

TEMDEC Telemedicine Development
Center of Asia (TEMDEC)
Telemedicine Development Center of Asia

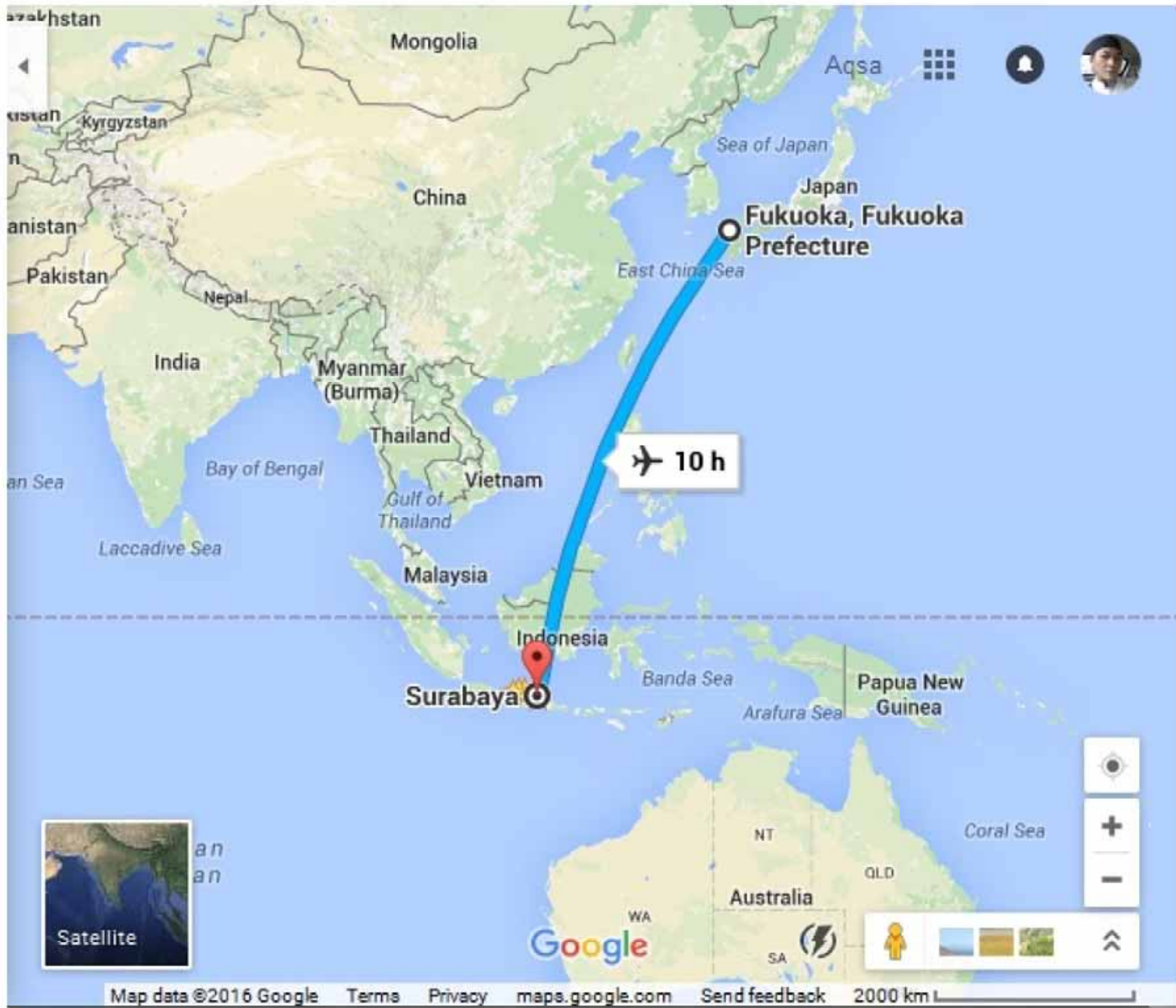


How Telemedicine Improve Dental Education?

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Telemedicine



The use of information-based technologies and communications systems to deliver healthcare across geographic distances.

It uses electronic information to communicate technologies to provide and support healthcare when distances separate the participants.

Telemedicine is being used today in academic medical centers, community hospitals, managed-care companies, rural hospitals, and is also being used internationally to link providers in developing countries to hospitals in developed countries. Advances in digital communication, telecommunication, and the Internet introduce an unprecedented opportunity to remote access to medical care.



How a telemedicine event realized?

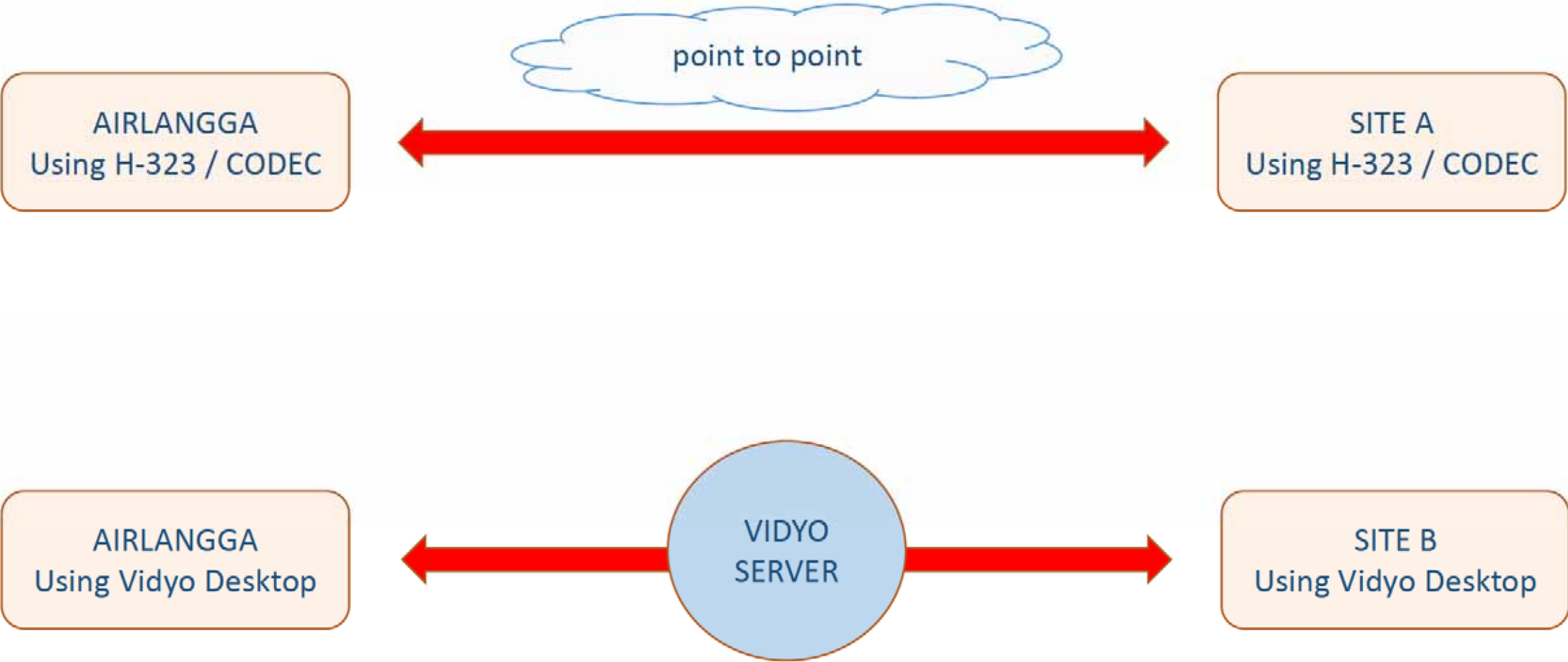
Each site must provide:

1. Sufficient internet bandwidth (2-3 mbps)
2. Knowledgeable, skillful and experienced network engineer
3. Medical/dental staffs to participate
4. Adequate equipment (laptop, PC, camera, microphone, mixer, CODEC)

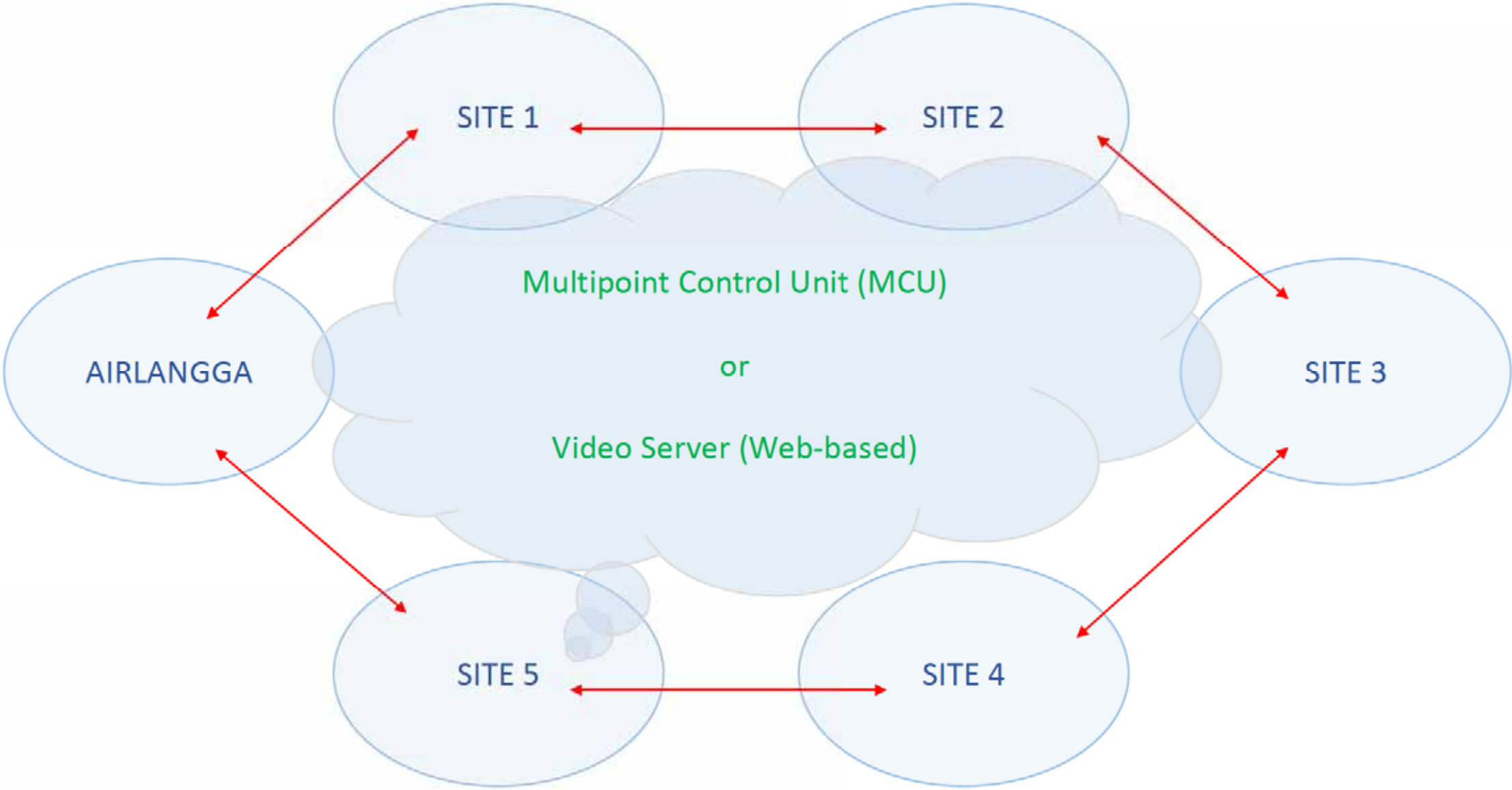
Systems to be used:

1. H-323: if all sites have CODEC equipment
2. Vidyo Server: if some sites do not have CODEC equipment

TWO PARTIES CONFERENCE




MULTI-PARTIES CONFERENCE



The aim of this center is to **establish effective** and **consistent medical communications** among Asian countries using **super-fast internet** and **advanced technology**.

Main activities are as follows:

- Remote medical education: Organizing programs and preparations for the event. 
- Remote patient care: Tele-consultations and arrangements for international patient care.
- Development and application of new technology: For more connections and better images.
- Development of attractive contents: Consistent search for the new applications.
- Secretariat of Medical Working Group of Asia-Pacific Advanced Network: <http://apan.net/>
- Center for international exchange programs: Invitation of foreign medical doctors.



ONE OF TEMDEC ACTIVITIES:

Remote medical (*and DENTAL ???*) education: 

Organizing programs and preparations for the event.

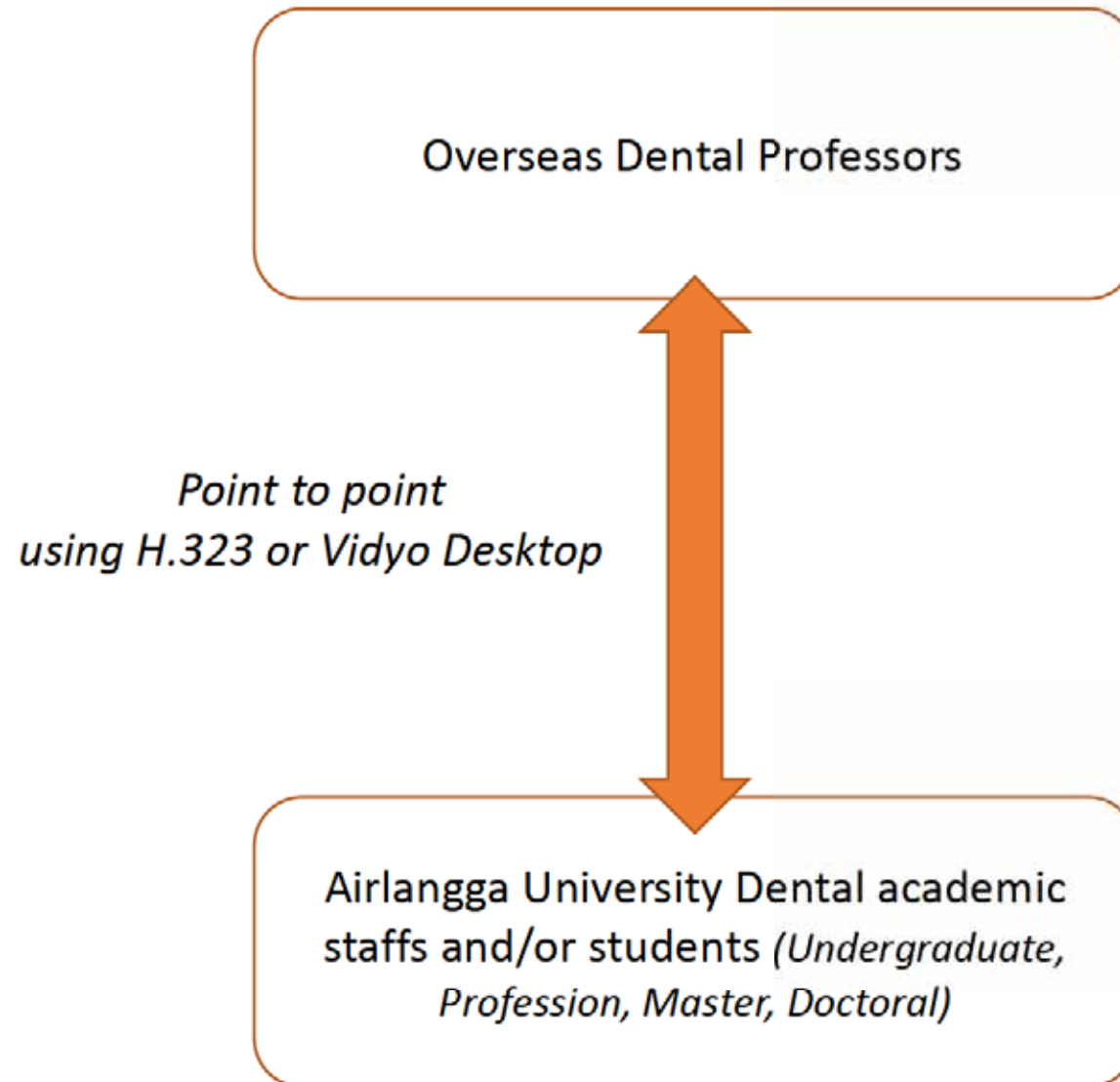
Future chances:

- Remote lecture from overseas Dental Professors
- Scientific teleconference in Dentistry
- Clinical procedures sharing (live or recorded)
- Remote teaching activity from Airlangga lecturers

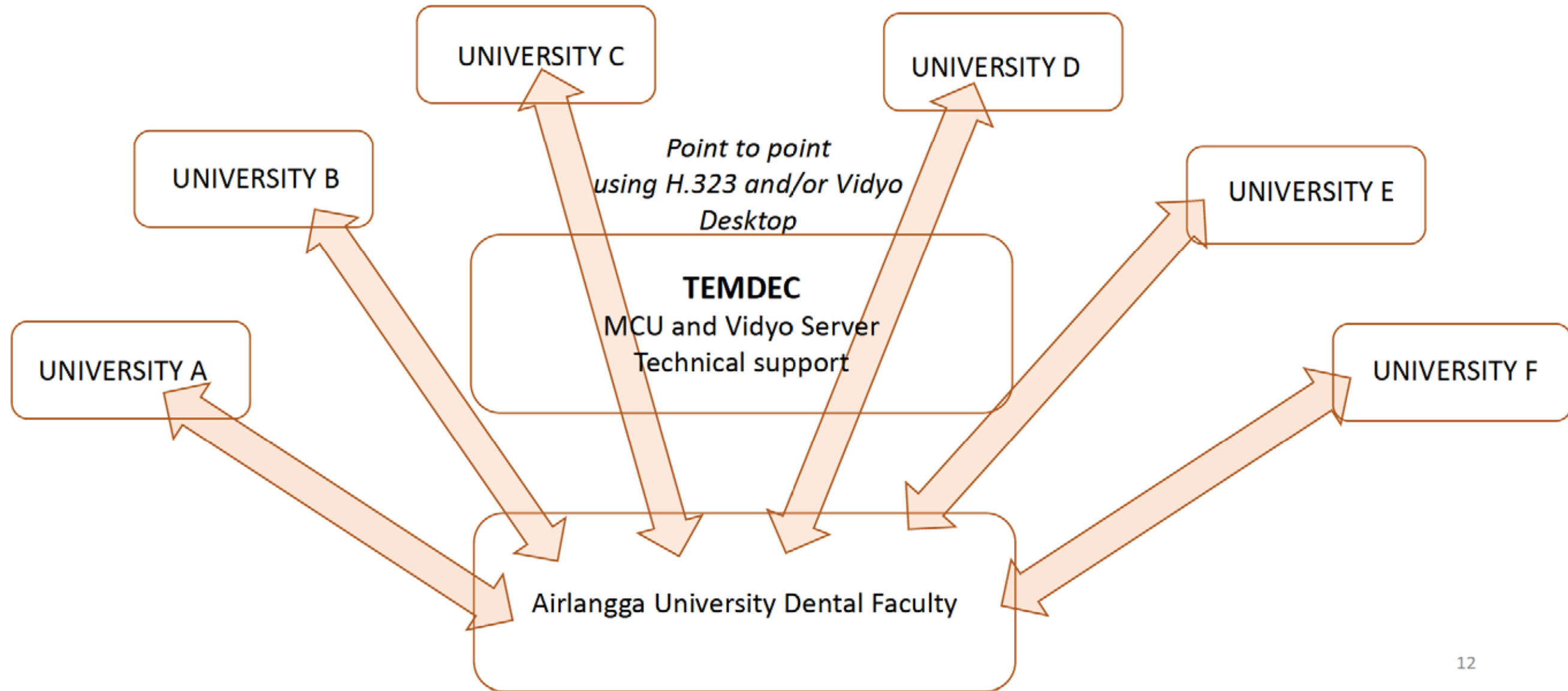


Parts of
eLearning
development

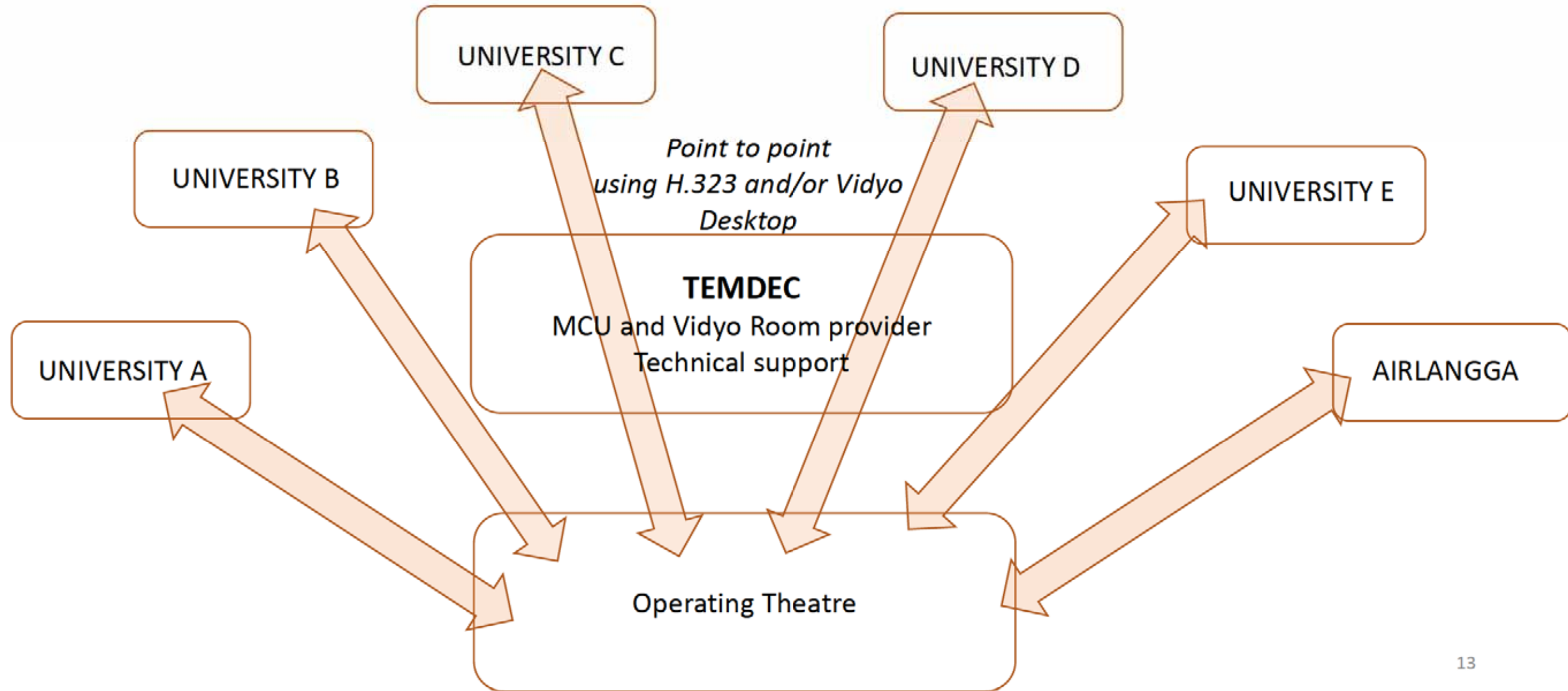
Remote lecture from Kyushu University Professors in Dentistry



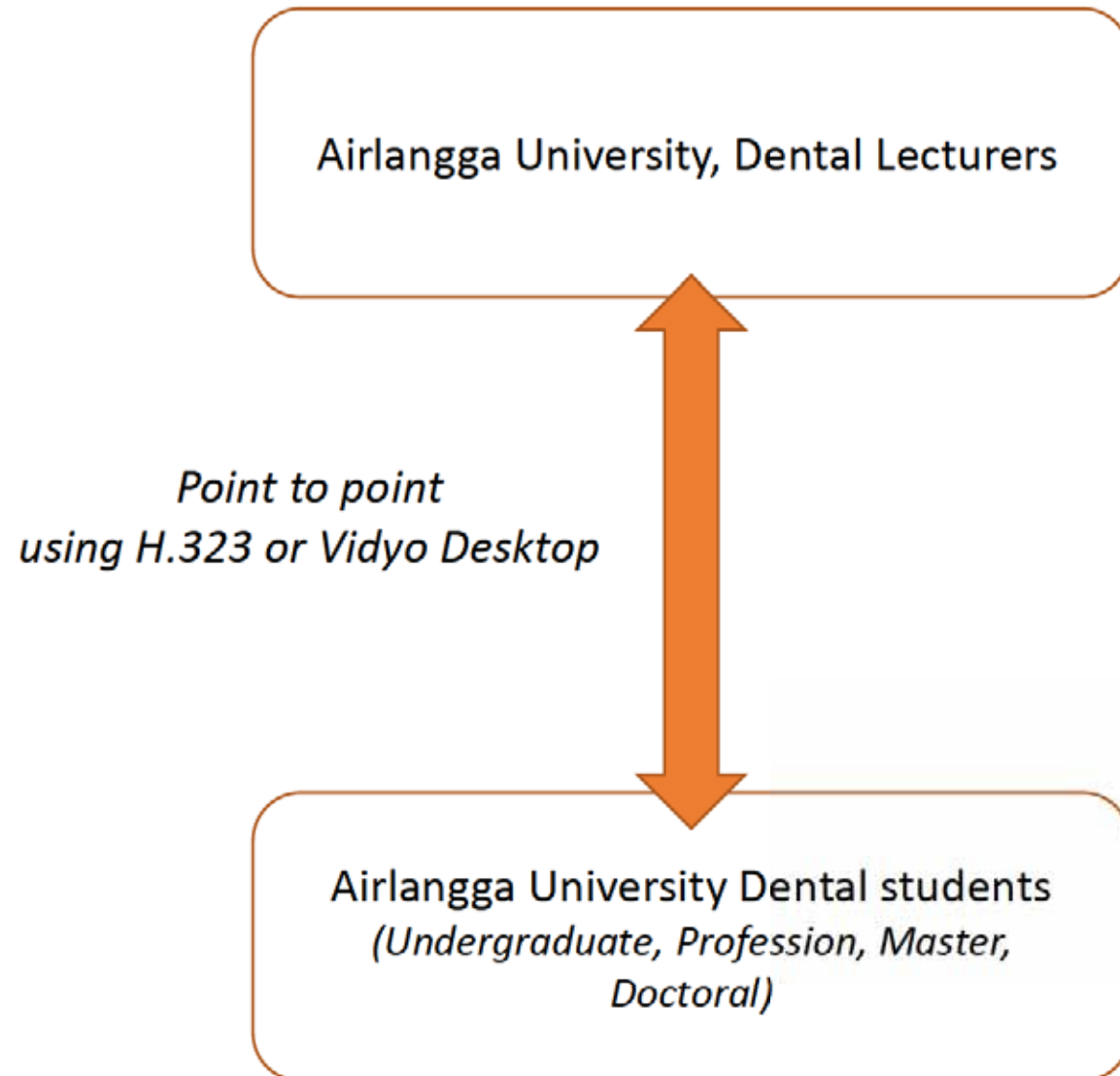
Scientific teleconference in Dentistry (Research reports, Seminars)



Clinical procedures sharing (live or recorded)



Remote teaching activity from Airlangga lecturers





OUR DEVICES



Scopia XT 1000



Mac all in one
desktop

Opportunities For Dentistry Airlangga Univ

- To be the leading innovative dental school
- Increase the accreditation points
- Increase International recognizing
- Make transfer of knowledge and skills more effective
- Certification as International speakers
- Establish **TELEDENTISTRY** in Indonesia



International
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Review Article

Teledentistry a new trend in oral health

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Abstract

"Teledentistry" is a synergistic combination of telecommunications technology, Internet and dental practice. It is a relatively new and exciting field that has endless potential. The first entity to put teledentistry into practice was the US Army in 1994. Since then, various institutions and organizations have practiced teledentistry with varying degrees of success. Teledentistry increased patient access to dental care, improved quality of care and the cost effectiveness. Teledentistry is also useful in long-distance clinical training and continuing education, screening and dentist-laboratory communication.

Key words: telemedicine, telehealth, e-health, teleconsultation, education, caries.

Introduction

Technologic innovations in the field of dentistry have been extensive in recent years. Just as communication technology and uses of electronic information has developed over the years, terms to describe health care services at a distance, such as telehealth and telemedicine, have also evolved. Teledentistry is a combination of telecommunications and dentistry. "Tele" is a greek word meaning "distance" and "meder" is a latin word meaning "to heal."

Teledentistry can be defined as the use of electronic information and telecommunications technologies to support long-distance clinical oral health care, patient and professional health-related education, public health, and health administration.

Many years ago how telephones affected people, in the same way with next 10 or 20 years teledentistry will be a routine of life. What was considered relatively distant future some twenty years ago today is the reality in dental clinics. Teledentistry is

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Challenges

Human resources

- Dedicated, communicable, enthusiastic, and visionary IT manager .
- Knowledgeable, skillful engineers

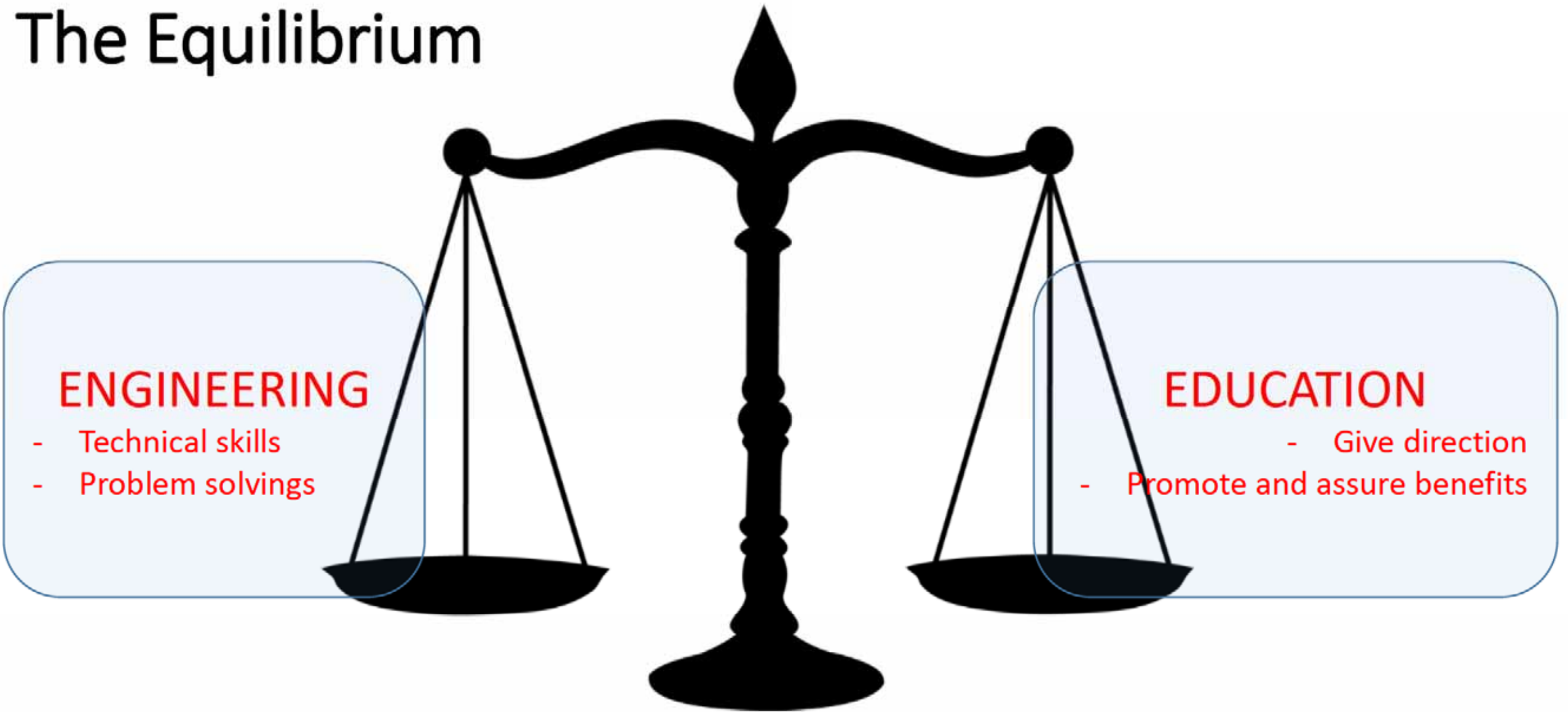
Infrastructures

- Bandwidth
- Codec, camera, large screen LED, mixer, router, PCs, microphones

Policy and management

- Top management's goodwills are extremely required.
- Appreciations for teleconference participants might enhance doctors's interests.
(Certificate for credits)

The Equilibrium



EVALUATIONS

FUTURE PLANS

- Expand the teleconf activities for eLearning and education in Dentistry (*TELEDENTISTRY*).
- Increase human resources competencies (*training*).
- Promote Airlangga Dental School active participation in International telemedicine sessions
- Suggest some Public Health researches according the Tele Dental Education issues.