APEC KKU 2022

Online Workshops for Lesson Study 2.0:
Artificial Intelligence (AI) and Data Science for Education in APEC Economies

Host Institution

The Ministry of Higher Education, Science, Research and Innovation (MHESI), Thailan
and the Institute for Research and Development in Teaching Profession for ASEAN (IRDTP), Khon Kaen Universit
Thailand and the Center for Research in Mathematics Education (CRME), Khon Kaen University, Thailan

Lesson Study through the Internet

Dr. Wahyudi, SEAMOLEC Director

Presented at: Online Workshops for Lesson Study 2.0: Artificial Intelligence (AI) and Data Science for Education in APEC Economies, 18 October 2022, 18-21hrs: GMT+7, BKK time

Outline

This presentation will specifically address the following 3 items:

Introduction

SEAMOLEC in Brief

Lesson Study – Before and During Pandemic

Adaptation of LS during Pandemic

Way Forwards

LS through the Internet?

SEAMOLEC in Brief

SEAMOLEC

SEAMEO REGIONAL OPEN LEARNING CENTRE
(Est - 27 February 1997)

Hosted by:

Ministry of Education, Culture, Research and Technology, Republic of Indonesia

Located in:

Open University Complex, Tangerang Selatan, Banten Indonesia

Vision:

To be the Centre of expertise in Open and Distance Learning (ODL)

Mission:

To assist SEAMEO Member Countries in identifying educational problems and finding alternative solutions for sustainable human resource development through the dissemination and effective use of ODL

Training

Research & Development

SEAMOLEC 4 Core Tasks

Consultancy Services

Information Dissemination

SEAMOLEC MOOC

Massive Open Online Courses

Course

96 Courses

Consist of 51 Open Educational Resources and 45 Massive Open Online Courses

Content

1000 + Content

Consist of 1000 content under MOOC SEAMOLEC

USERS

53250 Users

Total Users listed on mooc.seamolec.org of 53250 Users

SEAMOLEC
sea_008
Pembelajaran Android Programming
Starts: Jun 13, 2016

SEAMOLEC
sea-kdjj
Kompetensi Dasar Pendidikan Jarak Jauh
Starts: May 31, 2016

SEAMOLEC
2016_Digital_Class
Digital Class
Starts: Apr 19, 2017

SEAMOLEC
2016_SEA_Office
Tips & Trik MS. Office
Starts: May 01, 2016

Multimatics
ACAPSMM
ACA Adobe Visual Communication using Photoshop CS5
Starts: TBD

SEAMOLEC
SEA011
Animasi Drawing
Starts: Aug 21, 2016

SEAMOLEC
SEAMOLEC-ID-002
Introduction Vietnamese
Starts: Jan 01, 2015

SEAMOLEC
SEAMOLEC-ID-003
Introduction Thailand
Starts: Jan 01, 2015

SEAMOLEC
SEAMOLEC_2016_Japanese
Introduction Japanese
Starts: TBD

Online Trainings by SEAMOLEC on 2016-now

SEAMOLEC
SEAAR01
The Real World of Immersive Augmented Reality
Starts: Jan 02, 2018

SEAMOLEC
SEABlog_01
Blog Sebagai Media Pembelajaran
Starts: May 10, 2017

SEAMOLEC
3DL
3D Visualization tingkat lanjut
Starts: Jan 01, 2017

SEAMOLEC
3D001
3D Visualization Siswa
Starts: Oct 12, 2016

SEAMOLEC
PPT01
Desain Presentasi Berbasis Powerpoint
Starts: May 11, 2017

SEAMOLEC
AppInventor_01
Aplikasi Android Interaktif Berbasis App Inventor
Starts: Aug 13, 2017

SEAMOLEC
SEA_AR_01
Augmented Reality for STEM Education
Starts: TBD

SEAMOLEC
SEA-RAND-01
RETRO : Android Programming for Beginner
Starts: May 01, 2017

SEAMOLEC
CS-S01
RETRO: Digital Class Development
Starts: Jan 01, 2017

SEAMOLEC
ADSEA03
RETRO: Whiteboard Animation Based on Digital Learning Material
Starts: Jan 01, 2017

Regional (English)

Training programmes for Educators

1. Optimalization of office applications
2. Cloud-based office applications
3. Design presentations
4. Design infographics
5. Development of learning video
6. Development of whiteboard animation
7. Educational comic
8. Blog as a learning media
9. Android block programming
10. 3D Visualization
11. Augmented Reality Development
12. Virtual Reality Development
13. Internet of Things
14. GNS3-based LAN Simulation
15. Digital class

Metaverse

- Metaverse is the "Next Generation" of the internet that facilitates users to connect with each other, presenting interactions and immersive experiences.
- Metaverse could exchange information, interact socially, have creative spaces, collaborate, and conduct learning discussions as well as simulations for training and laboratory work.

SMKN 13 Bandung

SMKN 11 Bandung

SEAMOLEC Online Learning Platforms

1

E LEARNING

https://elearning.seamolec.org/

3

SIAJAR LMS

https://lms.seamolec.org

5

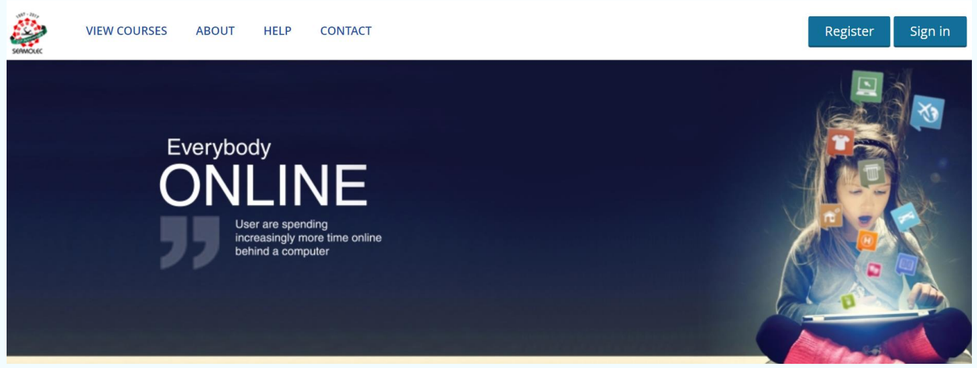
sumber belajar

OER

https://sumberbelajar.seamolec.org/

https://catc.elearning.seamolec.org/

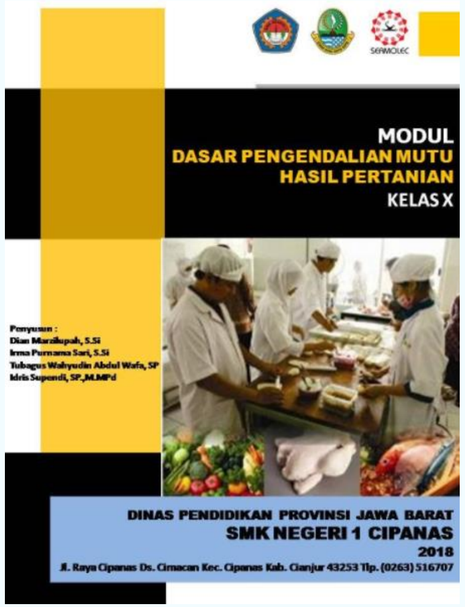
2



4

http://mooc.seamolec.org/

SEAMOLEC Digital Resources

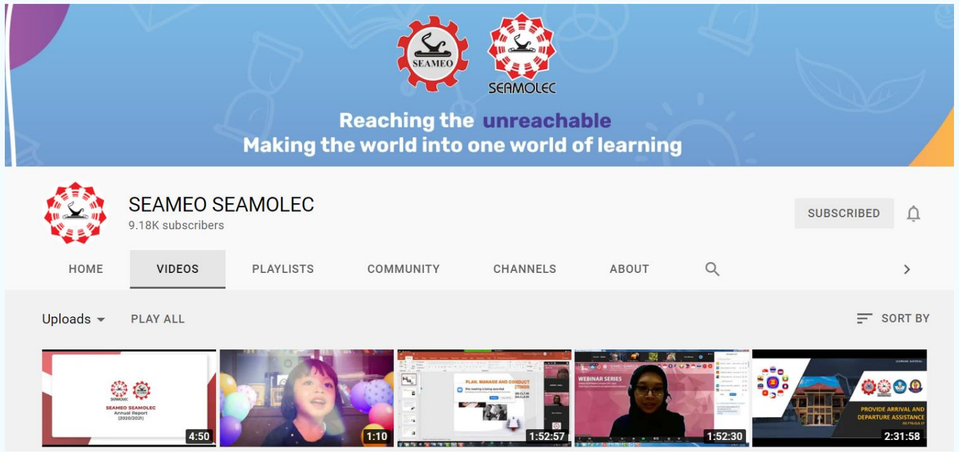


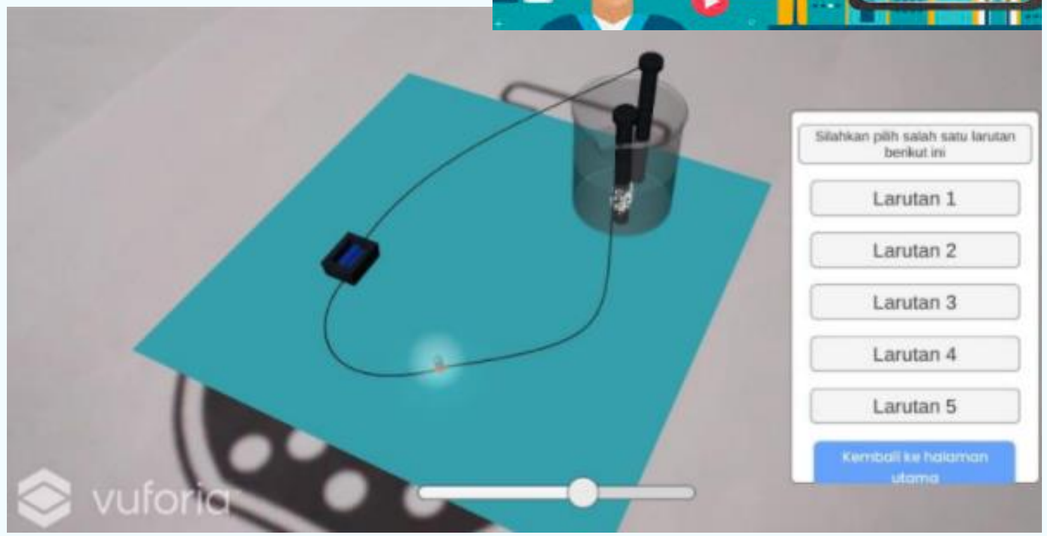
Printed & Digital Modules

UNDER DEVELOPMENT:
1. AI-Chatbot for EFL
2. Prototype ML with Visualization

Video

Video & Animations

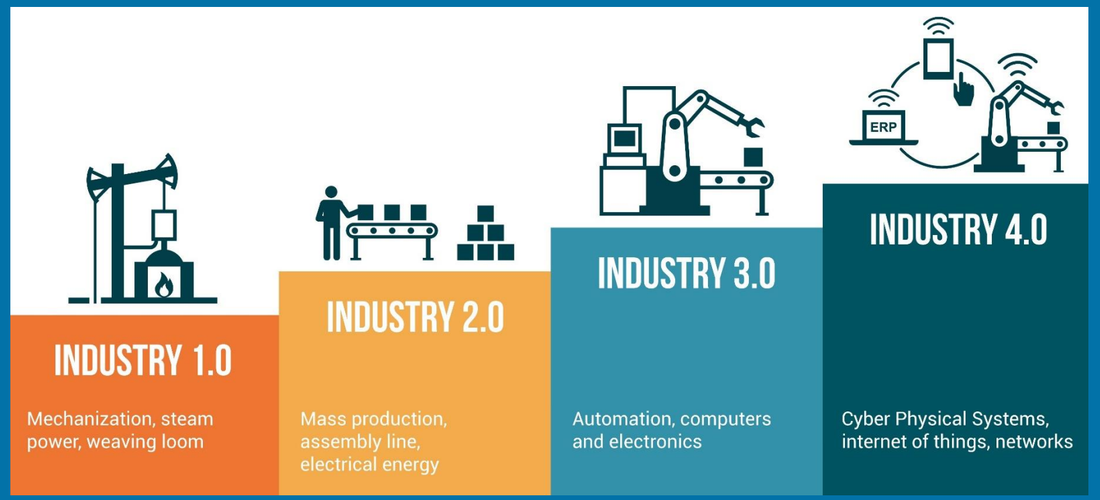




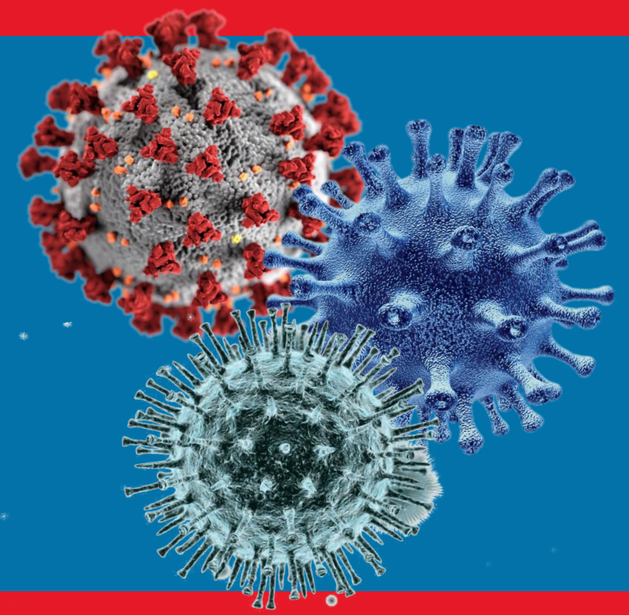
What are the Driving Factors of Transformation in Education? (Including LS Practice)

2 FACTORS OF EDUCATION TRANSFORMATION

Industry 4.0



COVID-19



FACTORS OF EDUCATION TRANSFORMAT

upro

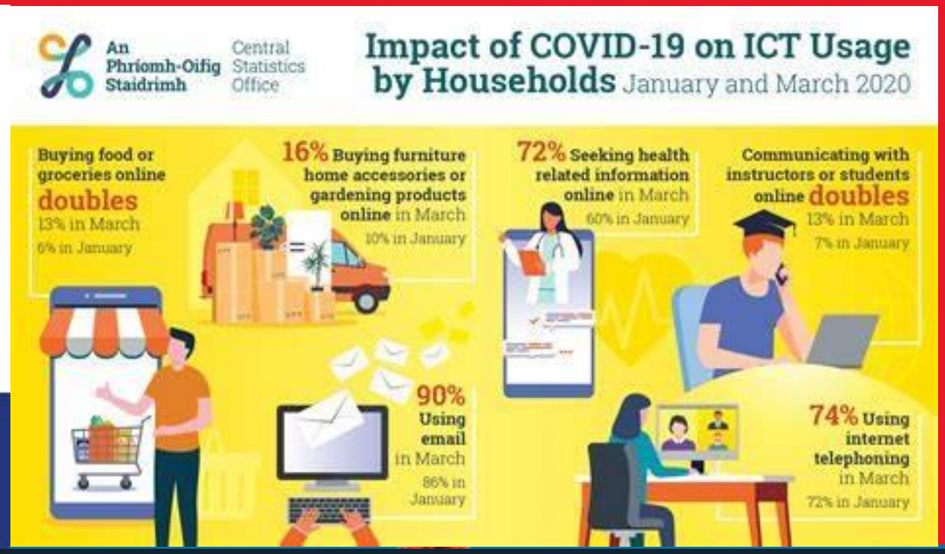
ONLINE CONFERENCE

ICT-20 @ COVID-19

DICT

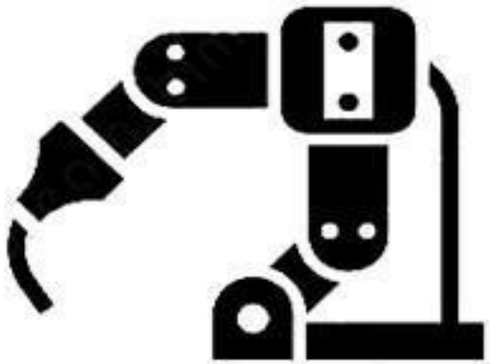
iADAPT

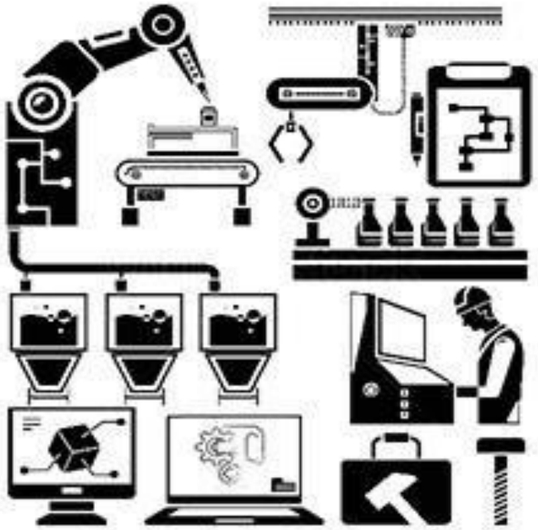
COVID-19 ICT Courses (DREAM Team) now available in iADAPT



COVID-19

INDUSTRY REVOLUTION 4.0





18th Century

Industry 1.0
Mechanical production equipment powered by steam

19th Century

Industry 2.0
Mass production assembly lines requiring labour and electrical energy

20th Century

Industry 3.0
Automated production using electronics and IT

Today

Industry 4.0
Intelligent production incorporated with IoT, cloud technology & big data

THE POWER OF INTERNET FOR LS?

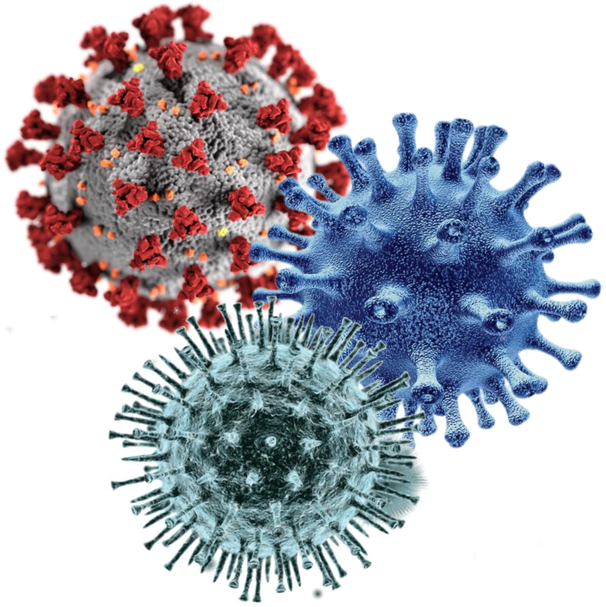
Merits & Demerits of Internet

- Today internet has brought the globe into a single room.
- Right from news across the corner of the world, wealth of knowledge to shopping, purchasing the tickets of your favorite movie-everything is at your finger tips.
- Internet has great potential and lot to offer…
- However, like every single innovation in science and technology, internet has its own advantages and disadvantages.
- Though, internet can also create havoc, destruction and its misuse can be very fatal, the its advantages outweigh its disadvantages.

6

SEAMEO

SEAMOLEC



LS BEFORE COVID-19

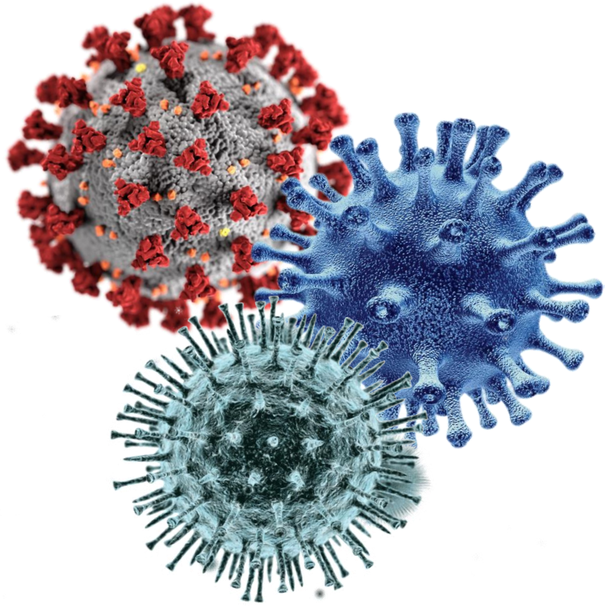
LS during COVID-19

‘Brings learning to the learners’

LS BEFORE COVID-19

‘Technology (ICT) enables educators to do cross-border education’ – Case study in 2016 between SEAQiM and KKU

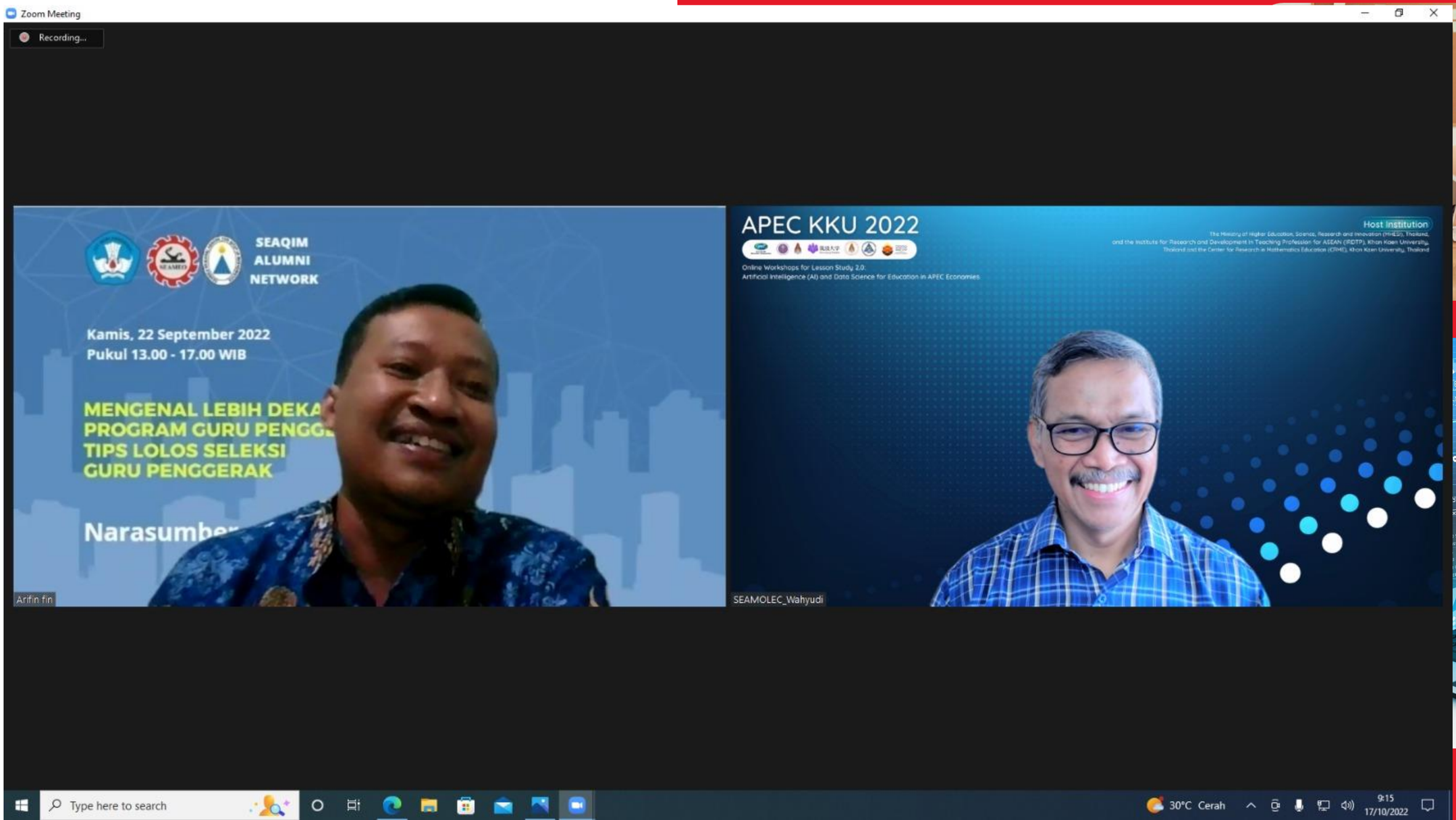
SHARING PRACTICES – ENABLED BY ICT



LS during COVID-19

‘Brings learning to the learners’ – Case of MGMP in Malang, Jawa Timur, Indonesia

LS THROUGH INTERNET



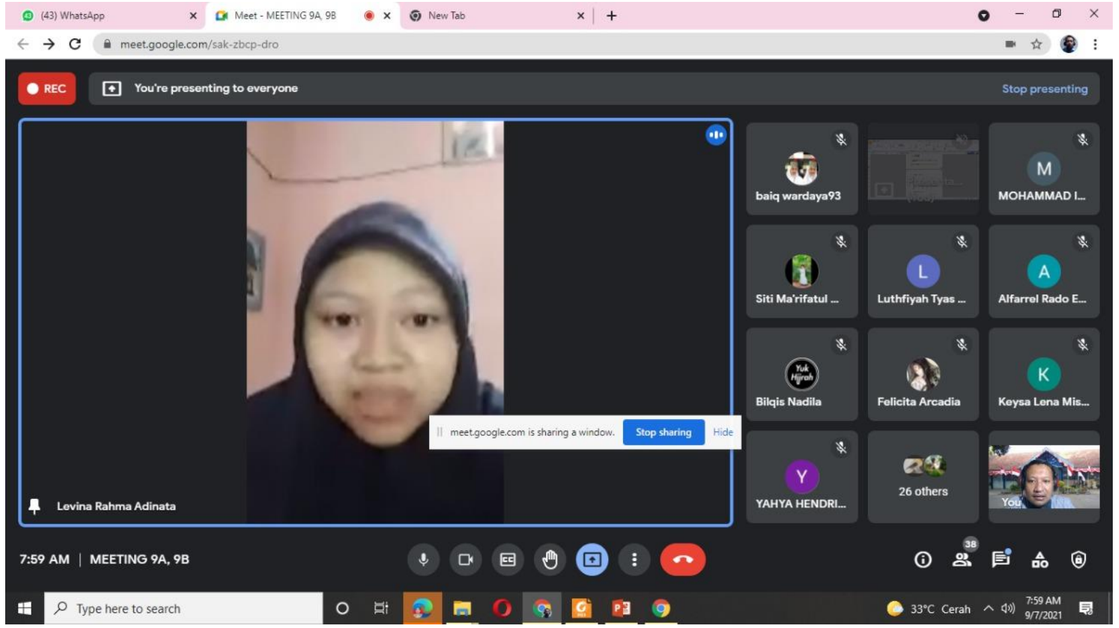
Lesson Study in Malang, Jawa Timur – Using Microsoft Team

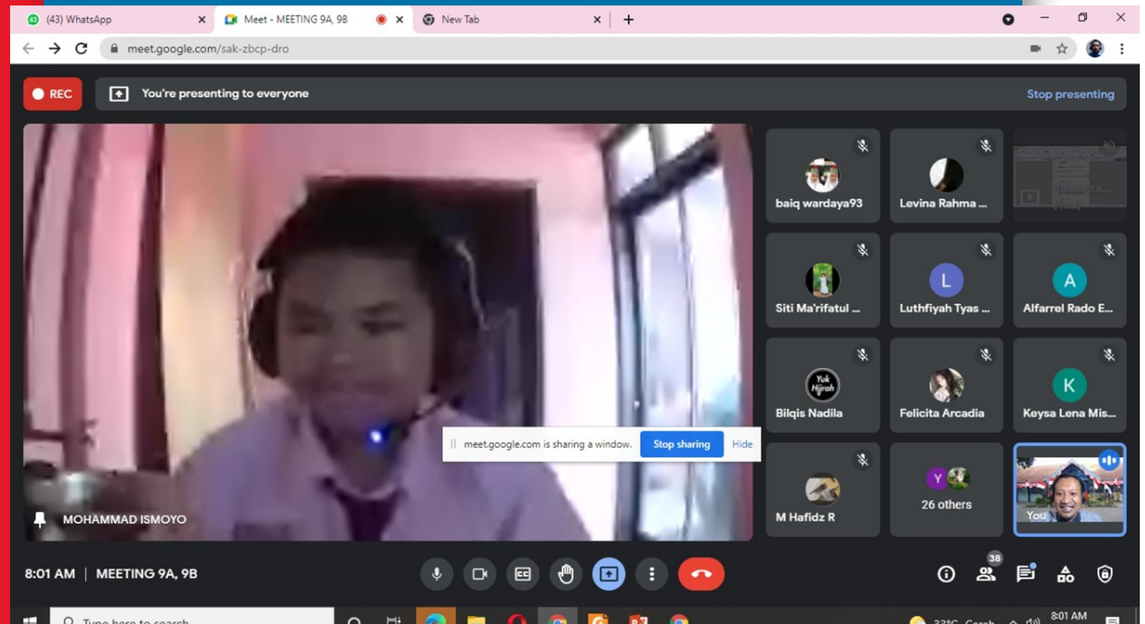
1. Mr Arifin – SEAQiM's Alumni of LS 2016

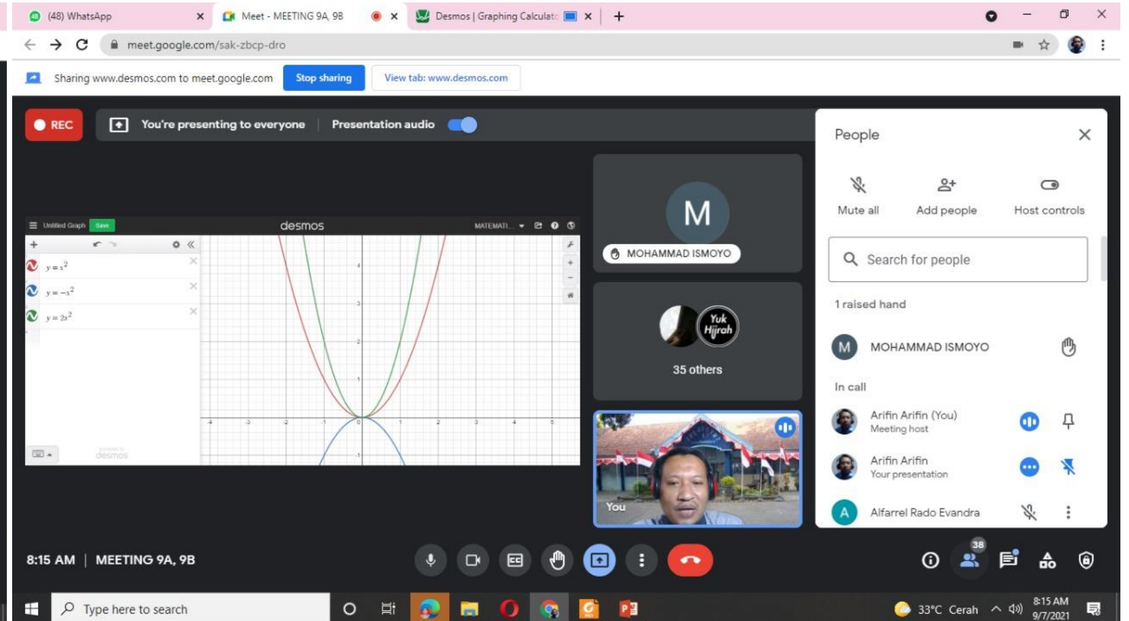
2. Implemented LS in his School via MGMP
3. Using Microsoft Team Platform
4. Challenges
5. Promises

Yes we did

Did you and your colleagues (can be local or international) conduct LS during the pandemics?





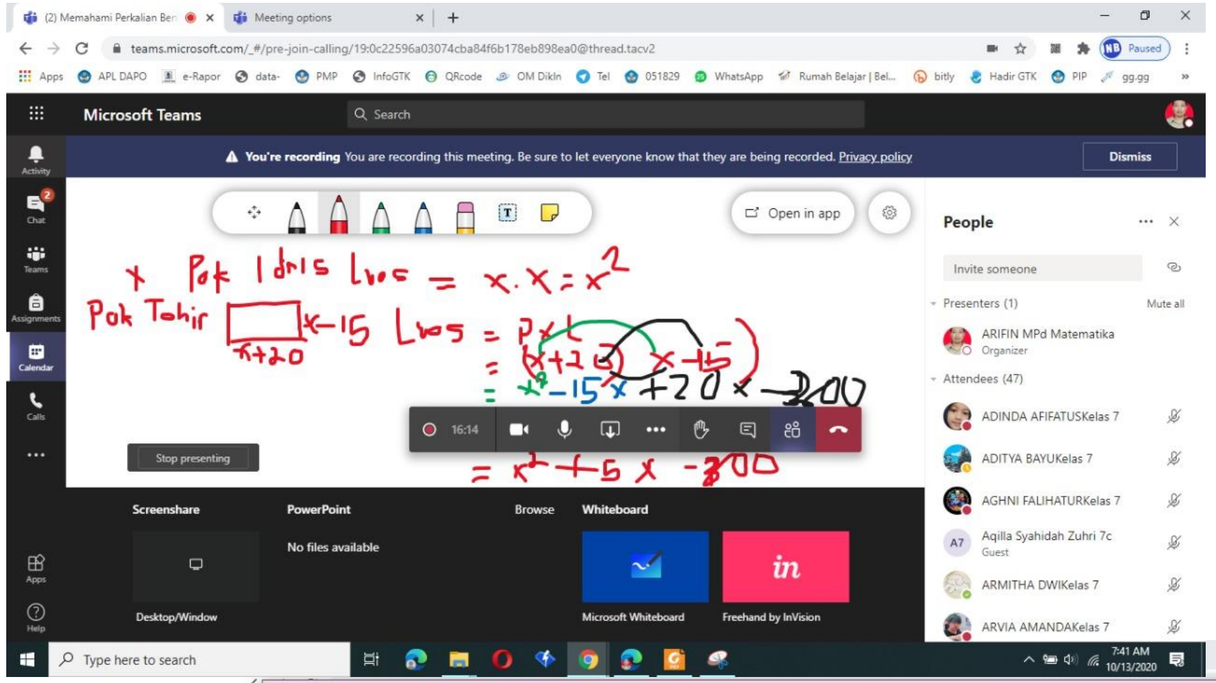


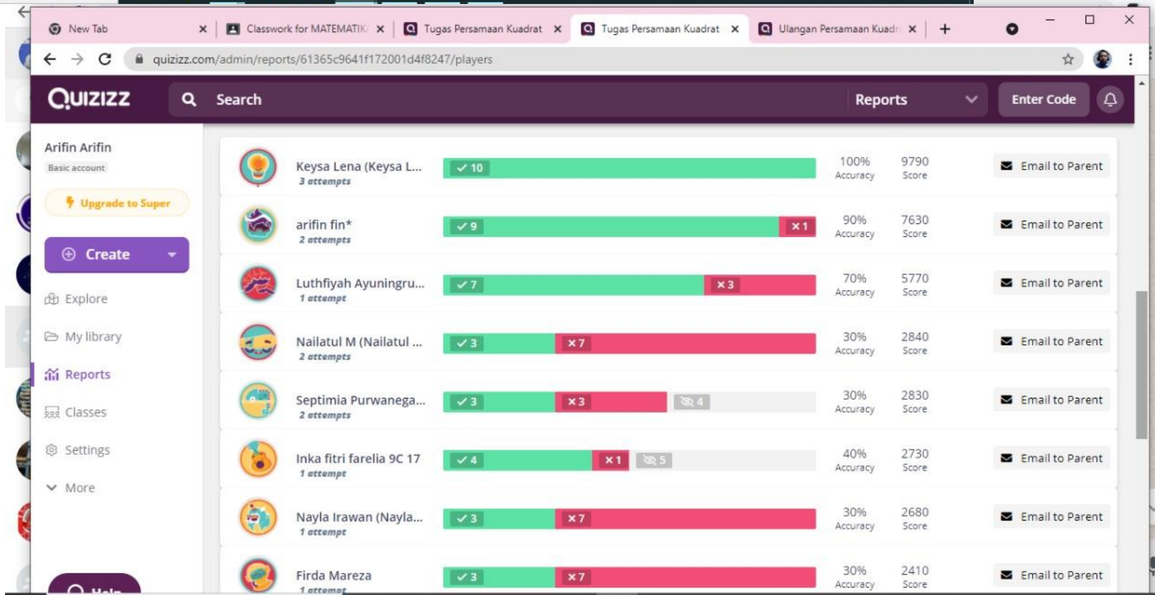
How did you and your colleagues communicate (observation, sharing T& Learning activities, reflection etc.)? Which online platform did you use frequently?

We usually communicated through team meeting virtually in every MGMP schedule on Thursday. Also, we decide the teaching material presented by the teacher model.

What is the challenge in so doing virtual observation and reflection?

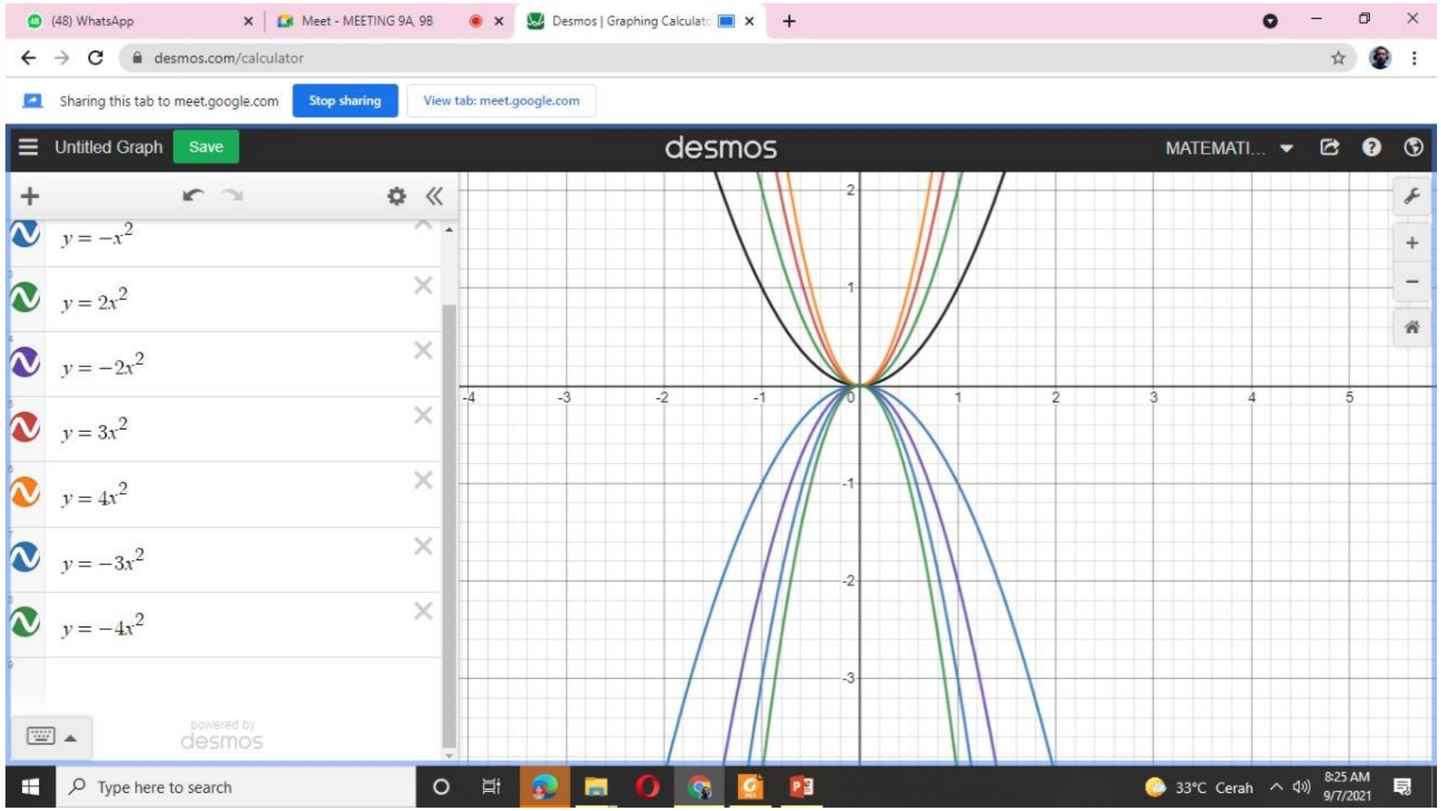
Very limited not maximally observed





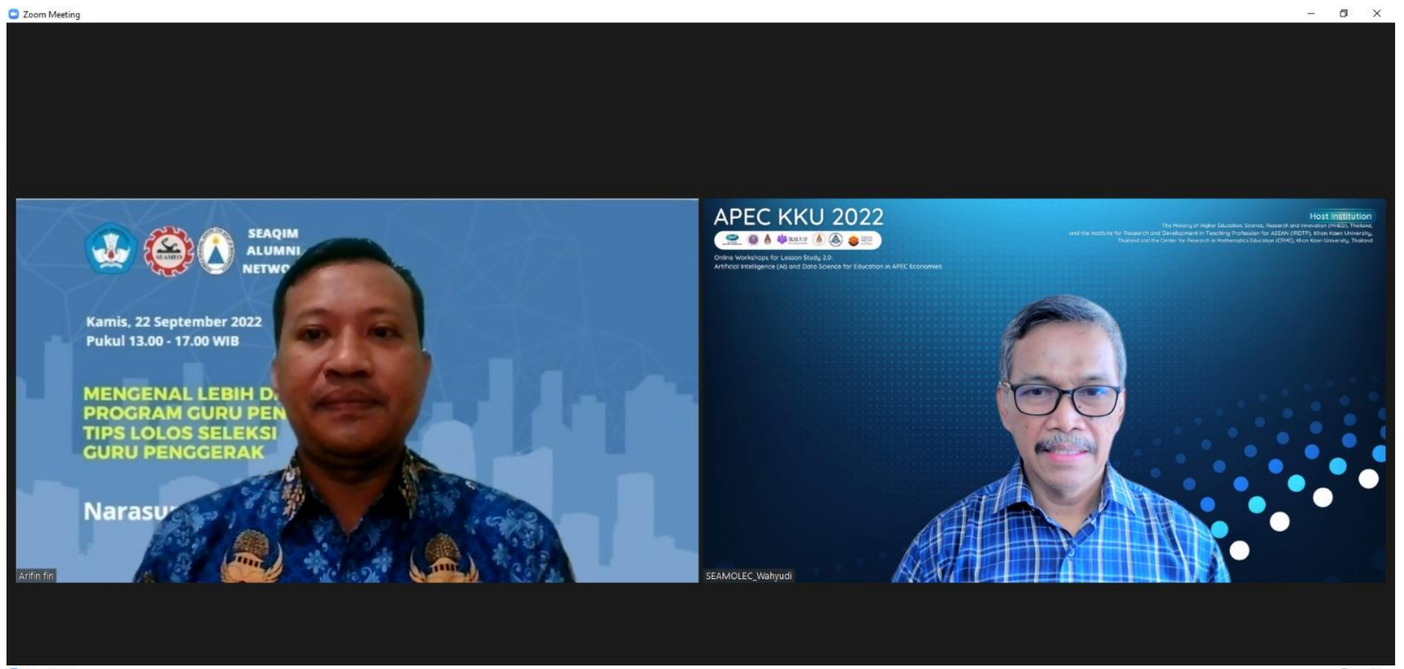
What is the benefits in so doing virtual observation and reflection?

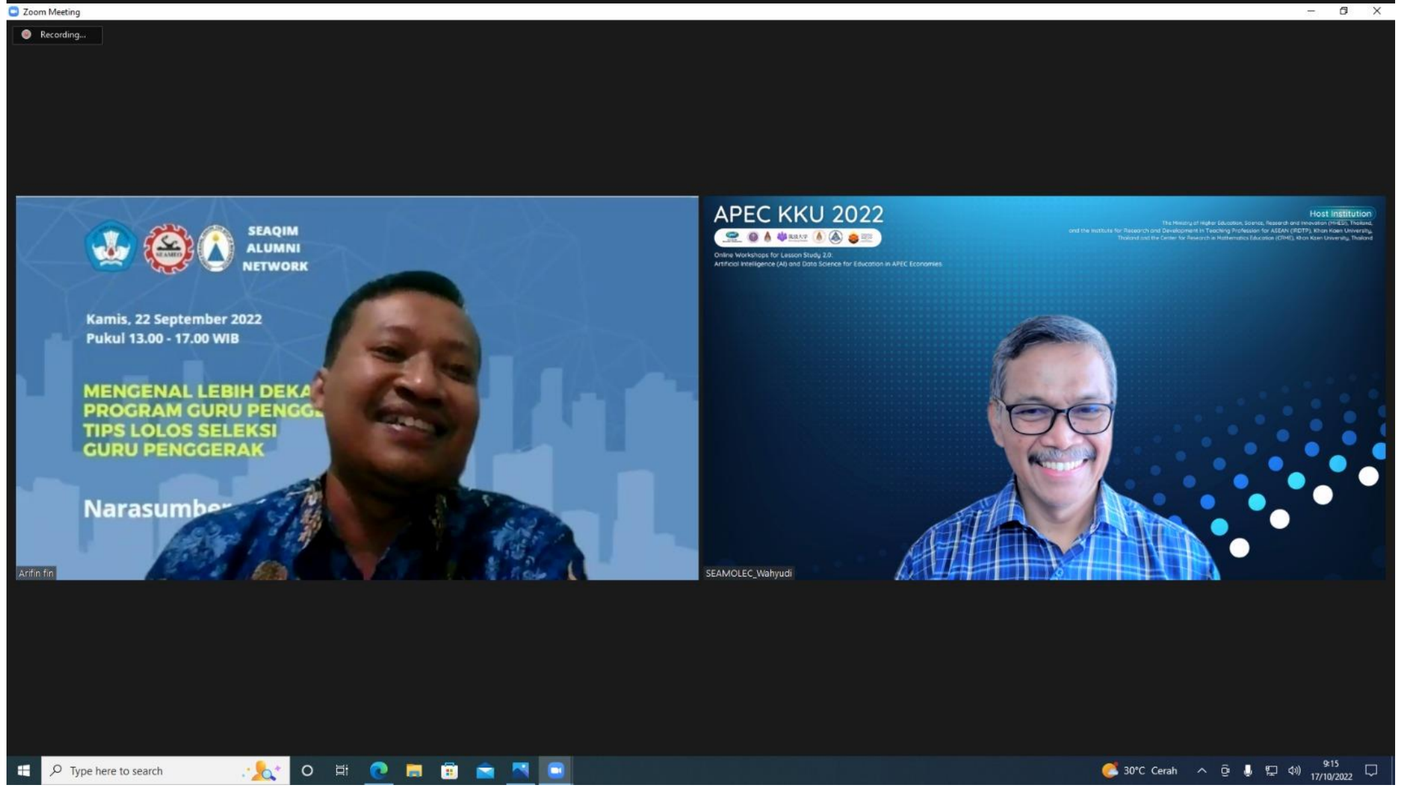
- Observations can be recorded
- Using teams and Google meet in various way for learning,sharing for evaluation.The benefit of using teams,we can place the assignment,make a recording,and recap the students'activeness in meeting.



The Way Forwards

Continuous commitment and collaborations





FOLLOW
LIKE
SUBSCRIBE!

@seameoseamolec
@seameoseamolec
@seamolec
SEAMEO SEAMOLEC

Thank You

+66 627153191

wahyudi@seamolec.org

www.seamolec.org