

**Multimedia Data Analysis:  
How to Handle the Video Data  
on Innovative Classrooms with  
the Use of an Analytical  
Software**

**SITES M2 Research Team**

# SITES

- **Second International Information Technology in Education Study**
- **An international comparative study conducted under the auspices of the International Association for the Evaluation of Educational Achievement (IEA)**

# 3 Modules of Sites

98-00 **M1 (the indicators Module);**

00-02 **M2 (the innovative practices Module); and**

03- **M3 (the survey Module): student learning  
outcome**

# SITES M2

- **M2 is an international qualitative study of innovative pedagogical practices that use information and communication technology (IPPUTs).**
- **This is the study we are currently working on.**

## **Aims:**

- **To identify and provide rich descriptions for innovative, technology-based pedagogical practices**
- **To provide information to national and local policy-makers on ICT related decisions**
- **To provide teachers and other practitioners with new ideas on ICT usage**
- **To investigate the measurement quality of M1 and contribute to the development of M3**



- **32 participating countries**

**French Belgium,  
Canada,  
Chile,  
Colombia,  
Denmark,  
Finland,  
France,  
Hong Kong  
Hungary,  
Indonesia,  
Iran,**

**Israel,  
Jordan,  
Italy,  
Japan,  
Korea,  
Latvia,  
Lithuania,  
Luxembourg,  
Netherlands,  
Norway,  
Philippines,**

**Portugal  
Russia,  
Singapore,  
Slovakia,  
Slovenia,  
South Africa,  
Taiwan,  
Thailand,  
UK,  
USA**

# Work Done by the Hong Kong SITES team

**Nov 2000**      open nomination for IPPUTs (Innovative pedagogical practices using technology)

**Dec 2000**      steering committee finalized on cases selected

**Dec 2000**      }  
**June 2001**      }      **Data collection**

**June 2001**      }  
**Sept 2001**      }      **Writing Case Reports**

                         }  
                         }      **Video Case report**  
                         }      **Case Analysis**  
**June 2002**      }

# Hong Kong Cases

- **9 cases sent for international comparison**  
**(Primary: 3; Lower Secondary:2; Upper Secondary:4)**
- **5 extra cases for dissemination of innovation practices**  
**(local extension)**  
**(Primary:3; Lower Secondary:2)**
- **Total 14 cases at different educational level on various subjects:**
  - **Science**
  - **Art & Design**
  - **Chinese**
  - **Economics**
  - **General Studies**
  - **interdisciplinary / cross-curriculum**



# Data collected in Hong Kong cases

- **School Documents**
- **Interviews of:**
  - **-Principals;**
  - **-IT coordinators;**
  - **-IPPUT teachers;**
  - **-Non-IPPUT teachers;**
  - **-Students**
- **Videotapes of lessons**
- **Students' Work**

# How do we handle the data?

- **Transcription of all interviews and lessons**
- **Qualitative Analysis with the use of a newly developed software: Media Analyzer**

# Media Analyzer

- A powerful tool to facilitate the analysis of video data, the process of transcription and data reduction in particular
- Synchronization of video clip with its corresponding transcripts
- Organization of relevant synchronized materials into meaningful groups called “Index Trees”
- Efficient analysis with reference to the codings under different index trees.

## Video data (Hong Kong Cases)

All videos are in digital video format















Total no. of video tapes: 117

Total no. of video cases: 14





# Digital Video Tapes Summary

<b>Cases</b>	<b>No. of DV Tapes</b>	<b>Approximate Time</b>
<b>CN001</b>	<b>9</b> 	<b>19m21s</b>
<b>CN002</b>	<b>2</b> 	<b>8m52s</b>
<b>CN003</b>	<b>21</b> 	<b>40m22s</b>
<b>CN004</b>	<b>10</b> 	<b>51m26s</b>
<b>CN005</b>	<b>8</b> 	<b>10m</b>
<b>CN006</b>	<b>4</b> 	<b>7m38s</b>
<b>CN007</b>	<b>9</b> 	<b>30m</b>
<b>CN008</b>	<b>16</b> 	<b>51m38s</b>
<b>CN009</b>	<b>1</b> 	<b>6m07s</b>
<b>CN010</b>	<b>5</b> 	<b>7m31s</b>
<b>CN011</b>	<b>10</b> 	<b>88m</b>
<b>CN012</b>	<b>10</b> 	<b>40m44s</b>
<b>CN013</b>	<b>7</b> 	<b>17m08s</b>
<b>CN014</b>	<b>5</b> 	<b>27m06s</b>

**Data Reduction**

# Using Media Analyzer:

**Synchronization**



**Coding & Analysis**