



# **ICT impact on Education**

## **Effective ICT utilization on lessons**

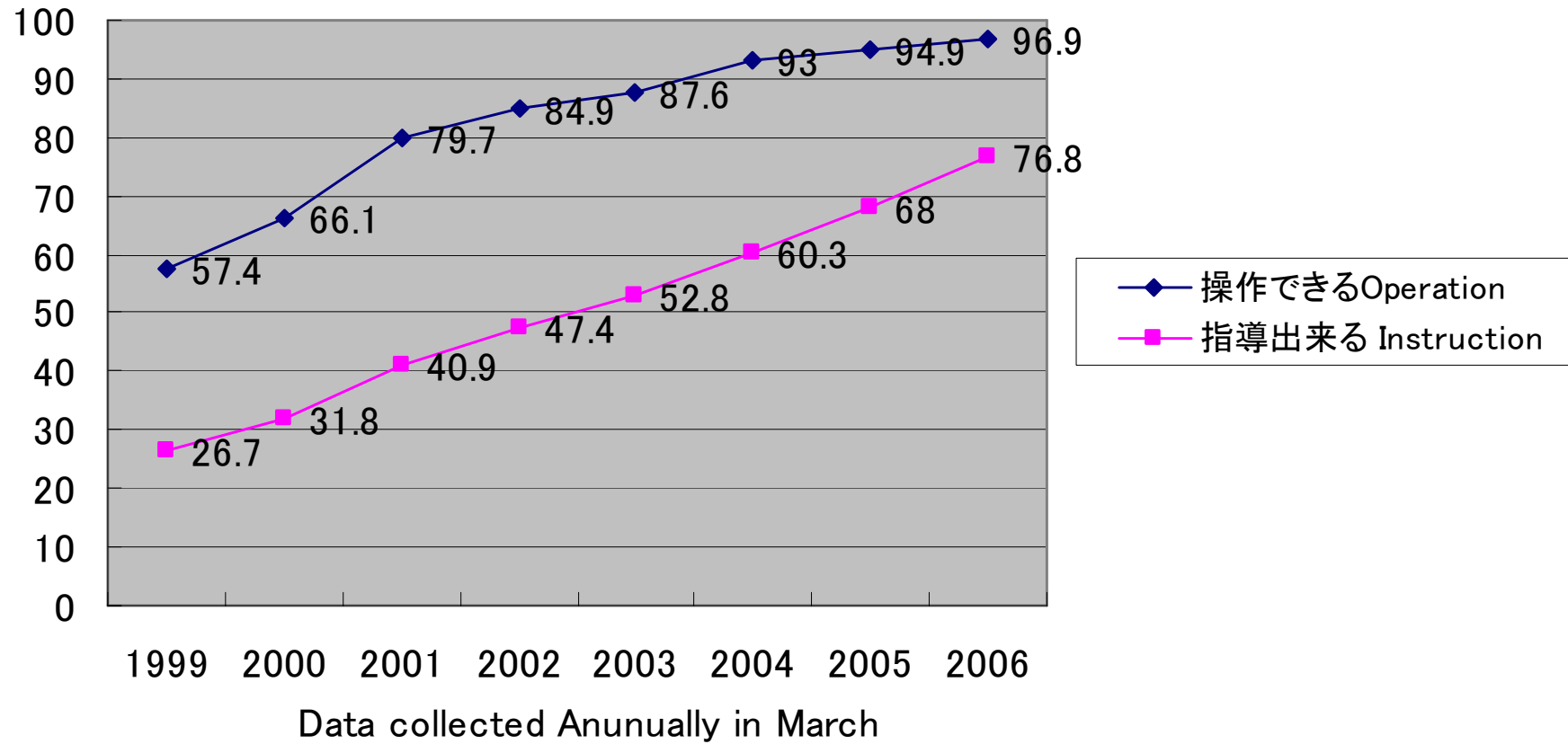
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# Outline

- **ICT utilization among teachers in Japan**
- **Effective measurements toward teacher training.**
- **Case study 1**
  - **Effective ICT utilization in Classes and fieldworks.**
- **Case study 2**
  - **International Collaborative Project**
- **Result and Exploration**

## Teachers Computer Competence



# **Teachers' ICT Utilization Standard (MOE standard 07.2.19)**

- 1. Ability to utilize ICT for preparation, evaluation, etc.**
- 2. Ability to utilize ICT during lessons**
- 3. Ability to instruct students to use ICT for learning**
- 4. Ability to nourish information morals**
- 5. Ability to utilize ICT for school affairs**

# Teaching Abilities for ICT Utilization in Education

## - Checklist for K-12 schools -

Tentative translation

**A : Abilities to utilize ICT for preparation and evaluation of material research and teaching**

A1 : Plan how and when to use PC/Internet

A2 : Utilize Internet or CD-ROM to collect materials

A3 :           word-processing or presentation software to produce documents

A4 : Collect and manage students' contents, learning status, achievements, using PC or digital cameras

**B : Abilities to use ICT in classes effectively**

B1 : **Present materials effectively** to students using PC or presentation equipment to encourage students interests

B2 :                                   to grasp questions clearly

B3 :                                   to explain for their easy understanding or deepen their thought

B4 :                                   to fix their knowledge in arranging learned things

**C : Abilities to help student to use ICT efficiently.**

C1: **Teach students** collecting/selecting information using PC or Internet

C2 :                                   to write, and to produce tables/graphs, using software

C3 :                                   to make presentation or expression using PC or presentation software

C4 :                                   to utilize learning software or Internet for repeated learning/practicing

**D : Abilities to foster sense of information morals**

D1 : **Teach students** to communicate, having responsibility for their information and activities and taking into account of counterparts

D2 :                                   to collect or send information, keeping rules/manners in information society

D3 :                                   to understand information accuracy/safety and to utilize ICT taking care of their health

D4 :                                   to acquire basic knowledge of information security, such as importance of password, and their and others' information

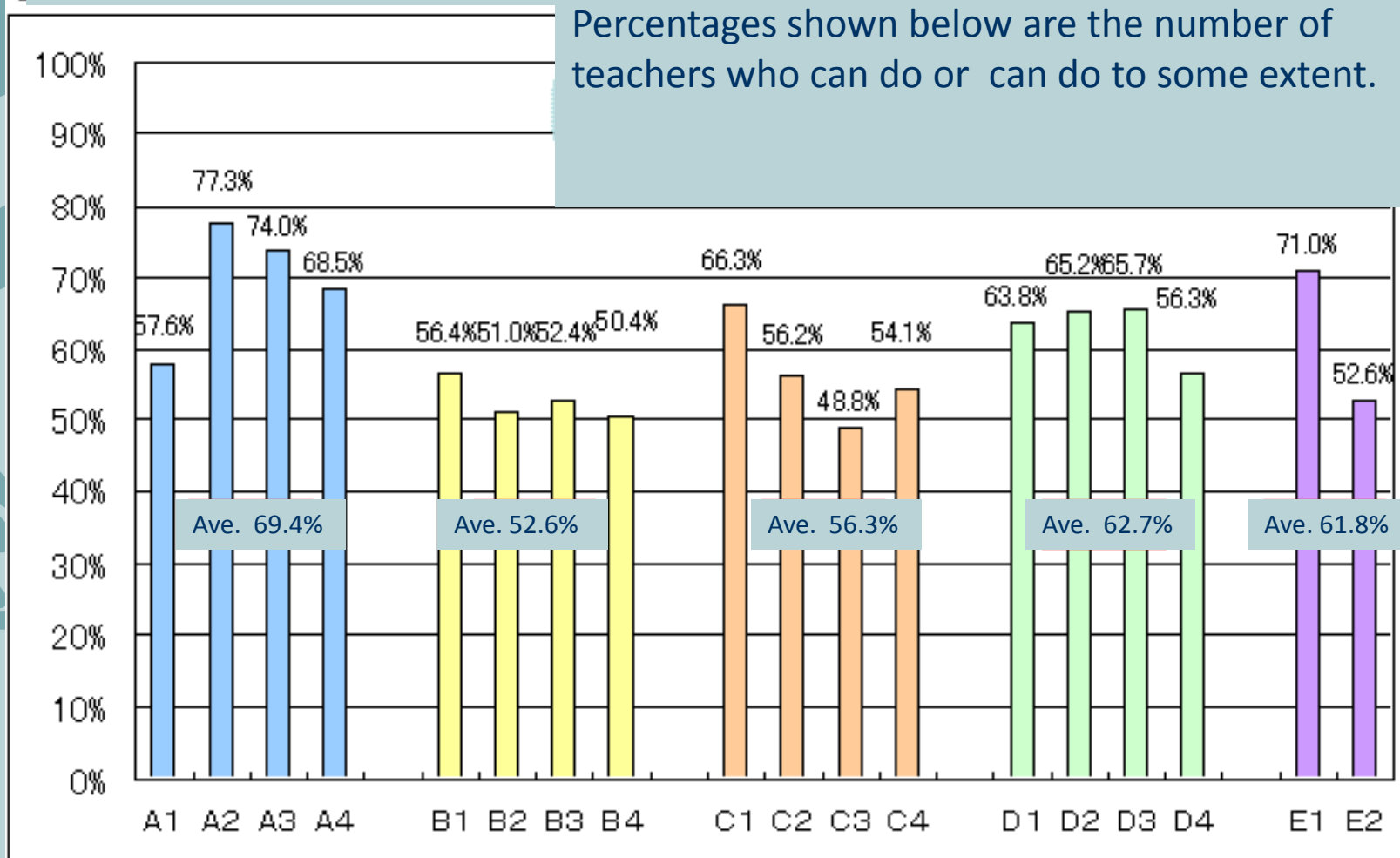
**E : Abilities to use ICT for school affaires and build up a good relation with Parents.**

E1 : Collect information for school affaires and class management and produce documents and materials using software

E2 : Exchange and share necessary information, utilizing Internet or school LAN, for closer cooperation among teachers, parents, communities

# ICT Utilization for Education among teachers

Percentages shown below are the number of teachers who can do or can do to some extent.



# ICT Utilization for Teacher Training

Integrate IT into Your Class - Windows Internet Explorer

http://www.nicer.go.jp/itnavi/indexe.html

Google 検索

ブックマーク

ブロック数: 12

チェック

翻訳

設定

Integrate IT into Your Class

## Integrate IT into Your Class

日本語 Credits Help

MEXT (The Ministry of Education, Culture, Sports, Science and Technology) offers a variety of support services to all school teachers to help integrate information technology into their classes. This site provides video clips which show classes in progress, demonstrating the effectiveness of IT for each subject.

### Video Clip Selection



300Kbps 150Kbps

**Points of Interest**

The use of video clips that allows the students to appreciate the speech and movement of Kyogen provides them with a first hand experience of old Japanese thereby enabling them to familiarize themselves with old words and phrases.

>>>[Jump to the case](#)



300Kbps 150Kbps

**Points of Interest**

To show live feed from around the world broadcast through cameras on the Internet so that students can recognize themselves as a global citizen.

>>>[Jump to the case](#)



300Kbps 150Kbps

**Points of Interest**

The use of computer presentation software and projector to visually demonstrate concepts that are difficult to grasp just from printed materials and blackboard instructions.

>>>[Jump to the case](#)

They're

# Effective ICT utilization in Classes.

- **Physical Education , Horse Jumping Elementary**





# Effective ICT Utilization in the Fieldwork.

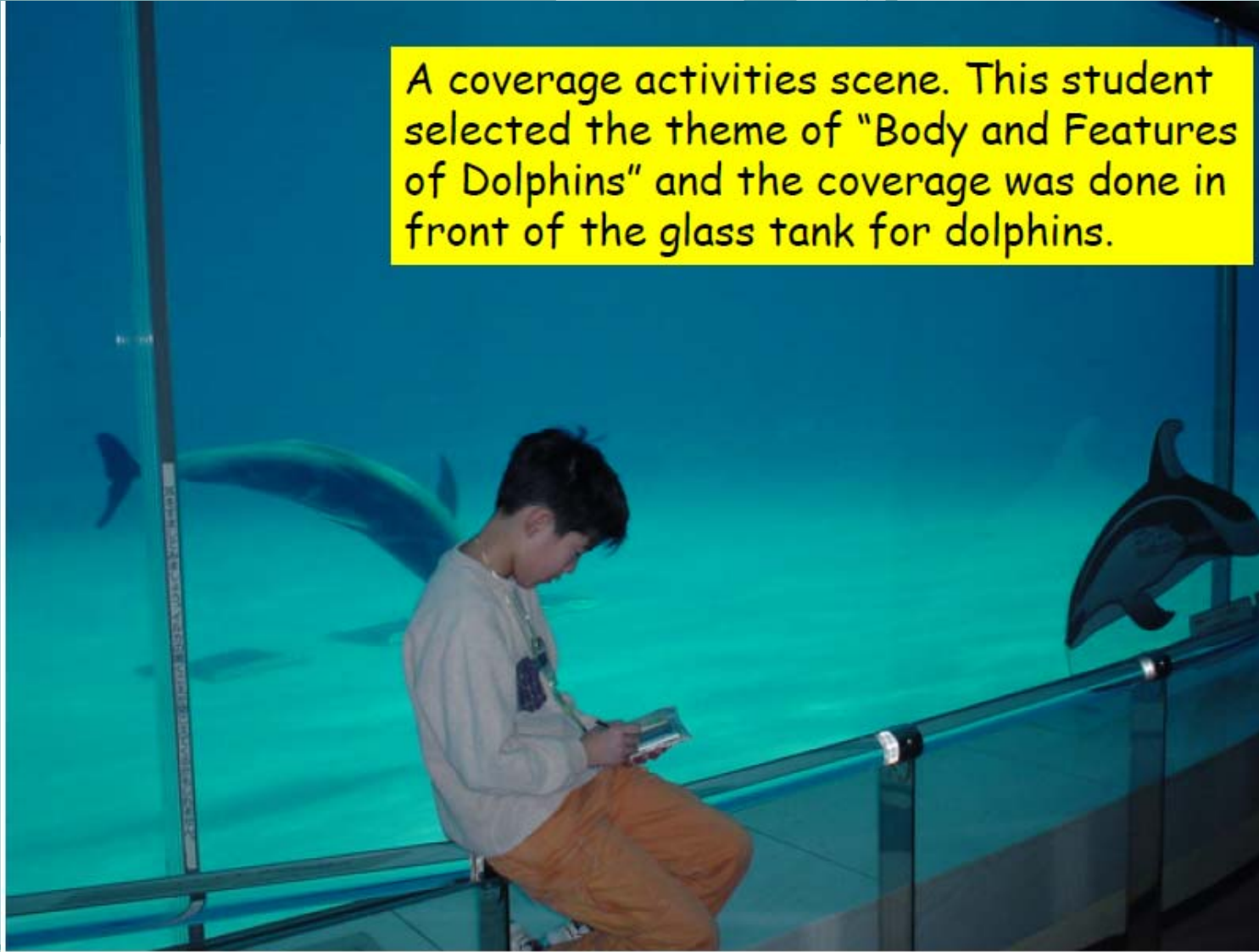
- **ZOO –School**
- **Combination between active knowledge and school knowledge**
- **Can you hear? This heart beat1 beat 2**
- **Sounds help students find something new while watching a live animal.**

# While watching a live Animal



# Aquarium and School


A coverage activities scene. This student selected the theme of "Body and Features of Dolphins" and the coverage was done in front of the glass tank for dolphins.



# Places and contents of learning



- **Enrichment**
- **Facing the real world with the help of digital movies or audio to deepen understanding.**
- **Experiential learning and class activities**
- **After getting information , students make reports with professionals' help via the internet at school.**



# International Collaborative Project World Youth Meeting

- **Started in 1999 in Nagoya , Japan.**
- **The steering committee is constituted of 20 universities, schools+ overseas universities ,schools**
- **Participating countries. (Up to 2007)**
- **Korea Taiwan Cambodia Papua New Guinea, Philippines, Australia, China, Finland, Germany**

# framework for WYM

- **Pre event**

Exchange files according to the theme

Design questionnaires ,self-introduction via movie files.

**Event** Face to Face Joint Presentation as a collaborative product

— They have to overcome cultural conflicts.

**After Event**

CD titles are created and shared by English Classes in participating countries.

# Collaborative Presentation Cambodia -Japan



# High Schools

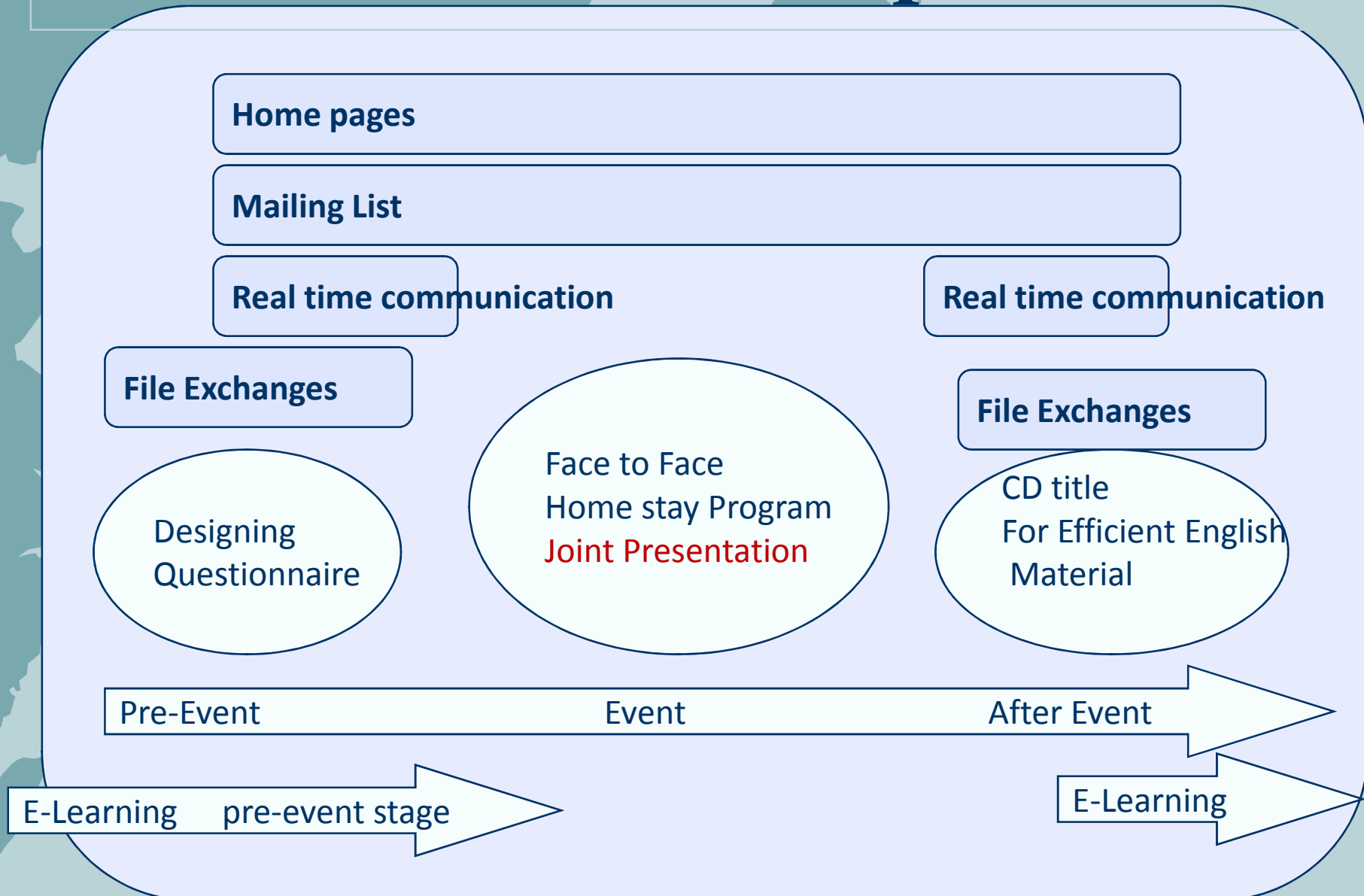
## Japan-Korea session

日韓 梨花女子大付属高校  
日本福祉大学付属高校





# Model of 10 Years of Experience



# Supportive E-learning

“Enjoy Speaking” is aimed at acquiring basic English to communicate with overseas

The screenshot shows a Microsoft Internet Explorer browser window displaying a website for 'Enjoy Speaking'. The browser's address bar shows the URL: <http://www.denno.co.jp/~nichihuku/1-1/sample1-1.html>. The website header includes the text '実践英会話 福祉経営学部/国際福祉開発マネジメント学科/影戸誠 教授' and 'Enjoy Speaking 使ってみよう英会話'. The logo for '日本福祉大学' (Nihon Fukushi University) is also visible, along with the text '人間福祉複合系'. The main content area features a 'Level 1 question' section with a '3' in a circle. Below this, there are six interactive cards, each with a Japanese label and an illustration of a caregiver and an elderly person. The cards are: 1. カルテに記入する (Recording in the chart), 2. 検温する (Taking temperature), 3. 採血する (Drawing blood), 4. 食事する (Eating), 5. 風呂に入る (Taking a bath), and 6. 薬を飲む (Taking medicine). A 'もう一度' (Once more) button with a speaker icon is located above the cards. To the right, there are three red circular progress indicators and a 'TIME 8' indicator. At the bottom of the cards, there is a row of numbers from 1 to 10, with the first two (1 and 2) circled in red. The browser's taskbar at the bottom shows the Windows Start button, several open applications, and the system clock displaying 14:17.

# E-Learning and International Collaborative project

- **“It is necessary to treat the” study activity” as an urgent issue in a broader framework.”**
- **( Kubota,2000)**
- **Forms of learning should be well designed.**

# Places and contents of learning regarding an International Project

- **e-Learning**
- **Basic conversation, edutainment**
- **classroom**
- **Group work for making and performing presentation**
- **Experiential learning**
- **Collaborative presentation with overseas participants**

# Analysis of the participating 51 students

- Did you have more chances to use English?  
(t(50)=3.824,p<.001)
- Would you like to try making on English Presentation?  
(t(50)=2.718,p<.001)
- Do you want to give an English presentations?  
( t(50)=2.349,p<.001)
- Do you feel more confident in speaking English and in managing a project? (t(50)=2.945,p<.001).
- Future English study  
almost 100 % of them answered that they think it necessary to study English every day.
  - 81 % of them answered that e-Learning was useful and helpful.

# Results and Exploration

- According to the ICT fundamental , ICT utilization was enhanced.
- Teacher training was improved year by year.
- ICT is improving quality of learning .
- English presentation and computer education can be related to each other. (MEXT2000)
- It is necessary to design situations of different aspects such as study in a classroom, E-learning and ICP.
- It is crucial to treat “study activity” as an urgent issue with in broader framework.

# Results and Exploration

- **To set up the learning environment across border as 2-3week international curriculum focusing on communication.**
- **This environment naturally help students to acquire computer skills and global friendship. New technology and broadband surely help them.**
- **To become get to know communicative aspects of English via the internet.**
- **To tackle the global issues, such as**