7th International Conference on Computers in Education
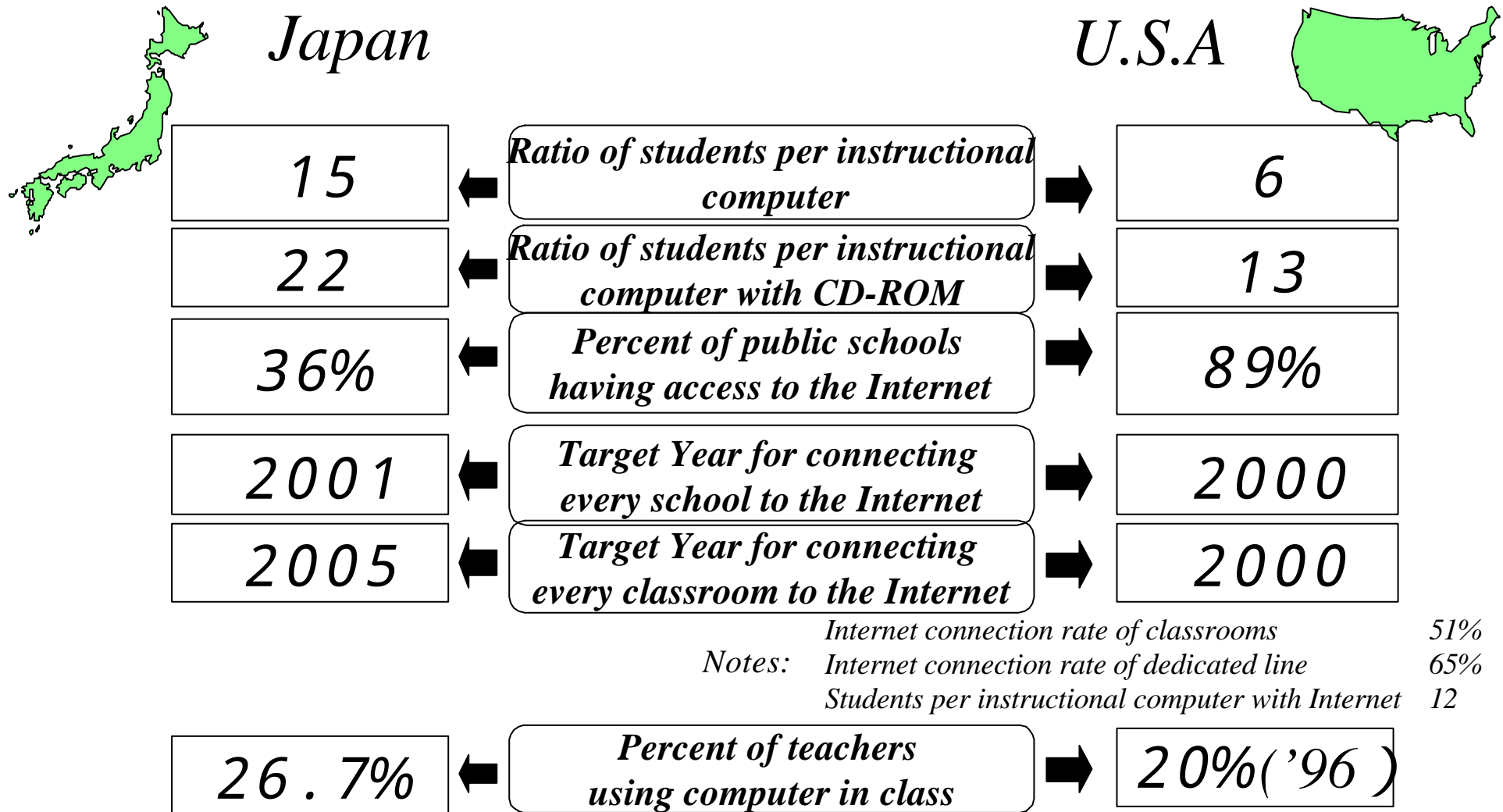*- New Human Abilities for the Networked Society -*
"MITI's Proposal for Educational Reform"
- Learning Web Project -

November 5, 1999

MITI

The Comparison of Internet Access in Public Schools and Classrooms between Japan and U.S.A

Japan

U.S.A

Ratio of students per instructional computer

Ratio of students per instructional computer with CD-ROM

Percent of public schools having access to the Internet

Target Year for connecting every school to the Internet

Target Year for connecting every classroom to the Internet

Notes:
Internet connection rate of classrooms	51%
Internet connection rate of dedicated line	65%
Students per instructional computer with Internet	12

Percent of teachers using computer in class

('96

Investigation into the actual condition of using IT in Public Schools,MOE, March 1999
Internet Access in Public Schools and Classrooms, National Center for Educational Statistics , Feb.1999
Market Data Retrieval Report, Market Data Retrieval,1998

Japanese Educational Projects using the Internet

1. The 100-School Networking Project (1994   1998)

(2.5 Million $ per year, 1998)

2. Developing Advanced Educational Software

- Learning Web Project - (1998   1999)

(100 Million $ out of FY.1998 supplementary budget, MITI)

3. Advanced Educational Networking Project among 1050 schools (1998   2000)

(250 Million $ out of FY.1998 supplementary budget, MPT)

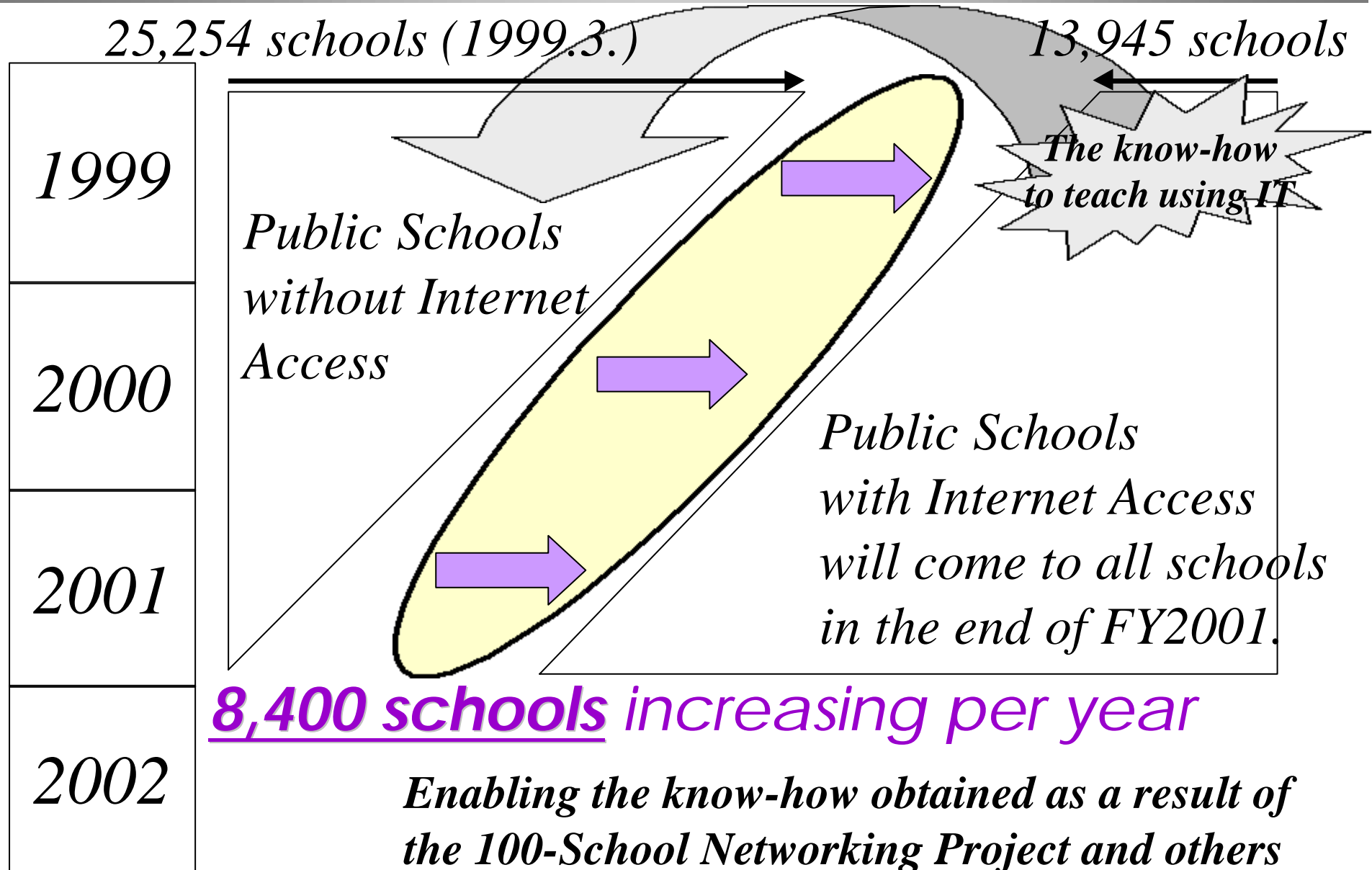## 4. E square Project (1999   2001)

(2.5 Million $ per year, 1999)
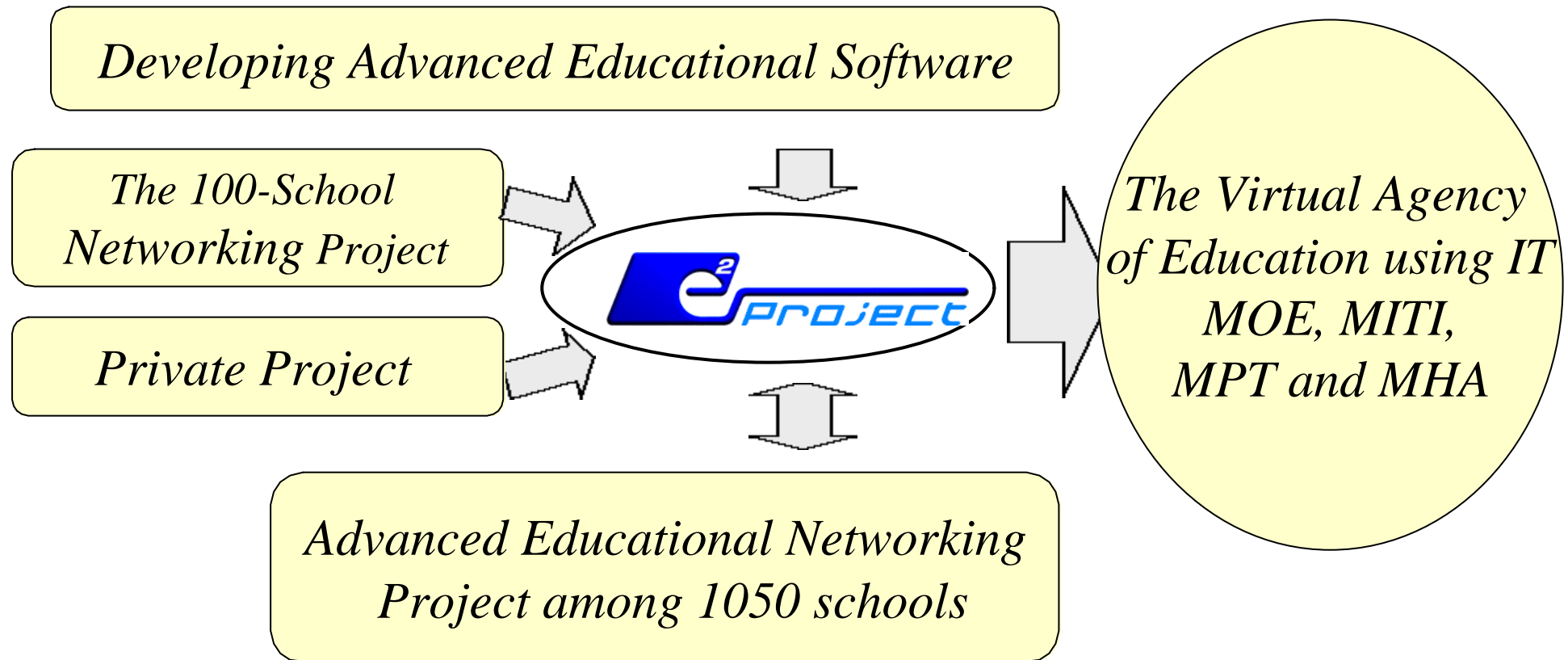
E square (e²) Project

http://www.edu.ipa.go.jp/E-square/

Notes: E Square = Educational × Electronic
Square = Open cyberspace for education

E Square Project Objectives

25,254 schools (1999.3.)

13,945 schools

The know-how to teach using IT

1999
2000
2001
2002

Public Schools without Internet Access

Public Schools with Internet Access will come to all schools in the end of FY2001.

8,400 schools *increasing per year*

Enabling the know-how obtained as a result of the 100-School Networking Project and others

Government Task Force (VA) of Education using IT

Developing Advanced Educational Software

The 100-School Networking Project

Private Project

The Virtual Agency of Education using IT MOE, MITI, MPT and MHA

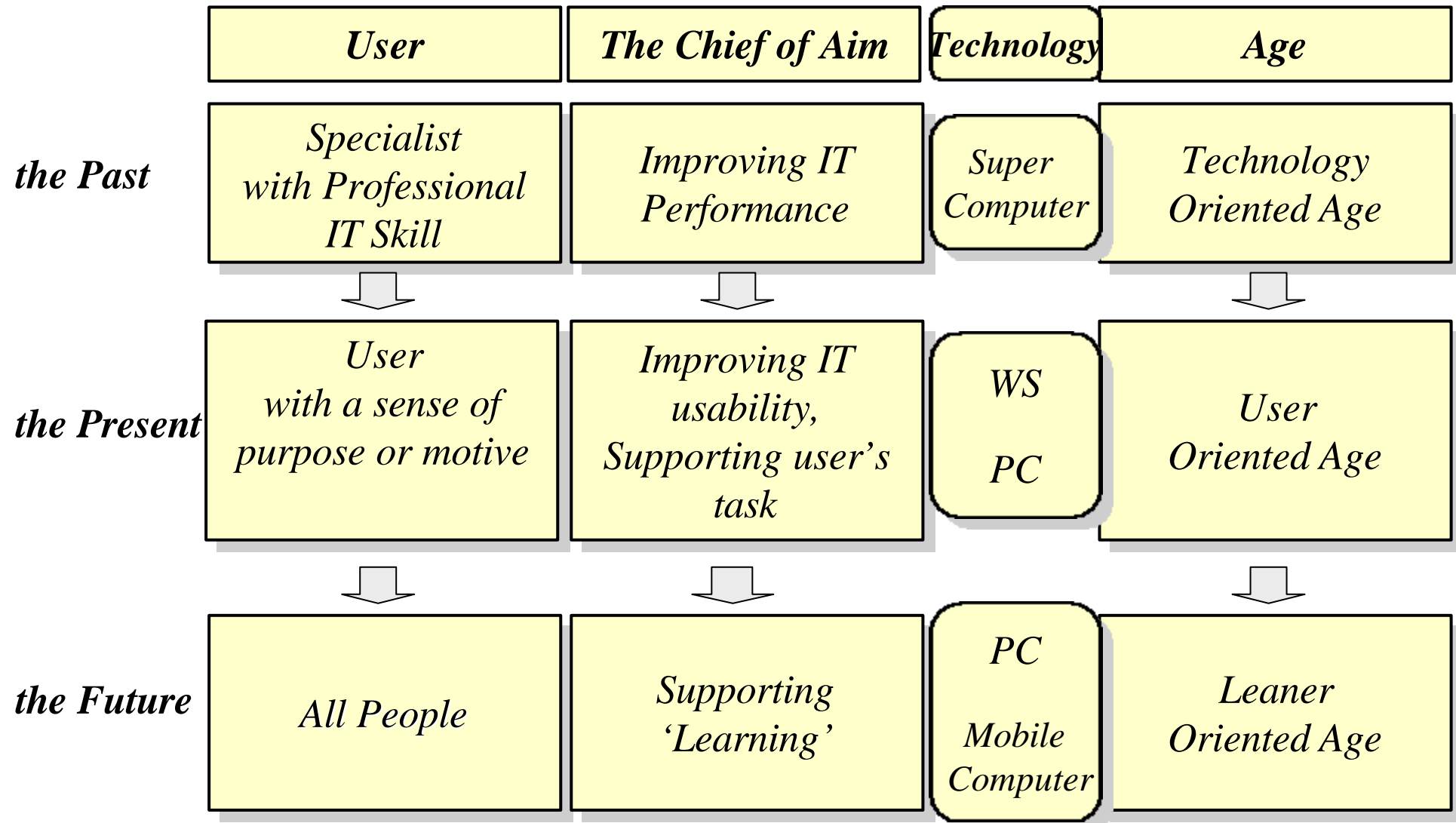Advanced Educational Networking Project among 1050 schools

Virtual Agency(VA) = A government agency cooperative task force under the direct control of the Prime Minister

Change of Role of Information Technology

	User	The Chief of Aim	Technology	Age
the Past	Specialist with Professional IT Skill	Improving IT Performance	Super Computer	Technology Oriented Age
the Present	User with a sense of purpose or motive	Improving IT usability, Supporting user's task	WS PC	User Oriented Age
the Future	All People	Supporting 'Learning'	PC Mobile Computer	Leaner Oriented Age

Notes: 'Learning'   Discovering, Pursuing, Mastering and Expanding Activities

Change of Learning Method by IT

•Cramming knowledge driven by necessity and duty
•Acquiring the ability to show the proper knowledge, which has already been taken into the head, in the time without other's help (Acquiring the technique of passing the entrance exam)

• Taking the useful information connected with the motive for the personal activities from the information which overflows
• Feeling and sharing the joy of wisdom and an intellectual curiosity
• Thinking a new idea
• Making a presentation of thinking

IT is the tool which supports learning.

Basic Policy on Supporting 'Learning' (1)

(1) Place

Before	Future
School	Learning Web in addition to School

(2) Characters

Before	Future
Teacher and Student (Taught person)	Learner and Supporter of Learner (Teacher)

Basic Policy on Supporting 'Learning' (2)

(3) Teaching materials

Before	Future
Given curriculum	The intellectual resources to search for learner's wisdom The chance to learn

(4) Method

Before	Future
Technique to cram knowledge efficiently	Technique to support finding why a learner learns and learning something

For Next Generation Educational Reform

Learning Web Project

Toward the formation of the Convivial Learning Network

Learning Web　Convivial Learning Network
'Convivial Learning Network' is the space of learning which the famous Society thinker Ivan Illich advocate.

For Next Generation Educational Reform

All teacher and local government officer of Education should change the way of thinking about teaching.

?The proposal of the new learning form using IT
?Training of all teachers and local government officer of Education.
?Arranging computer with the Internet access and LAN in school   etc.

Information technology should become the tool which anyone can use for learning.

?Start-making of learning using IT (Fusion with the game and the subject, Good contents for learning)
?Easy Data Mining System
?OS for Information Technological Learning
?Technological Support and Help Desk for schools   etc.