

T-learning for Lifelong Learning: Combining Television with e-Learning

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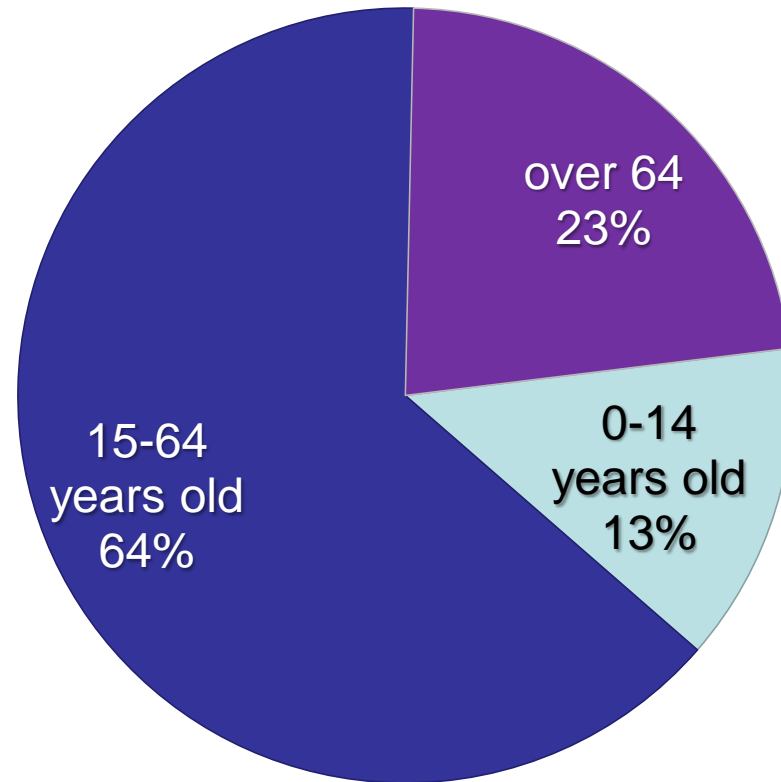
Why Television?

- ⊕ **30 years ago, it was an innovative idea to teach via television**
- ⊕ **Still it's a popular medium for pastime**
- ⊕ **Almost everybody in Japan has access to television**
 - **Good for passive learning**
 - **Good for lifelong learning**

The Need for Lifelong Learning

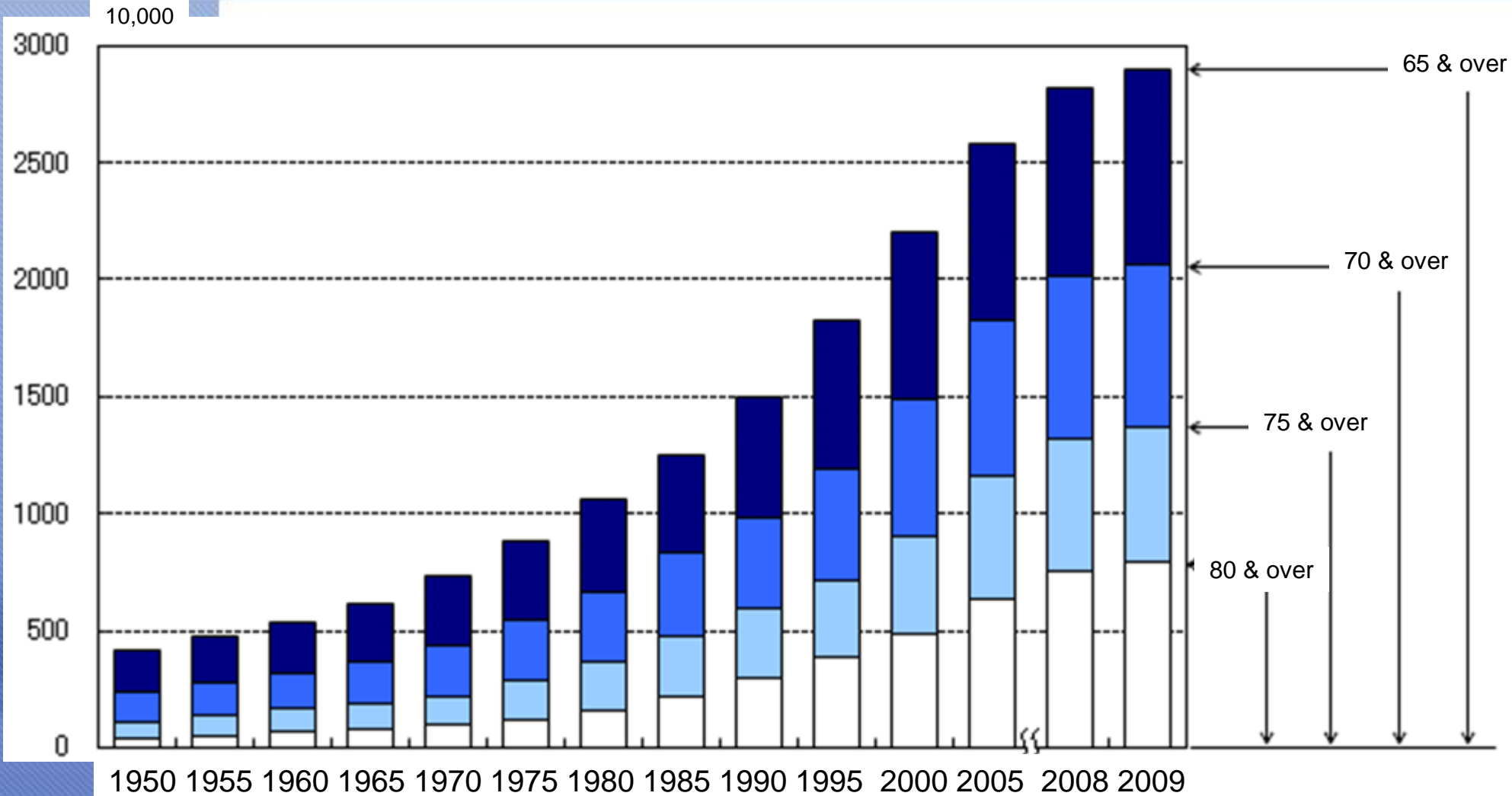
- ⊕ **Knowledge and information societies**
- ⊕ **Aging societies**
- ⊕ **Adapting to changes**

Japan as an Aging Society

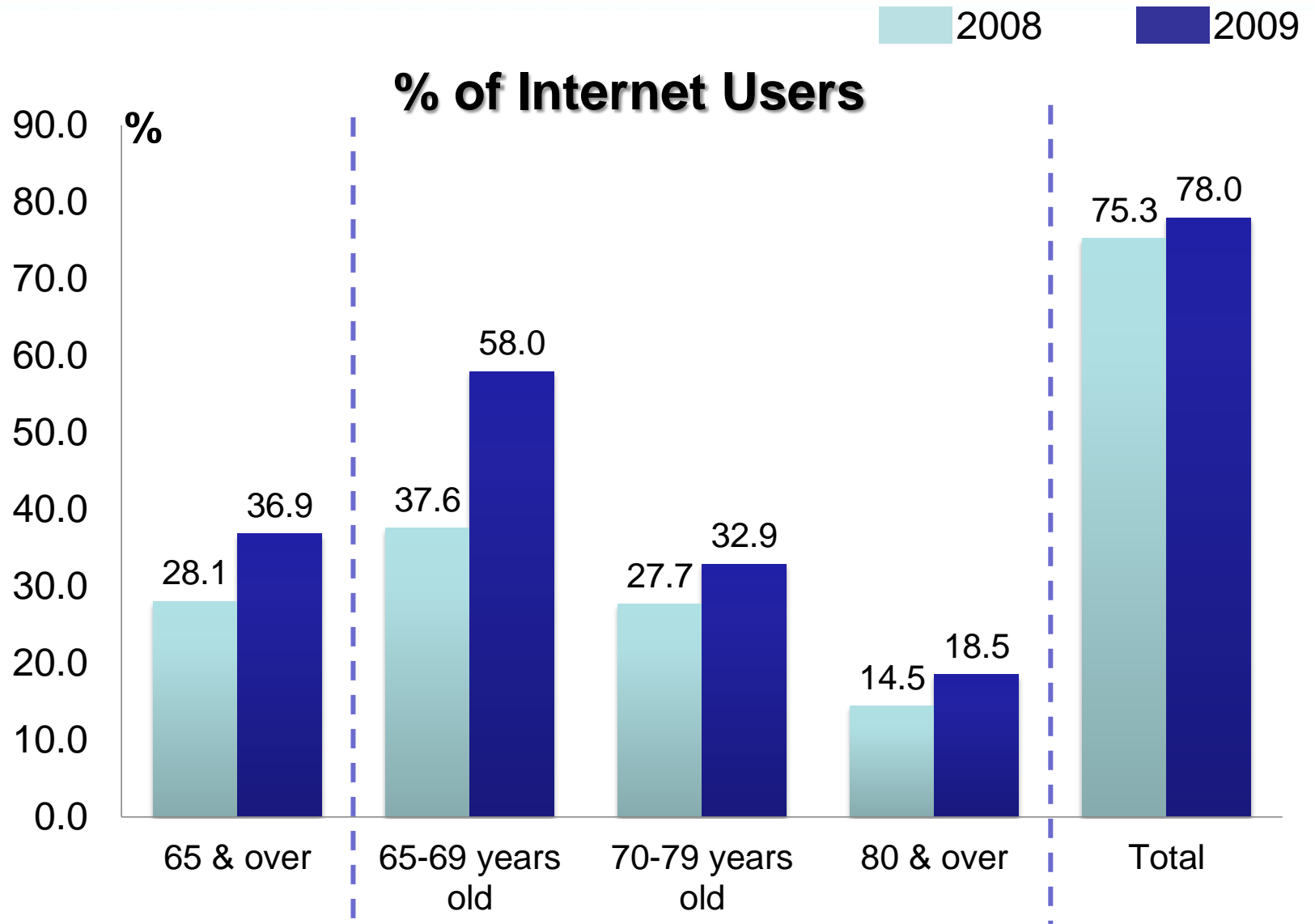


From 2008 Census Data

Japan as an Aging Society



Digital Divide in Japan



The Open University of Japan (OUJ)



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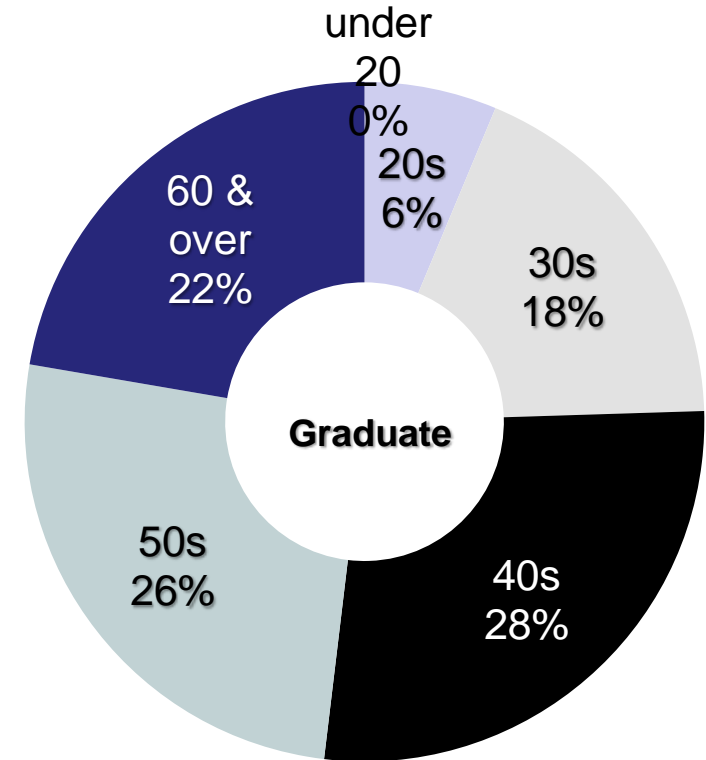
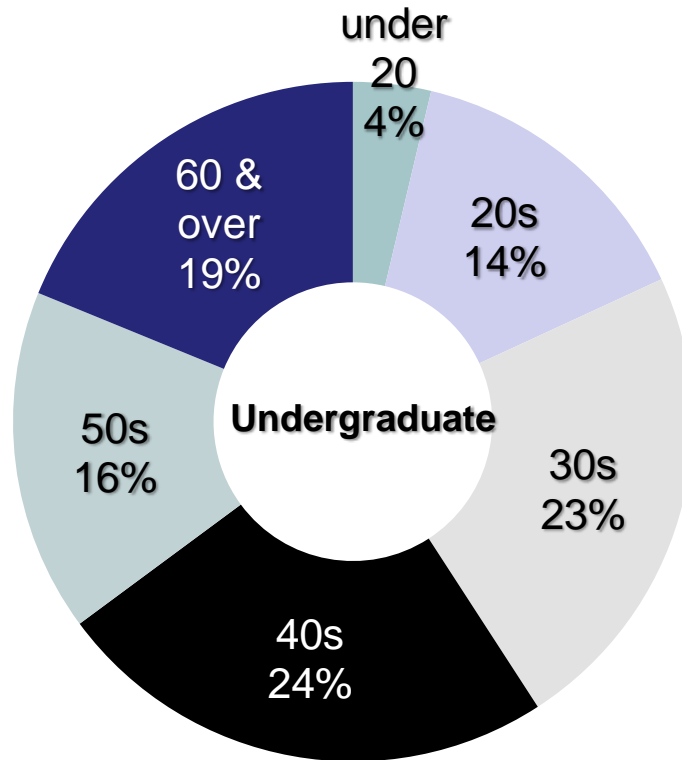
- ⊕ Established in 1983
- ⊕ Began its instruction via TV and radio broadcast in April 1985
- ⊕ Former English name is “University of the Air”
- ⊕ Only one university in the world that owns an independent TV station

The primary instructional delivery method is still TV and radio broadcasting

Mission of OUJ

- ⊕ To provide working adults with a chance of lifelong university level education
- ⊕ To provide an innovative and flexible system of university level education open to high school graduates
- ⊕ To cooperate with existing universities and make full use of the latest scientific knowledge and new educational technologies in order to contribute to the improvement of the higher education system in Japan

OIJ Students (Age)



Broadcast Programs at OUJ

⊕ **Television Broadcasting**

- ◆ Digital terrestrial broadcasting (only limited areas)
- ◆ Digital satellite broadcasting (nationwide)

⊕ **Radio Broadcasting**

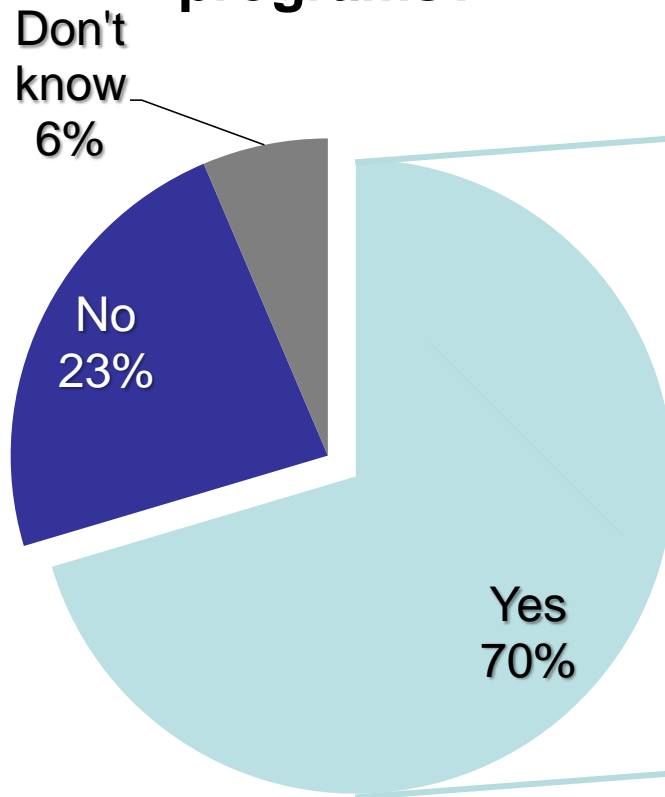
- ◆ Digital terrestrial broadcasting

⊕ **Internet Broadcasting**

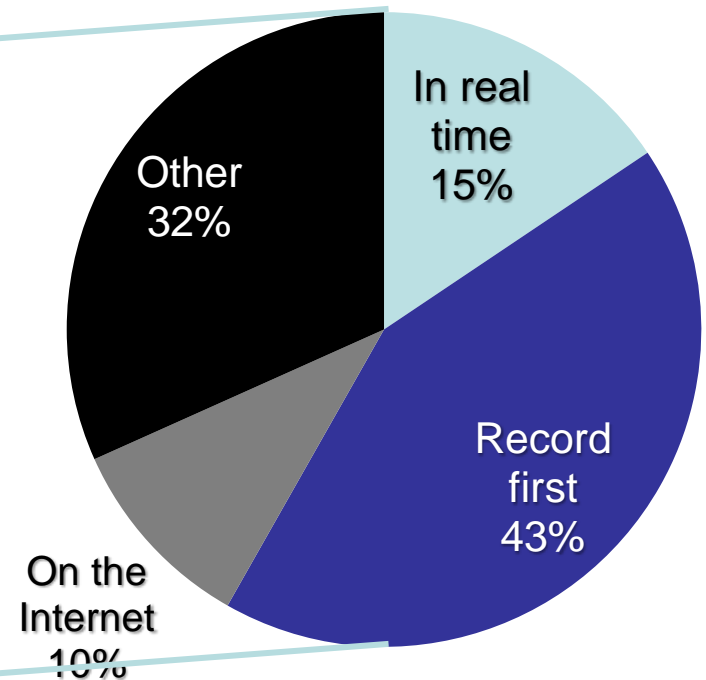
- ◆ Some television lecture programs and all the radio lecture programs are available on the Internet to the students

TV Programs Viewing by Students

Do you watch OUJ TV programs?



How do you watch?



⊕ Anybody who live in the area where the broadcasting signal can reach can view/listen to the programs for free

◆ **Social education**

⊕ In order to gain credits for the programs, a person has to enroll the course and take an exam

◆ **Formal education**

Broadcast Programs at OUJ

- ⊕ **One regular digital TV channel can carry:**
 - ◆ One high definition program
 - ◆ Up to 3 regular definition programs
- ⊕ **Have to fill the airtime by themselves**
 - ◆ Cannot sell/lease the airtime
 - ◆ Have to produce all the programs

bottleneck for innovation ?!

Production of OUJ Programs

- ⊕ **No capability of live broadcasting**
 - ◆ **All the programs are pre-recorded**
- ⊕ **Digital production**
 - ◆ Started in 2006 when OUJ started digital terrestrial broadcasting
 - ◆ Few programs take advantage of simultaneous data channels
 - ◆ High picture quality
 - ◆ Some programs utilize Chroma-key for backgrounds

Production of OUJ Programs

- ⊕ **One course (2 credits) of OUJ TV programs**
 - ◆ 15 45-minute programs
 - ◆ Usually takes 3 years from the submission of the proposal to the actual broadcast

- ⊕ **Course team for TV program production**
 - **Chief lecturer(s)** – full-time OUJ faculty
 - + Guest lecturer(s)
 - **Producer** – OUJ staff
 - **Director** – OUJ staff or outside contractor

Production of OUJ Programs



OUJ Broadcast Programs

- ⊕ **About 300 different programs (TV and radio) are broadcast annually**
 - ◆ **Four times annually per program for 4 years (average)**
 - 1st Semester (April – July)
 - Summer intensive (August - September)
 - 2nd Semester (October – January)
 - Spring intensive (February – March)
- ⊕ **Average production cost of one TV program**
 - ◆ **1.6 million yen = US\$ 20,000**

Internet Streaming of TV Programs

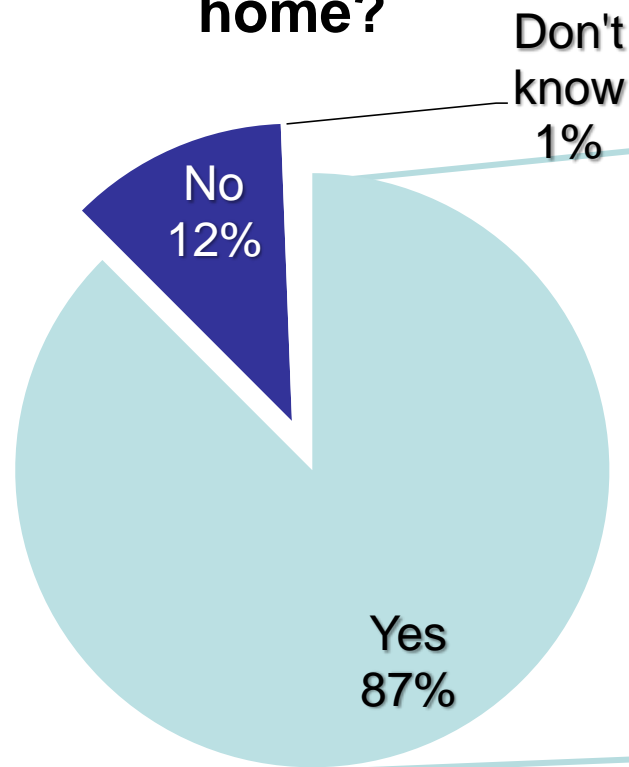


The screenshot displays a web browser window with the following elements:

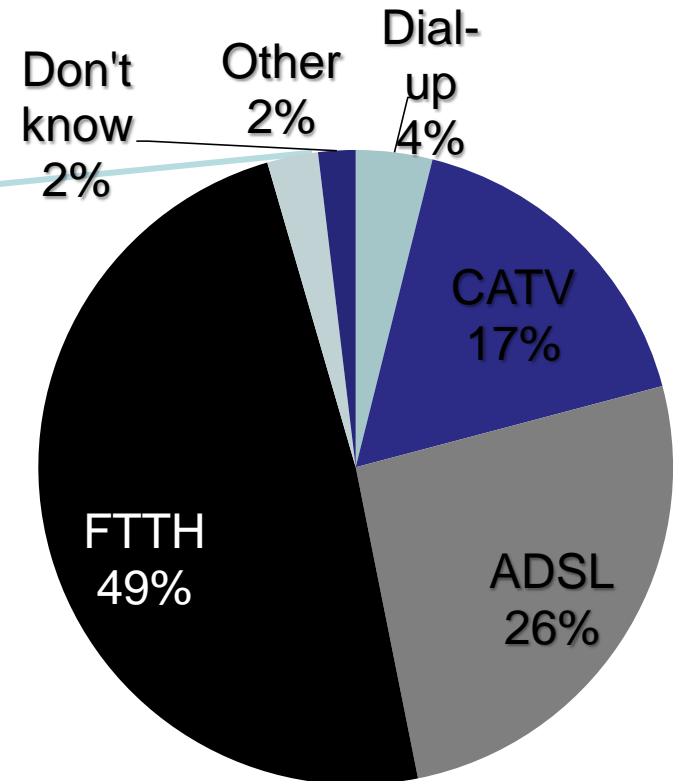
- Header:** 放送大学 (Hōsō Daigaku) logo and text, and CAMPUS NETWORK HOMEPAGE with the subtitle キャンパス・ネットワーク・ホームページ.
- Windows Media Player Interface:** Includes playback controls (play/pause, stop, previous, next), a progress bar, and volume control. The title bar reads "Windows Media Player".
- Video Content:** A woman with dark hair, wearing a grey blazer, is seated at a desk in a library or study environment. Behind her are bookshelves filled with books, a lamp, and a globe.
- Player Controls:** At the bottom of the player, the text "放送大学" and "04:07" are visible.

OIJ Students' Internet Access

Do you have a computer with Internet access at home?



What kind of Internet access do you have?



⊕ 2 main functions

1. To make the university administration effective and efficient
 - System Wakaba
2. To facilitate communication between teachers and students or among students
 - Campus Network
 - Teachers can post announcements and students can have access to the supplemental instructional materials & some broadcast programs
 - Limited use of forums

Challenges of Education via Television

- ⊕ Large budget for production and broadcasting
- ⊕ Difficulty of frequently updating the content
- ⊕ Lack of interactivity between teachers and students
- ⊕ Lack of communication among students
- ⊕ Difficulty of providing active learning activities
- ⊕ Difficulty of linking with print materials
- ⊕ Difficulty of formative assessment

⊕ **What digital TV can do**

- ◆ Limited Interactivity through remote control
 - Learners can take short quizzes
- ◆ Additional information sent through the data channel
 - Real-time presentation of audience responses

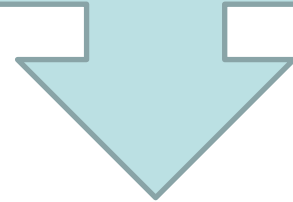
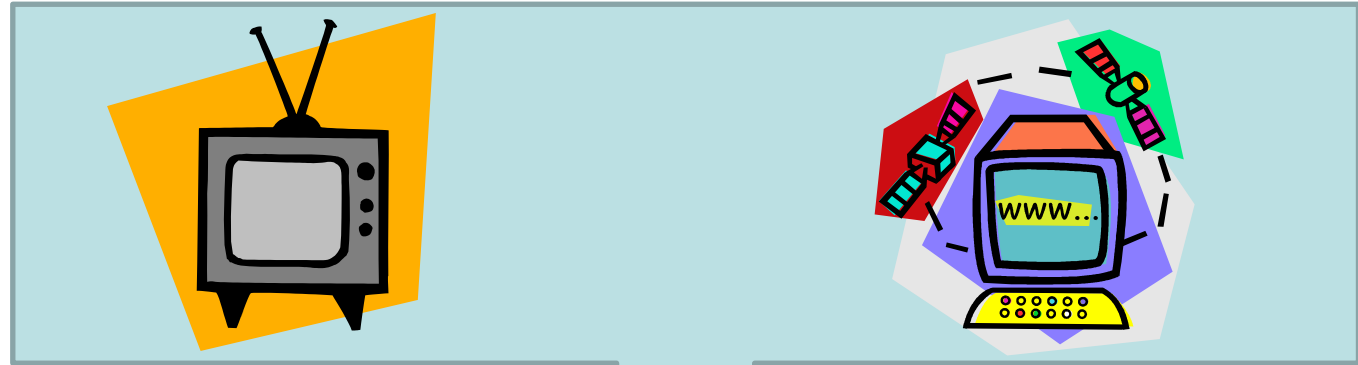
⊕ **What video on the Internet can do**

- ◆ Full-interactivity among the viewers
- ◆ Video quality still suffers
- ◆ Can link to forums or discussion boards

Convergence of TV and the Internet

Instruction

Communication



Instruction

Communication

Assessment



Collaboration

Conclusion

- ⊕ Next generation of TV/Internet may solve the problem of limited interactivity on TV and poor quality of video/audio on the Internet
- ⊕ Organizational transformation and reevaluation of educational model are needed
- ⊕ The effective usage of Internet in combination with digital TV is required

THANK YOU!