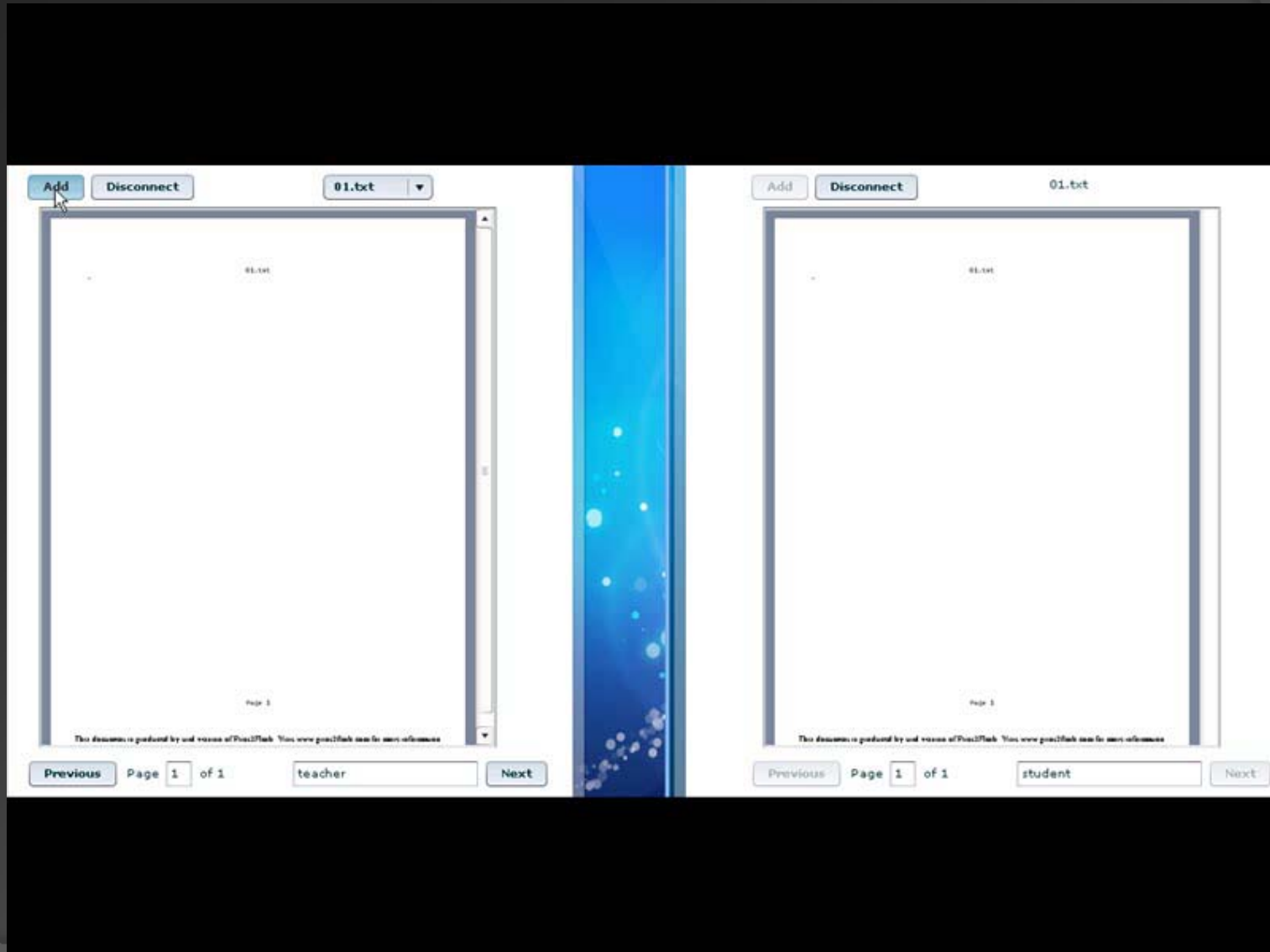
◎ Tools

- Video and Audio (Instructor)
- Document Sharing (PPT, HTML, PDF, JPG)
- Whiteboard (Multiple Devices)
- Chat: Questions

◎ Large LCD Panel Displays

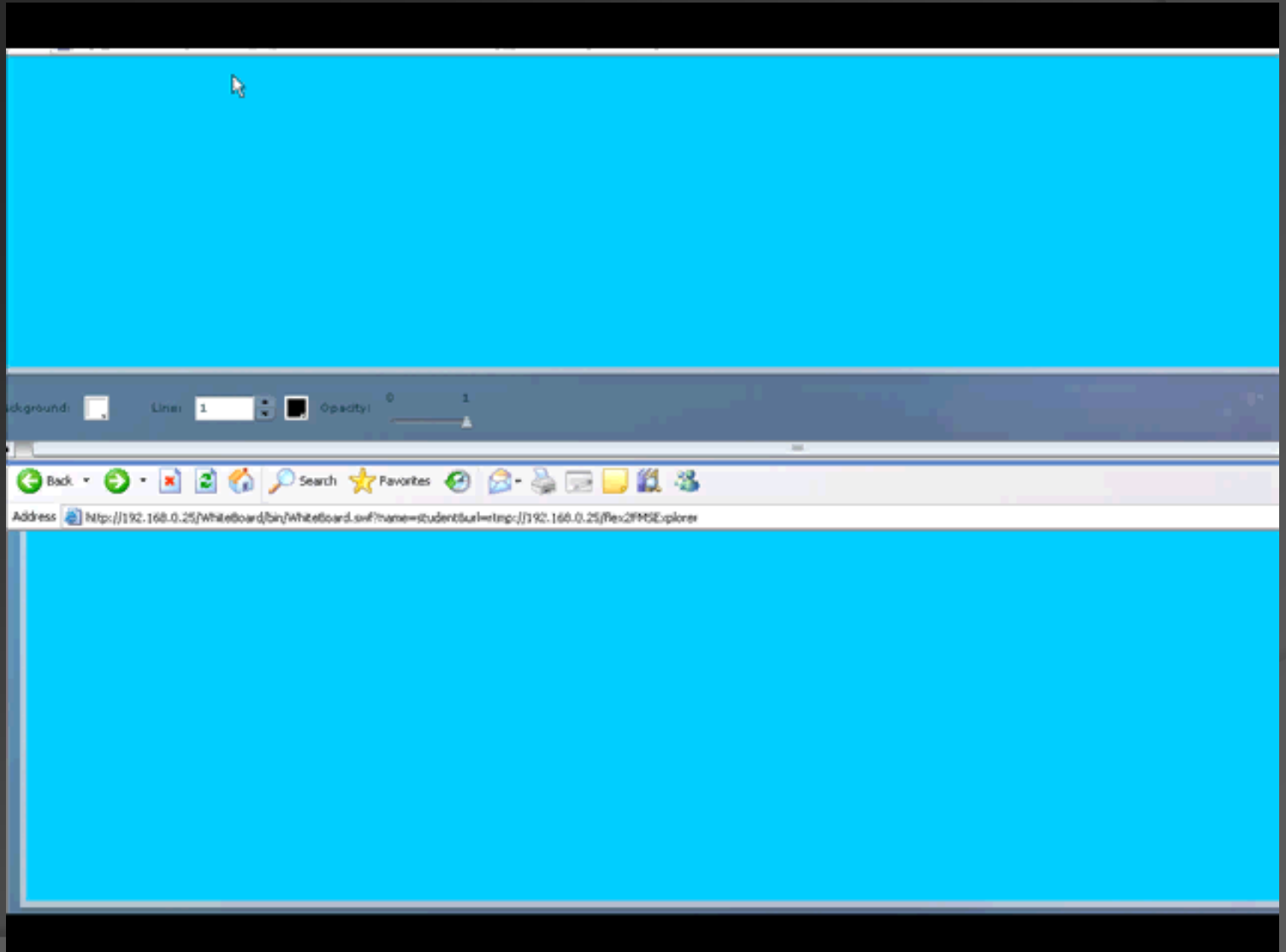
- *Student can choose where to pay attention*
- *Theater-like Environment*

Document Sharing



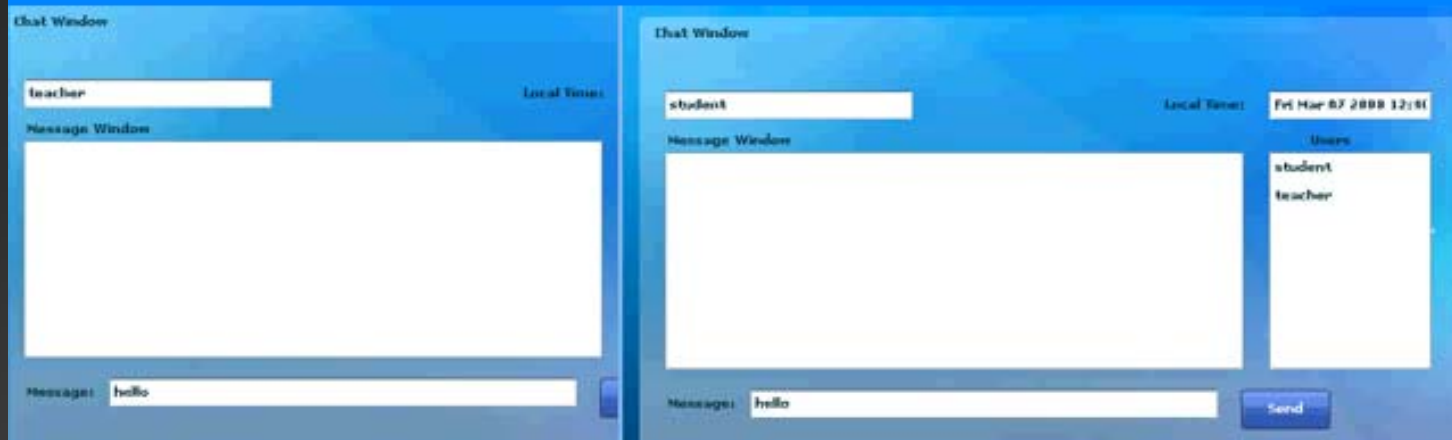
Whiteboard

Teacher



Student

Chat



Teacher

Student

Live Lectures: Extensions

◎ Live Lectures

- *Lack of Teacher Awareness about student environment*
- Communication & Understanding Issues
 - *Accent, Video Dropout, Audio Noise, etc.*
- No Feedback

Live Interactive Feedback

Live Lectures: Extensions

◎ After Good Live Lectures

- No Systematic Guidance
 - *Some Students feel “Orphaned”*
 - *No Good Reference Materials*

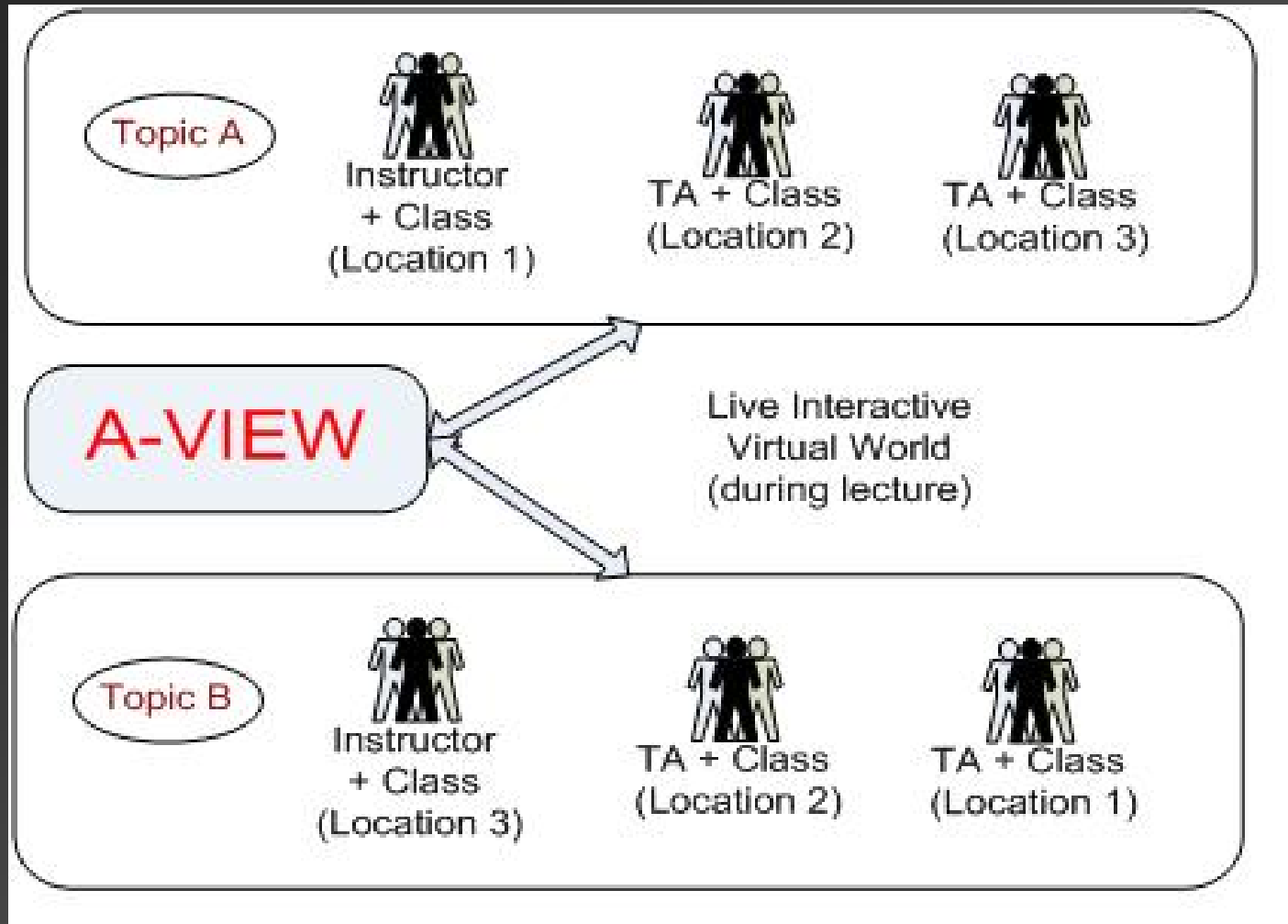
Social Environment (Knowledge Café)

Generic Framework: A-VIEW

(Amrita Virtual Interactive E-Learning World)

- ◎ Two Main New Sections
 - Live Lectures with Interactivity
 - Knowledge Café: Online Social Environment

A-VIEW Live Interaction



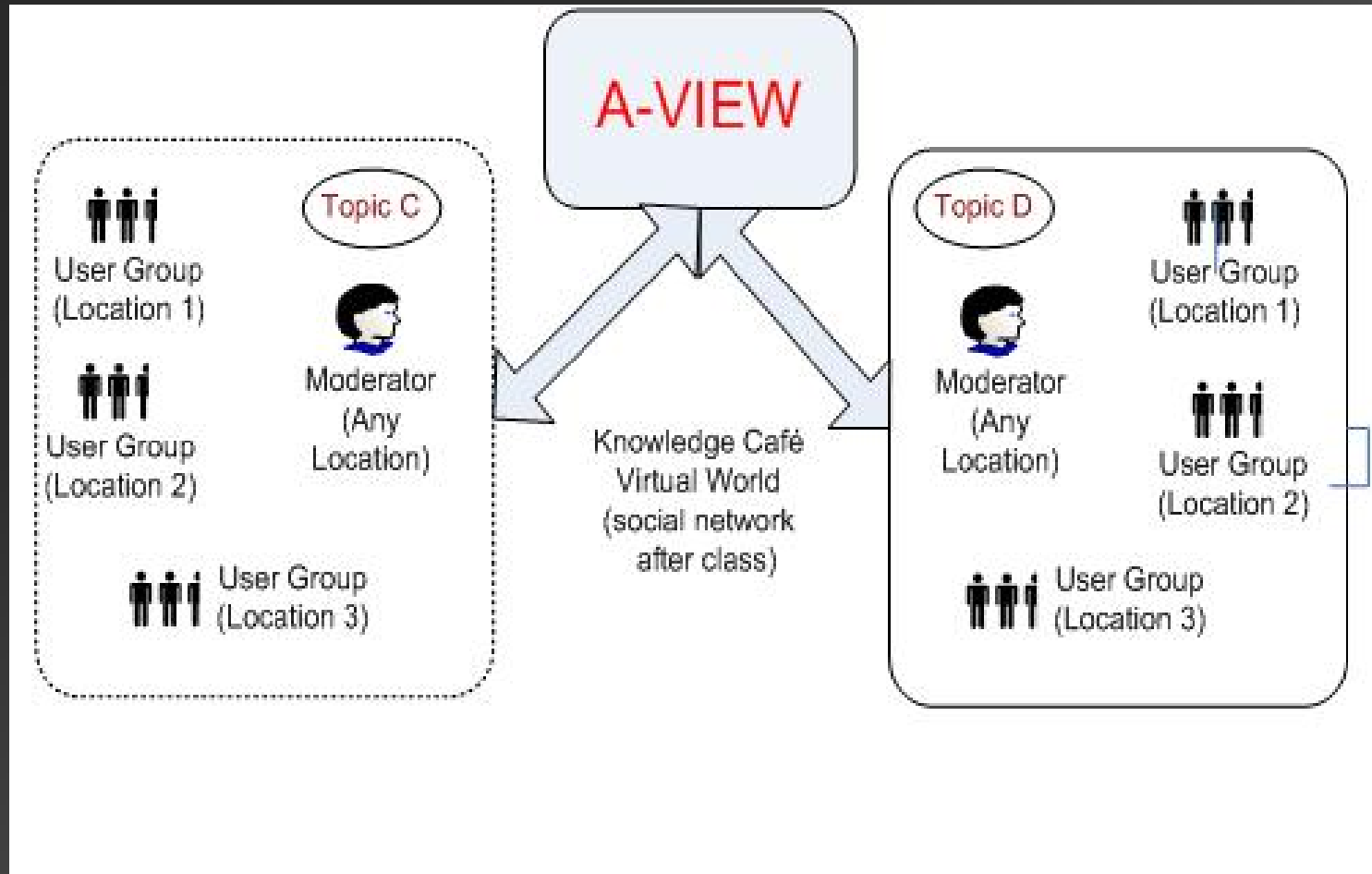
A-VIEW: Live Lectures with Interactivity

- ◎ Feedback system
 - Simple Student Response
 - Multiple Choice Quiz
 - Immediate Results in Graphical Formats
 - Teacher can evaluate
 - Verbal Communication
 - Basic understanding
 - Concept Insight
 - Grasp of Previous Lectures

Knowledge Café

- ⦿ After the Live Class
- ⦿ Online Chat Room for specific course
 - Users from any campus
 - Students, Instructors
 - Relevant notes will be incorporated in Library
- ⦿ Notice board
- ⦿ Discussion Forum
- ⦿ Automatic Email/SMS Reminders

A-VIEW: Knowledge Café



Knowledge Library

- ⦿ Recorded Lectures
 - Transcriptions (if needed)
 - Translations (if needed)
- ⦿ Resources
 - FAQs
 - Related documents and Materials
 - Relevant internet sites
 - Examples/Tutorials
 - Search Facility

Knowledge Café

Chat Room

Chandra: Does anyone know what is 'Internet 2' ?

Hari: is it the next generation of Internet?

Prof. Jain: Internet2 is non-profit consortium which develops advanced network and technologies, for education and high-speed data transfers.

Online Users

Location



Prof. Jain

- IISc-BNG



Lect. Lekha

- IIT-K



Hari

- Amrita BNG



Suraj

- SVC



Prakash

- NIT



Surya

- BIT



Kala

- Amrita CBE



Chandra

- IIT-M



Chopra

- DCE



Board



Forum



Chat



Email



Library



Lectures



Exit

Lecture Archives

⦿ Lectures


- Recorded, Archived
- Search by
 - Keywords
 - University name
 - Course
 - Teacher name
 - Date

Lecture Archives

E-Learning Scheduling

University **University Center** **Course** **Subject** **Teacher**

▼ ▼ ▼ ▼ ▼

Date  **Key Word** **Session No** ▼ **Duration** ▼

Format : mm/dd/yyyy

Results

UNIVERSITY	CENTER	COURSE	SUBJECT	TEACHER	DATE	SESSION	DURATION

Select One Row from DataGrid and Click Play Button

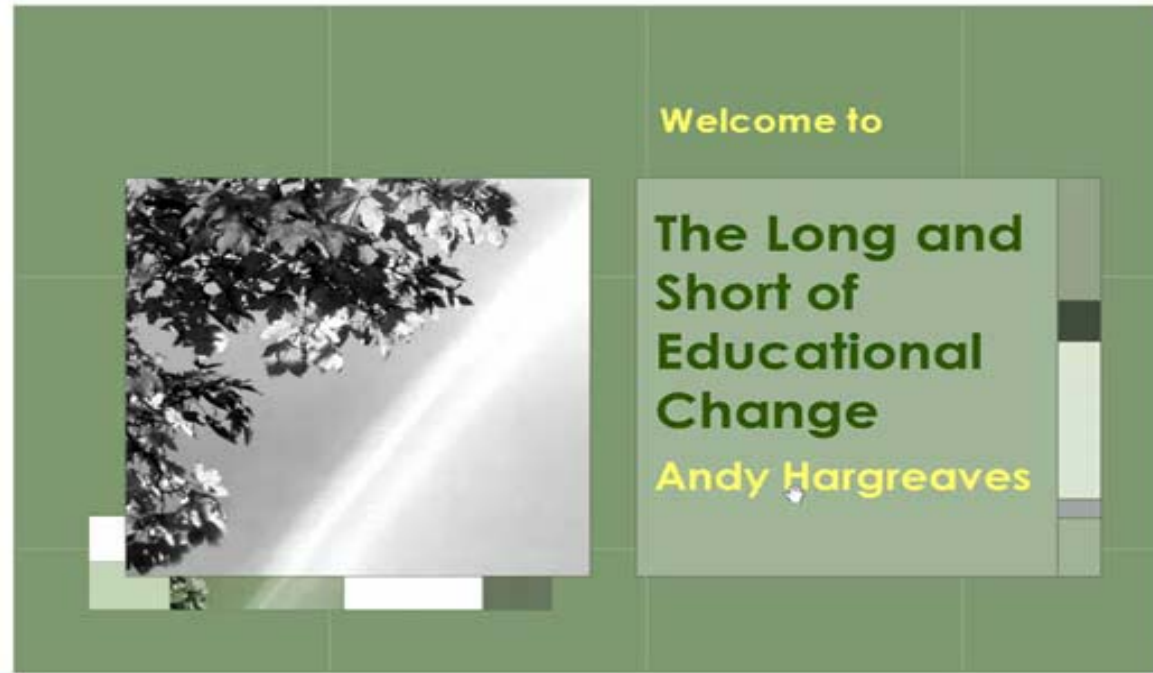
Lecture Archives

Recorded Lecture from LMS



Start

Pause



Welcome to

The Long and Short of Educational Change

Andy Hargreaves

A-VIEW: Applied to University

- Amrita Campuses
- Indian Universities
- Satellite / Internet Networking

Amrita Campuses



Amritapuri Campus



Bangalore Campus



Coimbatore Campus

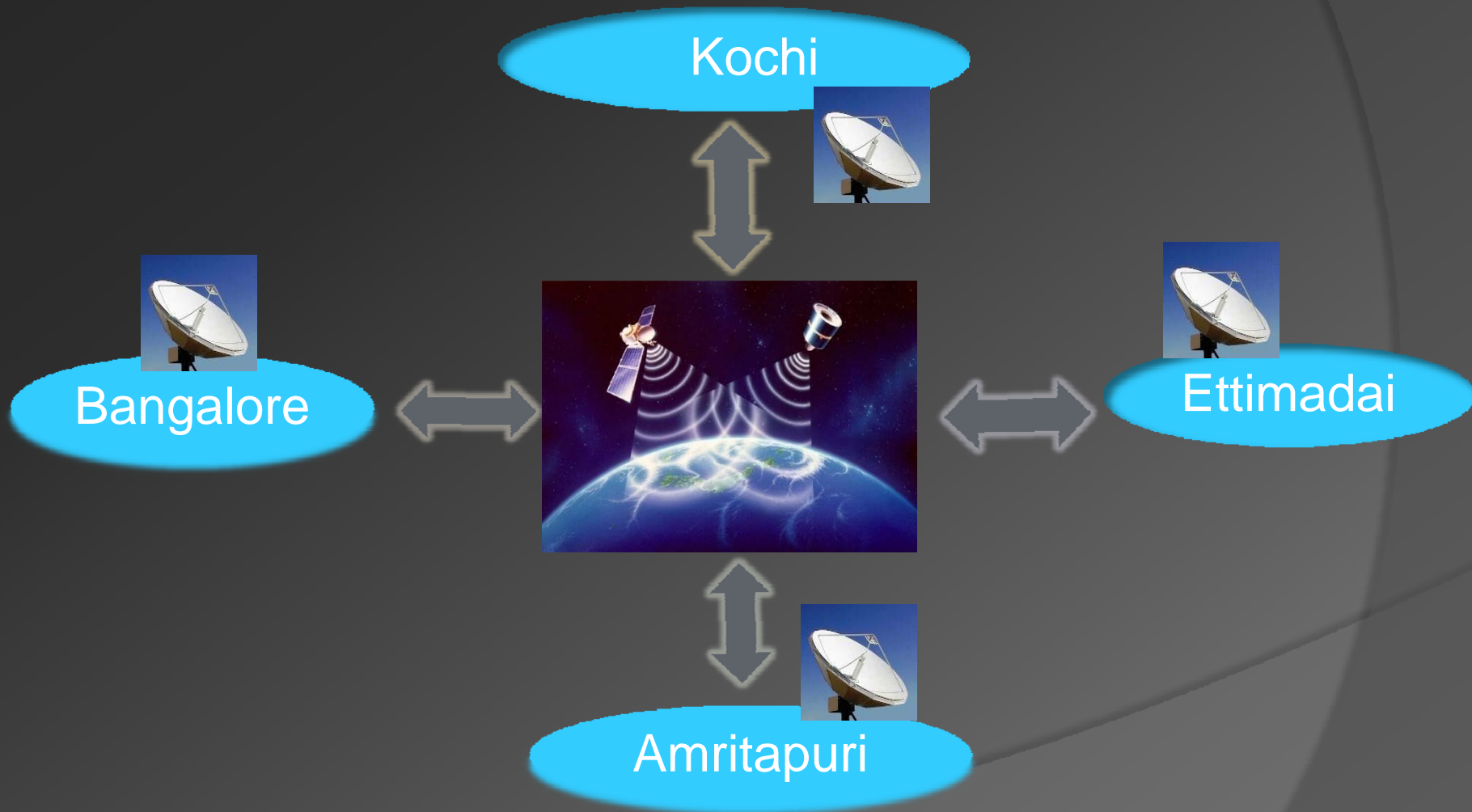


Kochi Campus

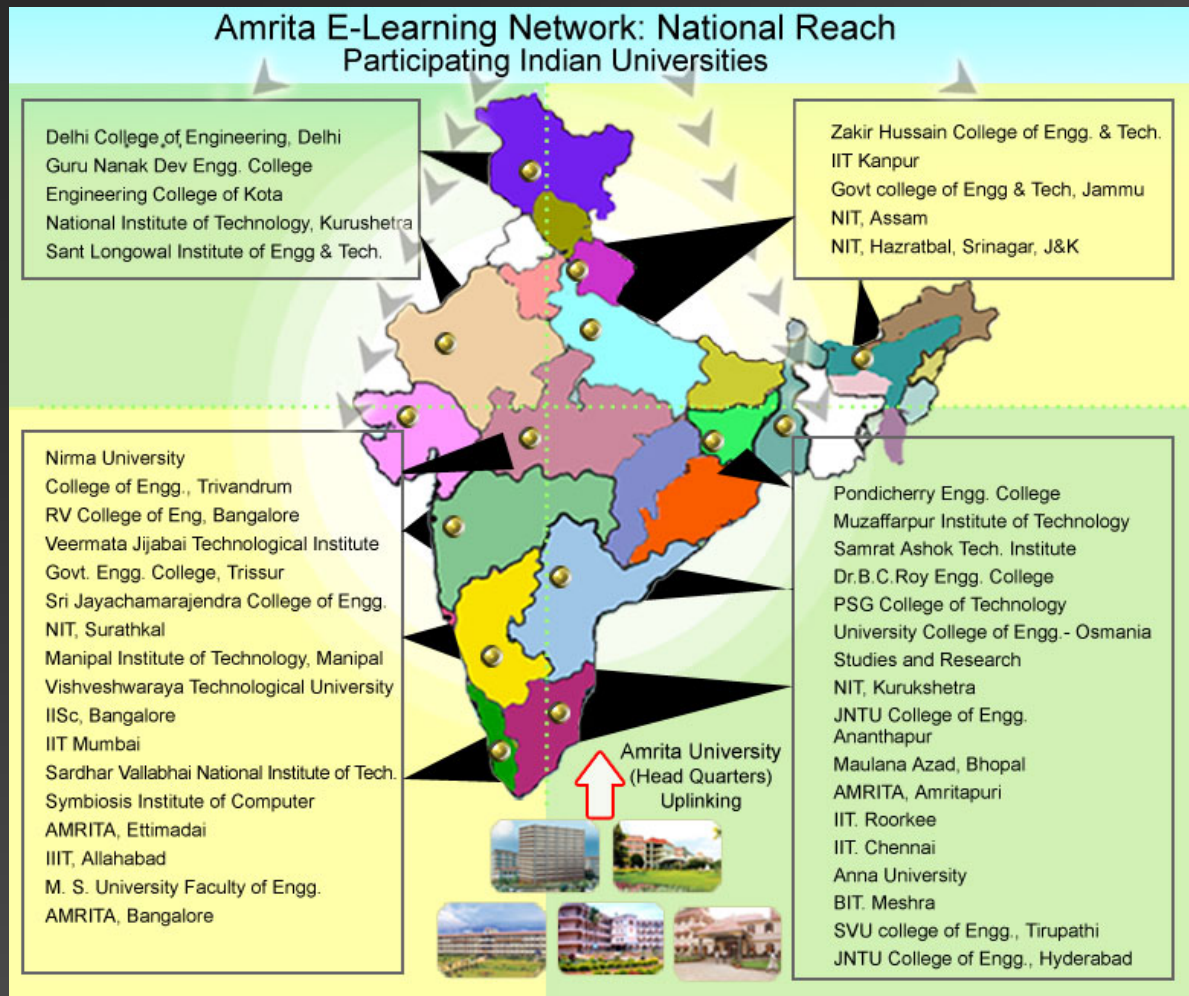
Satellite Connectivity at Amrita by ISRO (Indian Space Research Organization)



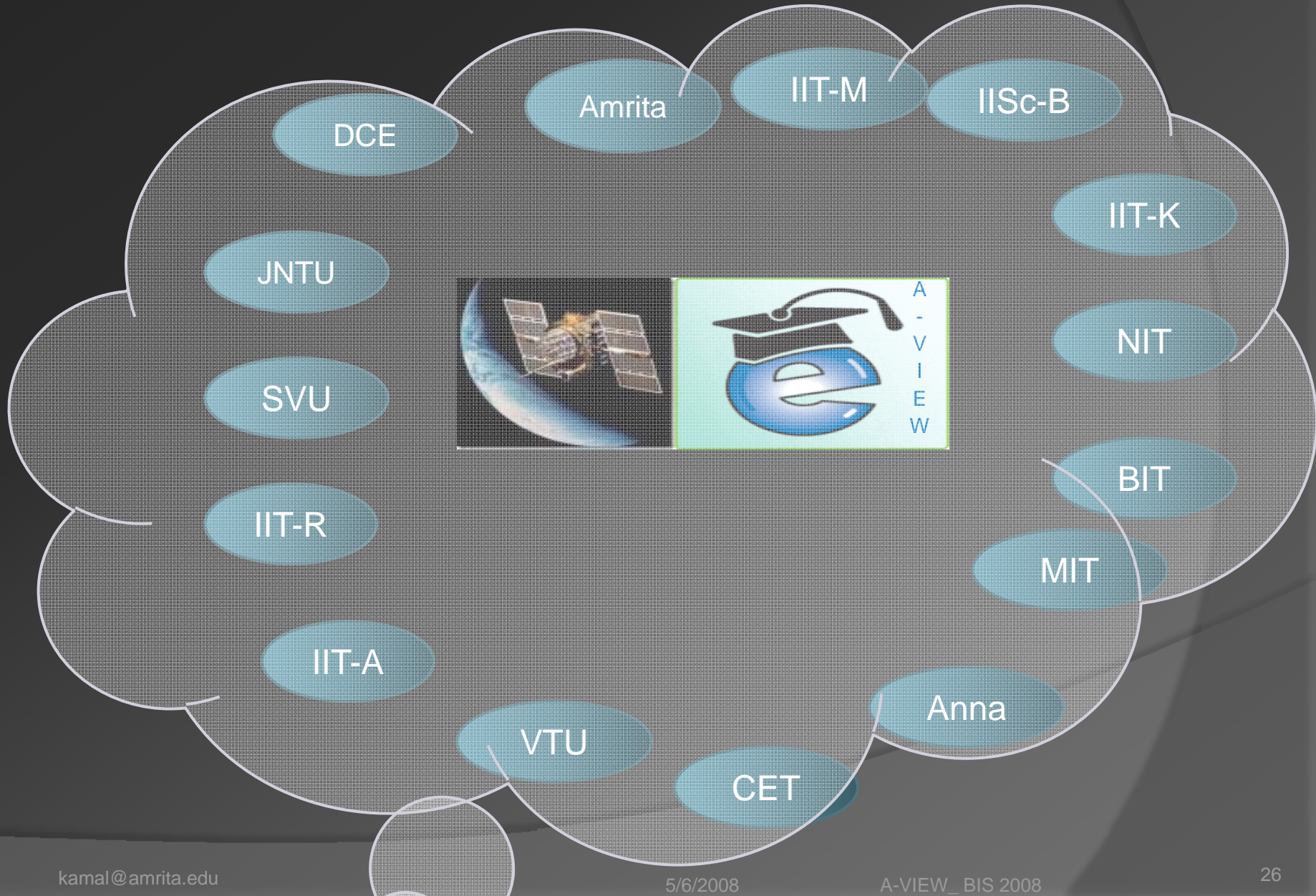
A-VIEW: Amrita Campuses



AVIEW: Indian Universities



A-VIEW: EDUSAT Network



Indo-US Initiative Program

Lectures on EDUSAT Network

Professor name	University	Topic
Dr. Eric A Brewer	UC Berkeley	Societal Transformation
Dr. N.Narayana Rao	University of Illinois	Electromagnetism
Dr.Ponisseril Somasundaran	Columbia University	Nanotechnology
Dr. Ashok Agrawala	University of Maryland	MIND Lab

A-VIEW: Corporate Applications

⦿ Training

- Similar to Teaching
- Usage of the Tools varies
- More Interaction between Employees

⦿ Telemedicine

- Specialists consult with patients/doctors in remote areas

⦿ Seminars and Live Events

A-VIEW: More Tools

- ⦿ More common in Corporate World
- ⦿ Window Sharing
 - Application contents visible to all
 - e.g. Programming, VLSI Editor
- ⦿ Application Sharing
 - Everybody can edit, One at a time
- ⦿ Mobile Instruction
 - Use Laptop and Input Device, e.g. Wacom Tablet

Corporate World: Any Time, Any Place

- ◎ Mobile Devices
 - Mobile Phones
 - PDA
 - OLPC (One Laptop per Child)
- ◎ User Interface
 - Space Considerations
 - UI Design can be different

Mobile Phone: Nokia



Mobile Devices: User Interface

- Tabbed UI to conserve space

The screenshot displays a mobile web browser interface with a tabbed UI. The tabs at the top are: Video and Audio, WhiteBoard, Powerpoint, Browser, TextChat, and Signout. Below the tabs, there is a text input field containing 'teacher' and a 'Disconnect' button. An 'Address Bar' contains the URL 'http://www.thetech.org/robotics' and a 'Send' button. The main content area, labeled 'Browser Module', shows a webpage titled 'ROBOTICS sensing • thinking • acting' by 'TheTech'. The webpage features a navigation menu on the left with links: About the Exhibition, Classroom Activities, Robotics Timeline, and Contact. The main content area is divided into several sections: 'universal robots' (The History and Workings of Robotics), 'robot art' (Four Bay Area Artists), 'machines and man' (Robotics and Ethics in the 21st), and 'at your command' (Control Your Own Remotely Operated Vehicle). The background of the webpage is a dark, circuit-like pattern with various icons and text.

Conclusion

◎ A-VIEW Framework

- Virtual World across Multiple Centers
- Feedback Mechanisms
- Flexible for Variety of Applications: Corporate, University, etc

◎ Leverage Best Instructors

- Expert Knowledge
- Teaching Skills
- Available to Many
- Reuse Excellent Lectures

◎ Knowledge Café

- Social Interaction Environment
- Technical, Moral, Social Support
- Friends, Collaborative Projects

Thank You