<table>
<thead>
<tr>
<th><strong>Title</strong></th>
<th>Multimedia Data Analysis: How to Handle the Video Data on Innovative Classrooms with the Use of an Analytical Software</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Author(s)</strong></td>
<td>Chow, A</td>
</tr>
<tr>
<td><strong>Citation</strong></td>
<td>CITE Research Symposium 2002 (IT in Education : Research into Practice), Hong Kong, China, 6 July 2002</td>
</tr>
<tr>
<td><strong>Issued Date</strong></td>
<td>2006</td>
</tr>
<tr>
<td><strong>URL</strong></td>
<td><a href="http://hdl.handle.net/10722/44066">http://hdl.handle.net/10722/44066</a></td>
</tr>
<tr>
<td><strong>Rights</strong></td>
<td>This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.</td>
</tr>
</tbody>
</table>
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

- **M1** (the indicators Module); 98-00
- **M2** (the innovative practices Module); and 00-02
- **M3** (the survey Module): student learning outcome 03-
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**: Data collection
- **June 2001**: Writing Case Reports
- **Sept 2001**: 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

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

Synchronization

Coding & Analysis