Global Science Campus Okayama
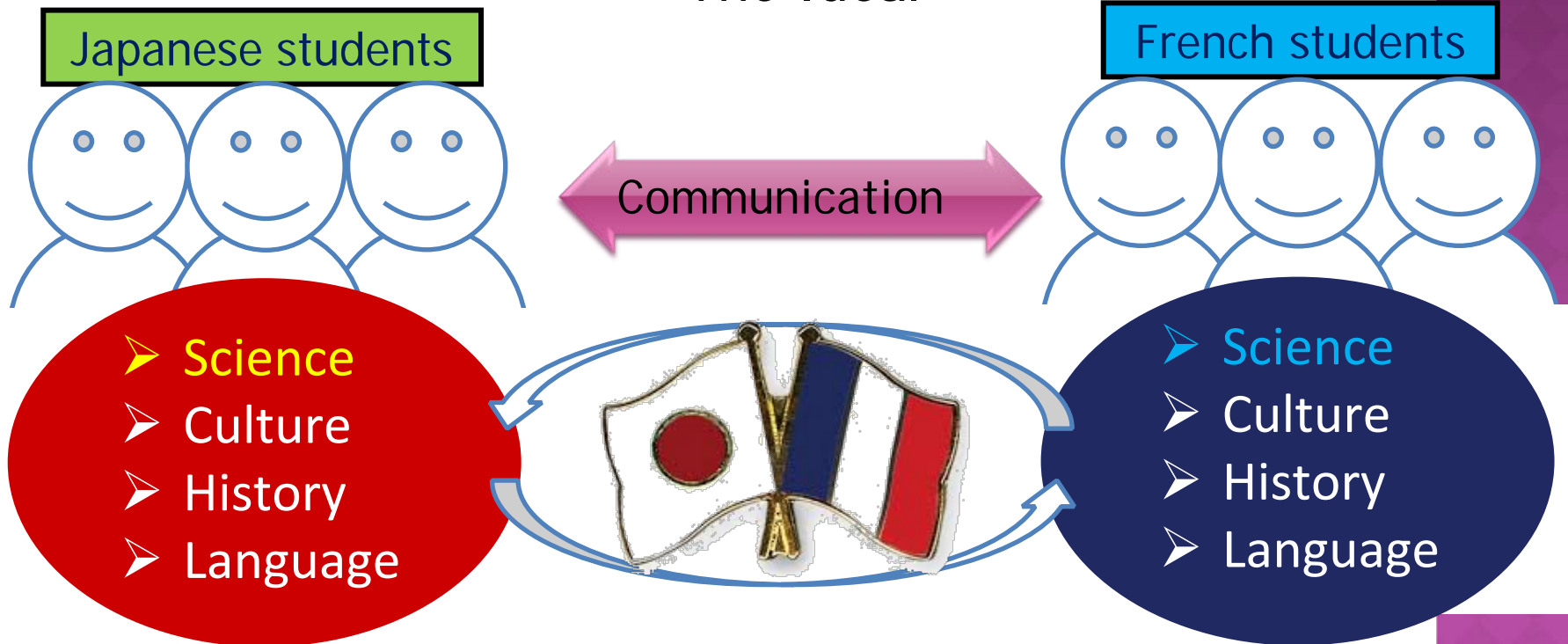## and
Cité scolaire internationale de Grenoble

The Virtual Classroom Project

VIRTUAL CLASSROOM

Concept:
- Global: complex, international, intercultural solutions
- Interactive: West and East: GSCO and CSI High-School students
- Work on multi-stage project – HSS propose opinions and solutions
- Presentations in limited time «Ma thèse en 180 secondes»

International intercultural experience

Develop interest in international research

English communication

Problem solving in an international situation

Presentation skills

Friendship: establish relationships for the Grenoble visit

Main steps

- Project: one scientific topic per group:
  - 2 CSI + 2 OU (assigned)
- Multi-staged (three or four sessions)
- Prepare an « 8mn » group presentation – 2 OKA + 2 CSI
- Present intermediate stages via Internet
- Grand Final: GRENOBLE March 2017

Topics

1. To replicate the experience and challenges of collaborating in a context where both groups use International English
2. To put the students in situations where they must do their best with the resources given (180 seconds thesis)
3. To give the students the experience of preparing a presentation on a complex topic for an educated but non-specialized audience

Cloning

Large scale disease: AIDS, MERS, Zika, Ebola

Medical robotics

Cryptography

The Quantum VS Optical computer

Mobile Advertising – State of the art –

Solar Energy – State of the Art

Future of nuclear energy energy transition

Bio-engineering – Use of enzymes to produce Hydrogen

Nano technologies and Energy

Fuel-Cells

Li batteries

Hybrid VS Hydrogen VS electrical cars

Traffic monitoring and regulation

Robotics for an aging population

Migration / refugees

Rare earths

Water – Irrigation – Clean drinkable

Forests

The logistics of the Virtual Classroom

Organising Committee

3/4 from Grenoble, 3/4 from Okayama

Prepare a calendar of the sessions

Select the topics

Define the aims

Prepare the tasks for the groups

** Template of questions to address

** Analyse the topics and find how GSCO and CSI students can propose complementary solutions

Flow for each Virtual Classroom

1. Preparation meeting (organizing committee)
   1. Establish aims for the Virtual classroom, set tasks for the groups, and decide the schedule
2. Virtual classroom
3. Post-Virtual Classroom (organizing committee)
4. Evaluate the Virtual Classroom; identify any problems and agree on solutions

Example

July: Organizing committee

Sets groups, dates, topics, aims

September:

Pre Virtual Classroom 1

Organizing committee

Sets aims for VC 1, attendance, detailed tasks, schedule, assessment guidelines
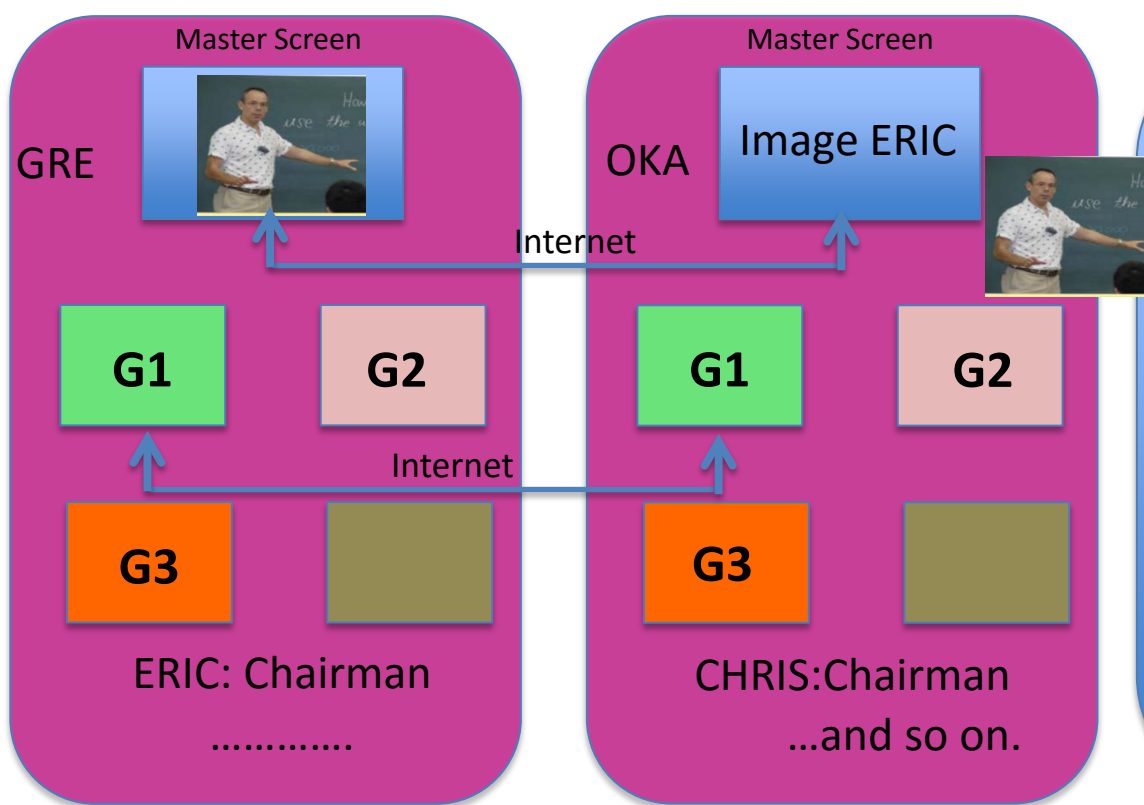
Virtual Classroom 1

Groups understand aims, expectations, tasks, Groups start tasks: groups work independently

Post-Virtual Classroom 1

Organizing committee

assesses Virtual Classroom 1, identifies problems, agrees on solutions

Master Screen

GRE

OKA

Master Screen

Image ERIC

MANAGING COMMITTEE:
** 3 / 4 from Gre and 3 / 4 Oka
** 1 Leader
** Prepare 15 TOPICS
** Organise the « sessions »
** Organise follow-up

1st session
   a – Self Introduction
   b – Presentation of VC (2 voices)
   b – Group formation
   c - Random drawing: topics
      to each group

| G1 | G2 |
| G3 | |

| G1 | G2 |
| G3 | |

Internet

Internet

ERIC: Chairman
....

CHRIS:Chairman
...and so on.

MATERIAL STRUCTURE

-- Group : 2 stud.CSI + 2 GSCO

-- 1 Laptop / group   SKYPE Internet

-- MASTER screen – Coach

-- 1 coach for 10 groups

MANAGEMENT PROCESS

-- 4 formal sessions – Sept/Oct. ; Nov. ; Jan. ; Feb.

-- 1 session :
   **   Managing Committee – Preparation / Debriefing

   ** Students: self introduction, group form., given topics

-- Encourage groups to work «IN BETWEEN» formal sessions