What the Research on Computer Enhanced Learning was, is, and will be in Taiwan

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National Science Council
Taiwan
Was

• 20 years ago, there were only a handful of researchers in Taiwan conducting research in designing education related computer games.

• 1998-2002: Learning Technology Excellent Research Program

• Key persons: TW Chan, Ovid Tzeng, CH Liu
<table>
<thead>
<tr>
<th>Same Location</th>
<th>Different Locations</th>
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<tbody>
<tr>
<td><strong>Same Time</strong></td>
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<tr>
<td>4&lt;sup&gt;th&lt;/sup&gt; Teaching in Classrooms</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; Telephone Video Conferencing Network Chat Room Discussion</td>
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<td>4&lt;sup&gt;th&lt;/sup&gt; Group Discussion in Classrooms</td>
<td>1&lt;sup&gt;st&lt;/sup&gt;</td>
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<td>4&lt;sup&gt;th&lt;/sup&gt; Individual Learning at Home</td>
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<td><strong>Different Times</strong></td>
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<td>3&lt;sup&gt;rd&lt;/sup&gt; Bulletin Board Work by Taking Turns</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt; Email Exchange Bulletin Board Systems</td>
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<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
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Was

• 2003-2007: E-learning National Research Program
• Title: The National Science and Technology Program for e-Learning in Taiwan
Goals


1. E-Learning industry
2. Social equity
3. Manpower cultivation
4. Innovative research
**e-Learning National Program**

- Program Architecture (3 main axes)
  - Program Contents (7 tracks)

1. e-Learning for every one.
2. Narrowing the digital divide.
5. R&D of advanced e-Learning technology.
6. Fundamental research on learning and cognitive sciences.
7. Policy guidance and manpower cultivation

- Upgrading Taiwan’s Overall Competitiveness in the Era of Knowledge Economy.
- Stimulating the Development of Industries Related to e-Learning.
- Bringing forth New Waves of Academic Research.
Is

• 2008-2012: E-learning National Research Program
• Title: Taiwan e-Learning and Digital Archives Program (TELDAP)
Goals

• The aim of TELDAP is to make e-learning and digital archives available and accessible to the general public, moving towards the establishment of a knowledge society, with the ultimate goal of strengthening national competitiveness.

• The main overall objectives of TELDAP are **archiving the diversity of Taiwan and deepening e-learning in Taiwan**.
Eight Sub-projects

• 1. Taiwan Digital Archives Expansion Project
• 2. Research and Development of Digital Archives and e-Learning Technologies Project
• 3. Core Platforms for Digital Contents Project
• 4. Academic and Social Promotions and Applications of Digital Archives and e-Learning Project
• 5. Industrial Development and Promotion of Digital Archives and e-Learning Project
• 6. Digital Education and e-Learning Project
• 7. e-Learning for Chinese Language Project
• 8. International Collaboration and Promotion of Taiwan e-Learning and Digital Archives Program
1. 一般學生
2. 資優生
3. 肢障
4. 學障
5. 社經不利
6. 原住民
7. 新移民
8. 教學者
9. 其他

96-98資教學門計畫統計(對象)
96-98資教學門計畫統計(領域)
Performance of the “Science Education” Program

International Journal of Science Education
2008, 1–22, iFirst Article

RESEARCH REPORT

Research Trends in Science Education from 2003 to 2007: A content analysis of publications in selected journals

Min-Hsien Lee\textsuperscript{a}, Ying-Tien Wu\textsuperscript{b} and Chin-Chung Tsai\textsuperscript{c}\textsuperscript{*}
\textsuperscript{a}National Taiwan Normal University, Taiwan; \textsuperscript{b}National Taichung University, Taiwan; \textsuperscript{c}National Taiwan University of Science and Technology, Taiwan
Table 1. Country ranks of publications from 2003 to 2007 (top 10) for the three journals (IJSE, SE, and JRST)

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Will be

- Phenomena observed
- Gap between research and education practice
- Gap between research and cultural expectation
- Gap between research’s target population and local population structure
- Gap between research’s quantitative output (publications) and qualitative impact (original theoretical ideas)