

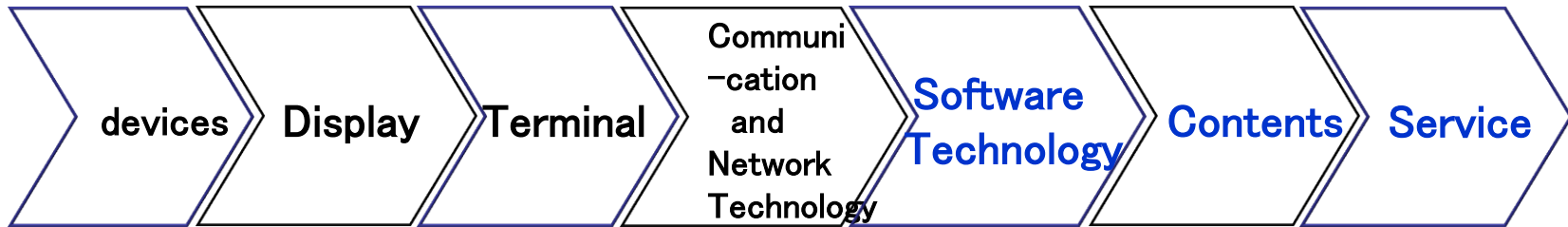
# Proposal for development of Mobile ICT and e-Education in India

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President  
**SHARP CORPORATION**

Tokyo, September 29<sup>th</sup> 2010

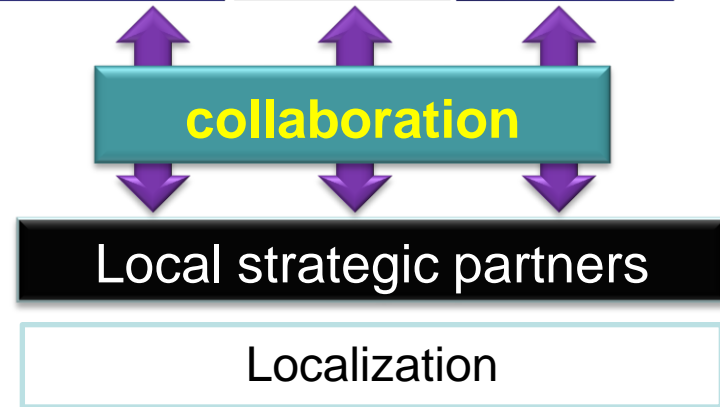
# SHARP ICT business strategy

Value chain from device to service through terminal



## One-of-a-kind device

Broadcasting 3D LCD  
Device for ASV LCD  
Mobile



Customers

# SHARP'S ICT Products

**Mobile Phone**

**Global**

3G  
2G  
GSM

W-CDMA  
CDMA2000  
TD-SCDMA

Cycloid

**Japan**

Slider Clamshell Touch Panel

NTT docomo, KDDI, Softbank

**Mobile Tool**

e-Book

**Home Solution**

Interior Phone

**Business Solution**

SCAN

DISPLAY and WORK

PRINT

IN Scan

Data

Integrated Touch Panel

# **Proposal for e-Education system experiment**

**utilizing Mobile ICT technology and e-textbook terminals**

# Proposal for experiment

## Background

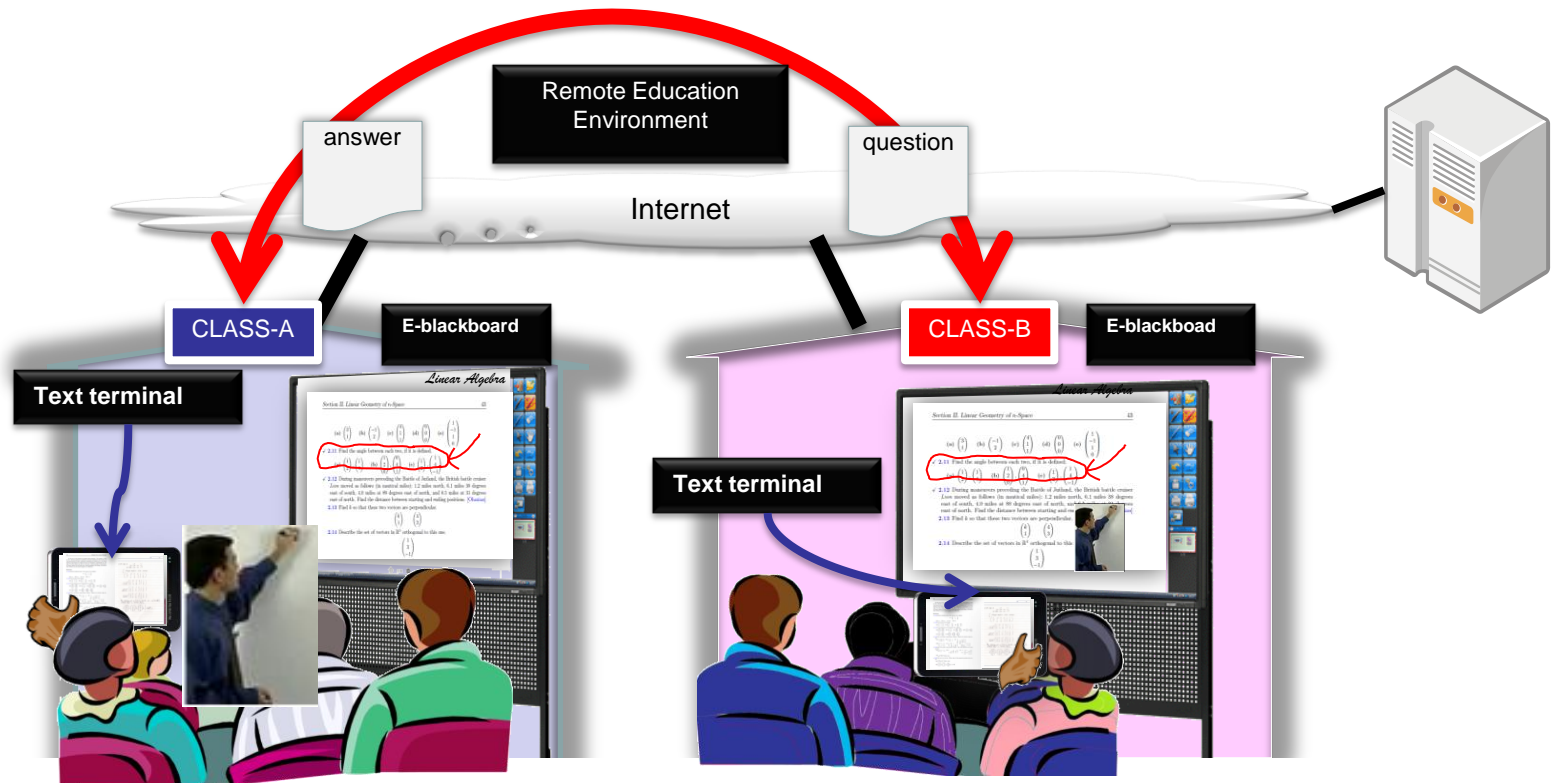
- 1. It is challenging to ensure high quality education in all levels throughout the country.**
- 2. It is recommended to create an ecological educational environment by implementing ICT infrastructure.**



- ① Sharp would like to propose an experiment for a way to enhance the remotely connected virtual class sessions between campuses or colleges using ICT technologies at IIT Hyderabad.**
- ② Sharp would like to develop software, contents, and cloud computing framework to realize the experiment in cooperation with IIT and solution providers in India.**

# Proposal for e-Education system

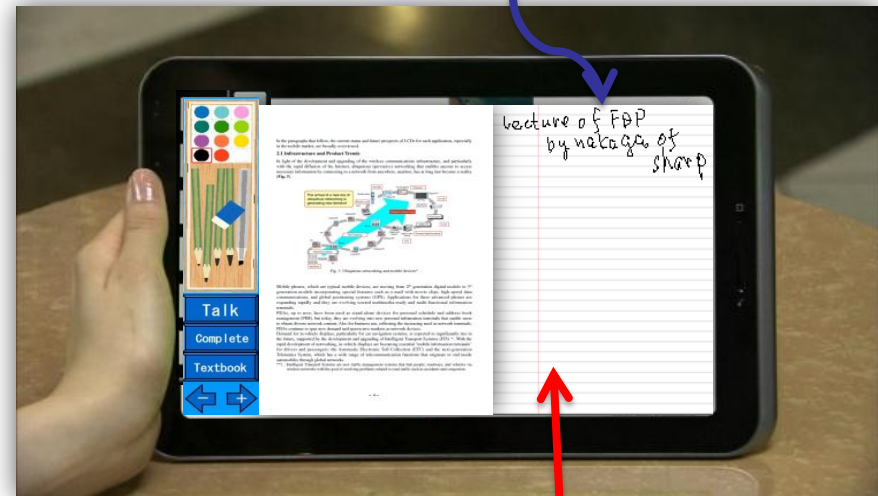
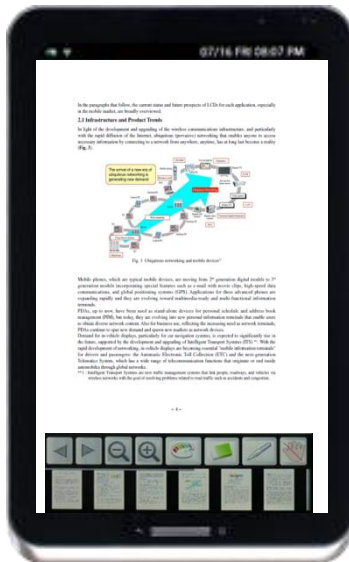
1. Enhancing the even high quality of education in all the levels by **remotely connected** virtual classes.
2. Realizing face to face and **interactive** communication



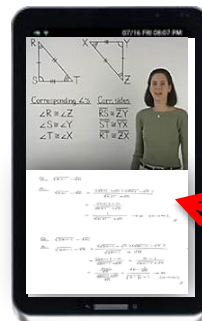
# Textbook terminal for e-Education system

- Various contents and textbooks are **downloaded**. (paperless)
- Student can take notes and puts marks **on terminal**.
- Open platform (Android) can develop **customization**.

• Hand writing note function



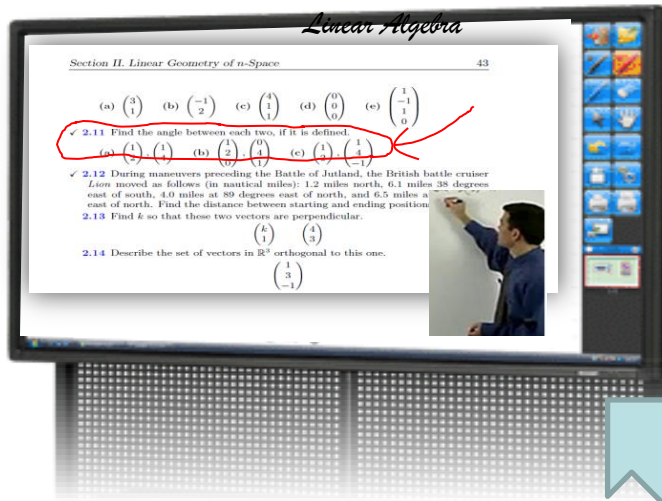
Memo/notes can be taken on the same page of the textbook.



Memo/notes can be taken while watching a video program on same screen.

# E-blackboard for remote classes

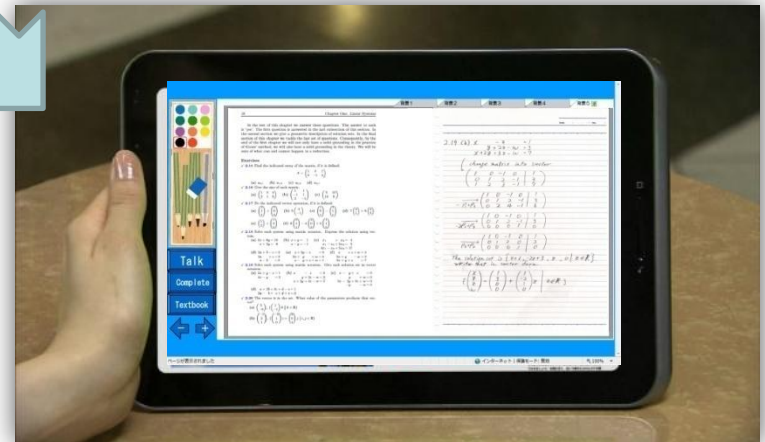
## Remote class-B



E-whiteboard  
(60" LCD with touch panel)

- **interactive tutoring**
  - Students can see the teacher.
  - Students can give answers to questions the teacher gives through their terminals.

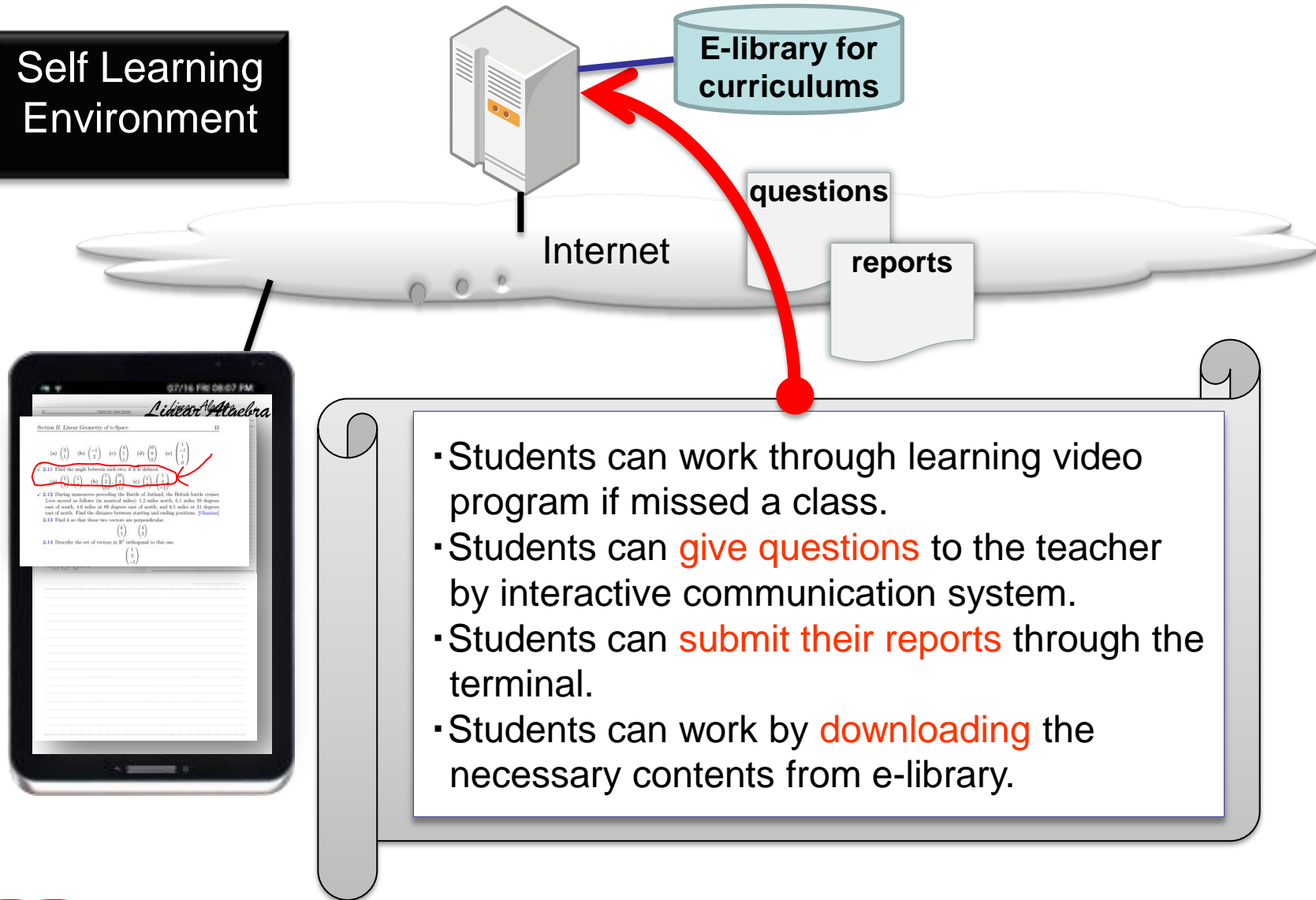
Sharing the same textbook on the terminal





# Self-learning

Self Learning Environment



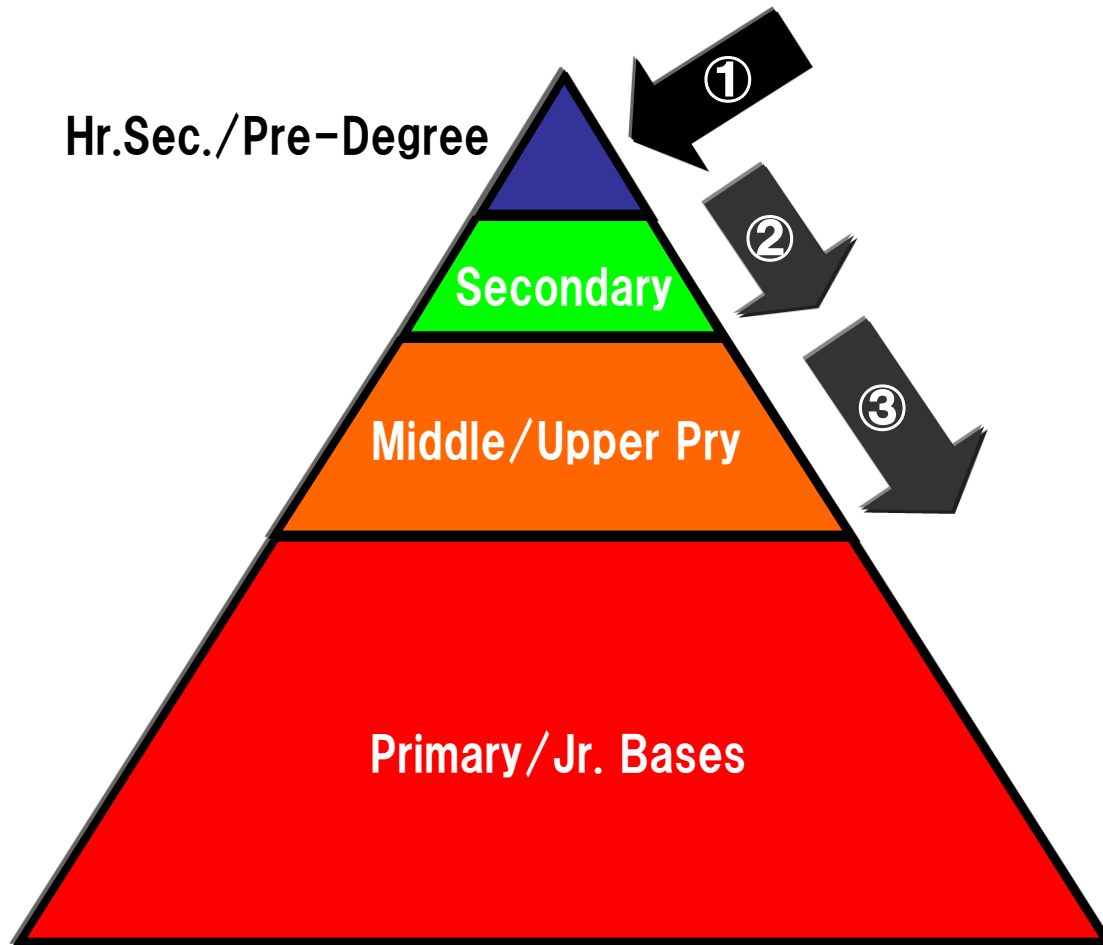
- Students can work through learning video program if missed a class.
- Students can **give questions** to the teacher by interactive communication system.
- Students can **submit their reports** through the terminal.
- Students can work by **downloading** the necessary contents from e-library.

# Expected effects–summary

- ① Remotely connected virtual class by ICT enables **more students** to get high quality education.
- ② Interactive tutoring method gives students the **personalized** coaching on the individual, which helps ensure the **even level** of education.
- ③ Digitized textbooks and video programs change the way how the students studies.
  - a **paperless** education.

# Enrolment by Educational Stages (07–08)

## Implementation of e-Education



# Vision for the future

- The implementation of an ICT education system is being discussed in Japan.**
- Once the effectiveness of the experiment is proven, India and Japan can jointly seek the best way to collaborate to implement the e-Education, starting from the higher education levels and then to extend it to the secondary and downward to other levels.**
- Sharp would like to cooperate with the Indian IT and the educational sectors and authorities for developing the new education system that can suit best for India.**

**SHARP**