Open Education activities at Hokkaido University and post covid-19 scenario

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Hokkaido University
Center for Open Education

- University-wide organization
  - Under the Institute for the Advancement of Higher Education
- Objectives
  - Supporting teaching and learning using OER
  - OER research and development
- Unification of initiatives on campus
  - Hokkaido University OCW office
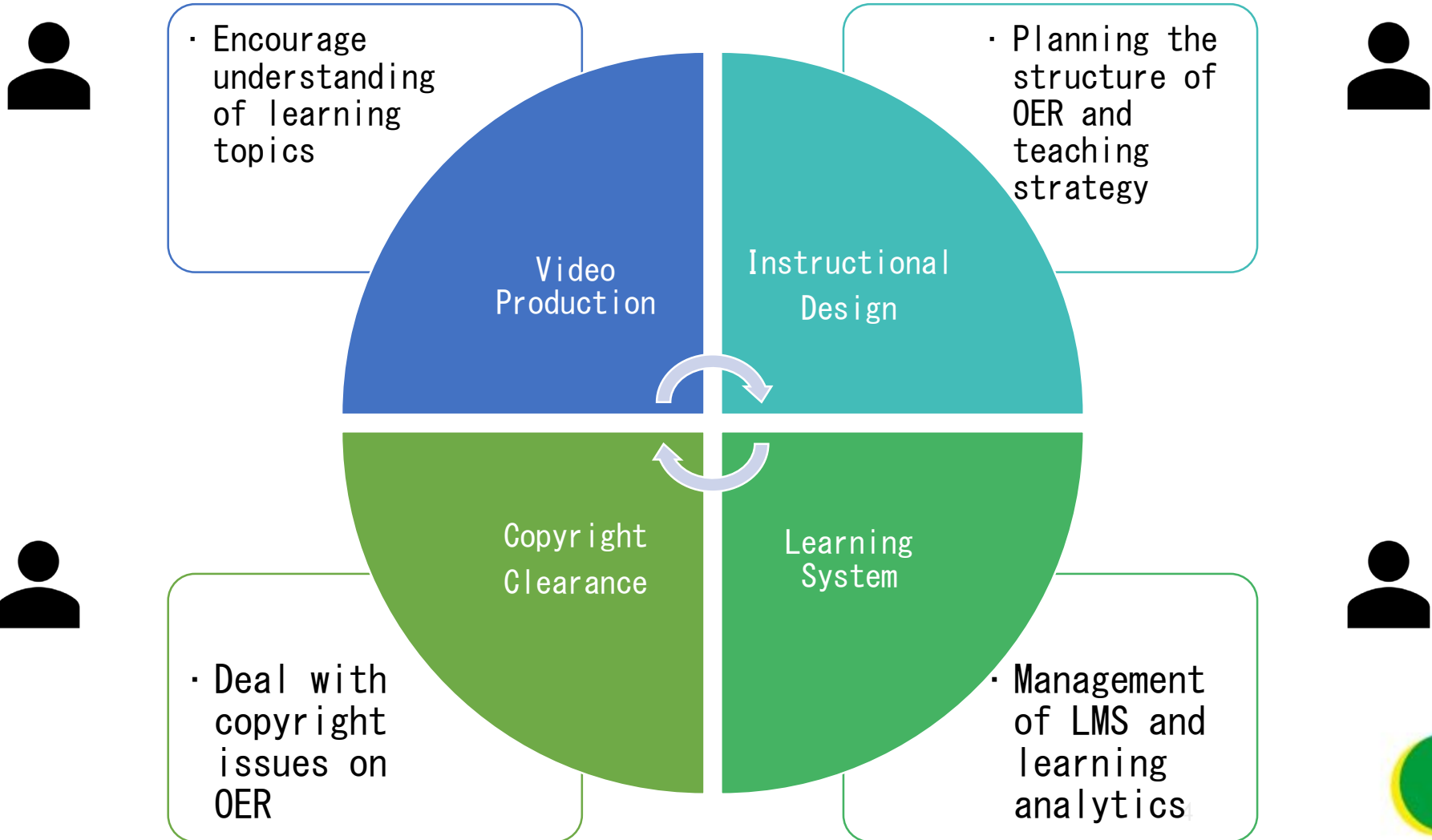 - E-learning efforts on several departments

Organization of the Center for OE HU

- Two divisions
  - OE Development division: OER development and utilization, MOOC
  - CoSTEP: Research and education of Science communication
- Staff (E-learning division)
  - Director
  - 5 full-time
  - 5+ half-time (including graduate students)

Staff

· Encourage understanding of learning topics

· Planning the structure of OER and teaching strategy

Video Production

Instructional Design

Copyright Clearance

Learning System

· Deal with copyright issues on OER

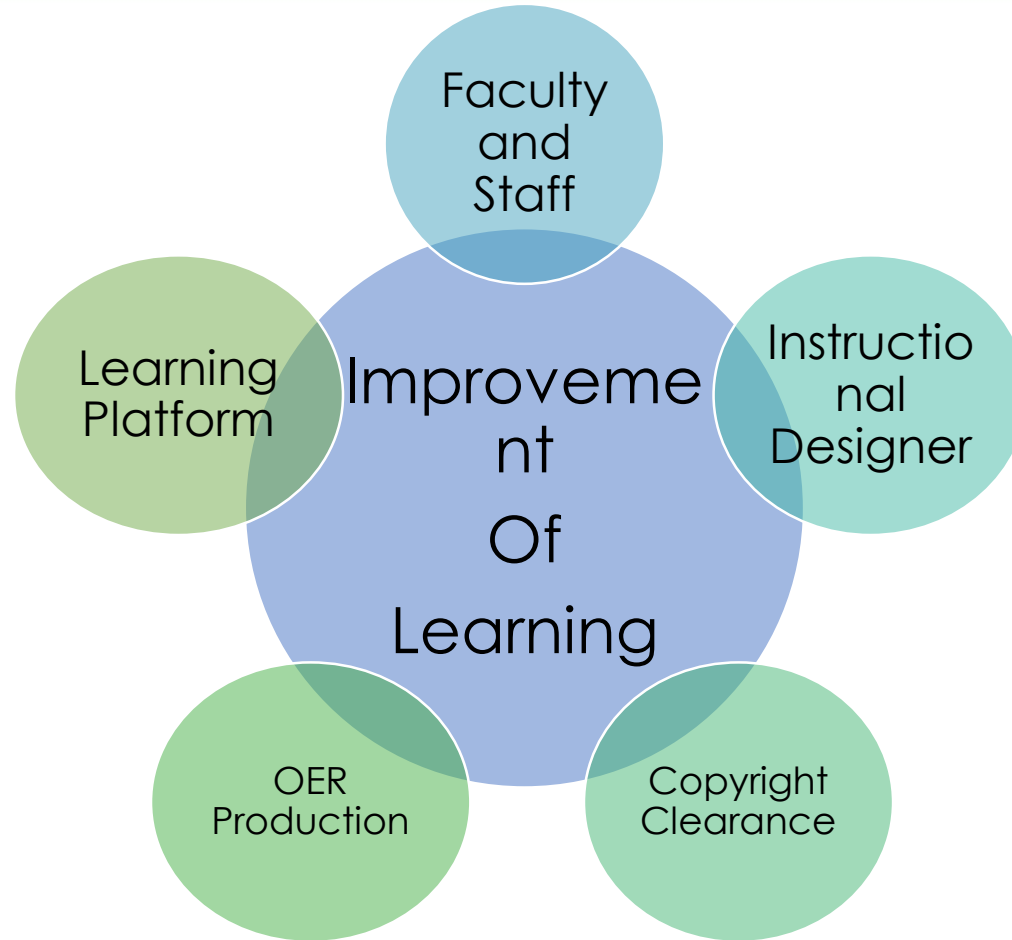· Management of LMS and learning analytics

Facility

- Staff room
  - Project management
  - OER development and video editing
- Special studio for lecture capture

Our function towards improvement of learning

Developing OER

- Lecture capture
  - Mainly developed before, become fewer
- Structured OER
  - Committed to instructional design
- Skill training video
  - OSCE(Objective Structured Clinical Examination) for veterinary medicine
- Introduction of virtual reality

Utilizing OER

- Develop OER for faculty
  - For blended learning and flipped classroom
  - Consultation with staff specialized for instructional design, video production and copyright clearance
- Share OER for campus education
  - In Hokkaido University
  - Open to the public: via OCW and MOOC
  - Share with universities around Hokkaido region: cooperatively deliver liberal arts education
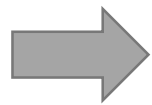
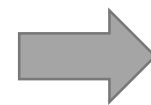# Cooperation of universities in Hokkaido

- Utilize distance learning
  - Video conferencing system
  - Special classroom for active learning

- Improve student outcomes
  - Overcoming challenges to increase effectiveness of distance learning
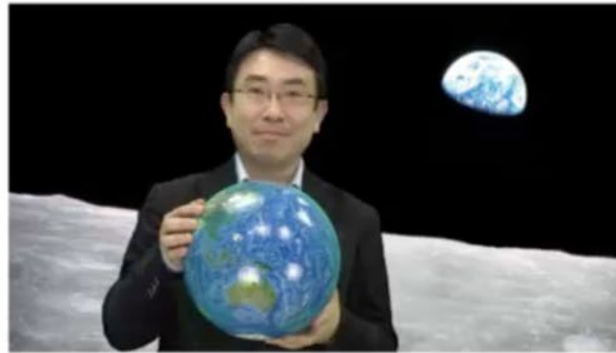
18th century
21st century

20th century

Active learning

Examples of OER
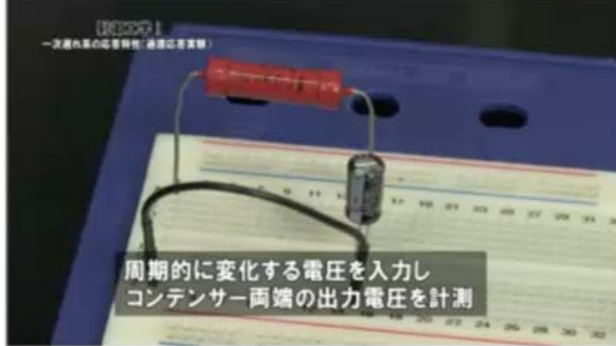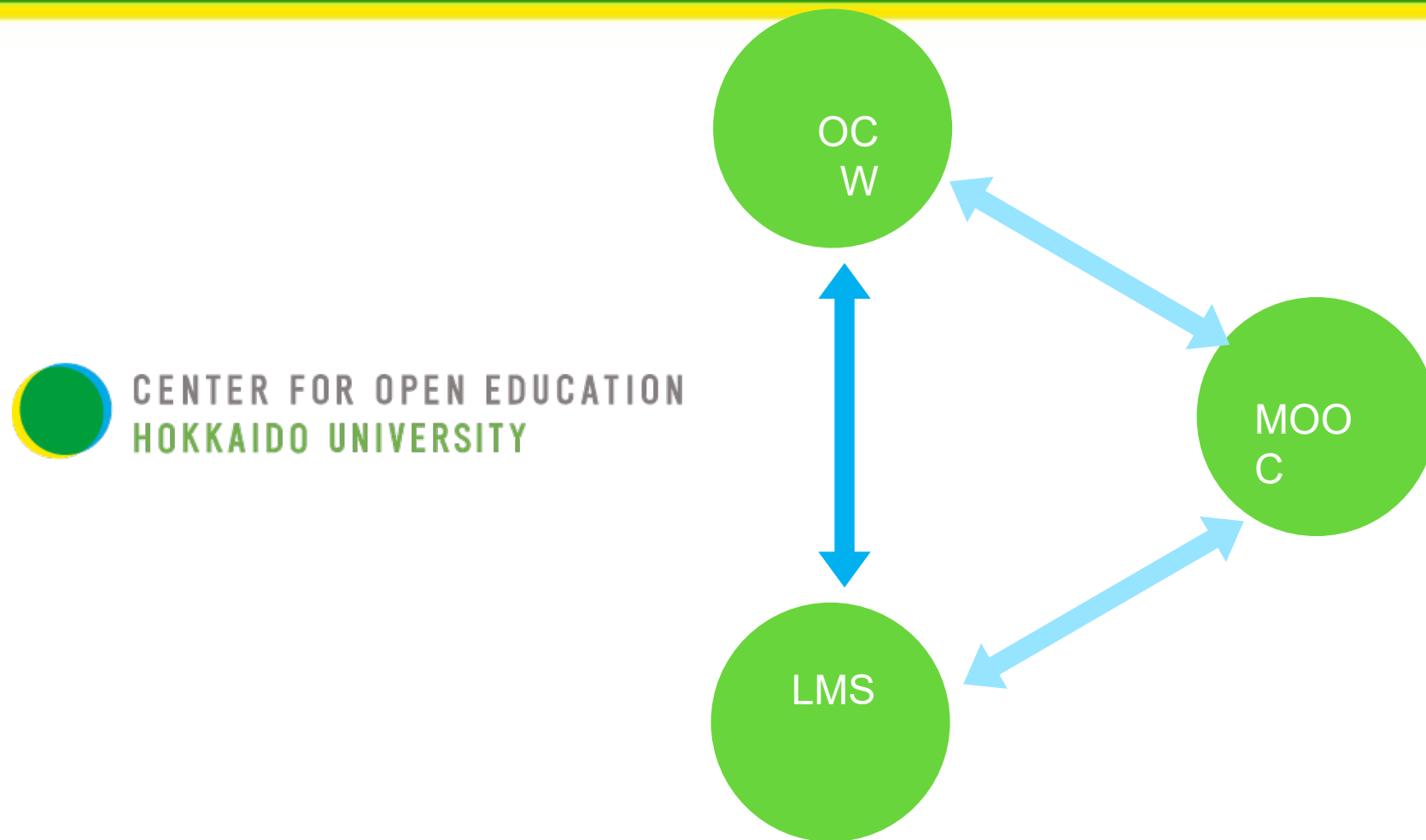

- MOOC-type materials
- Some OERs are based on existing OER (CMU OLI)
- Open license（CC-BY-NC）

Share OER with multiple platforms

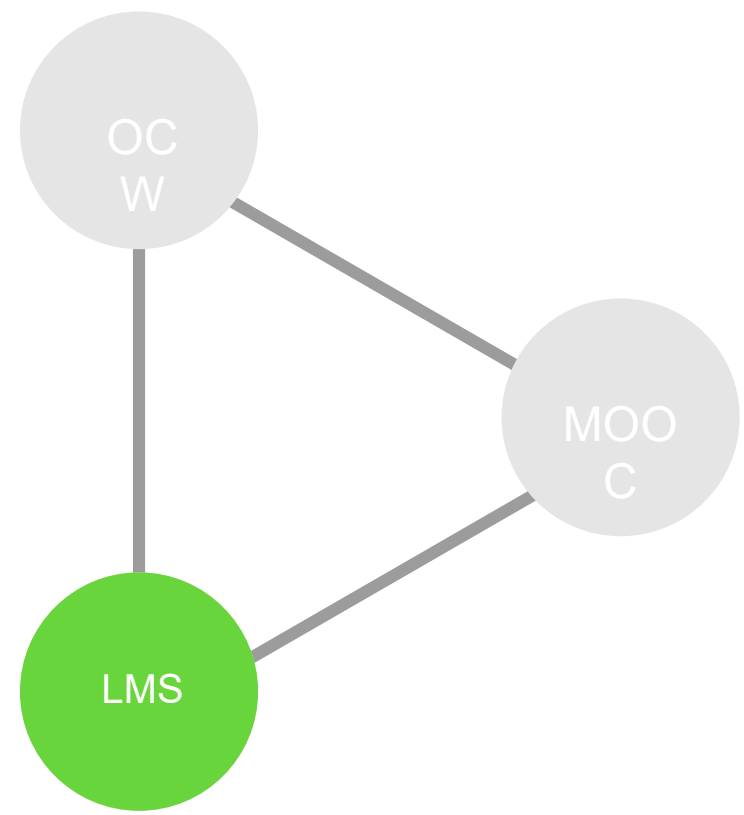# Share OER via LMS for campus education
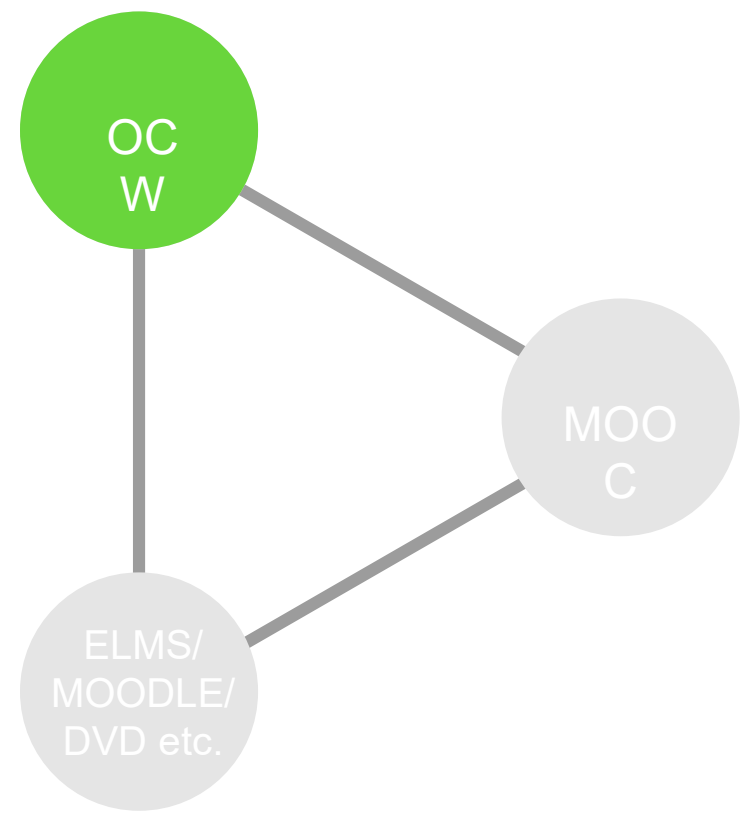

- ELMS
- Moodle
- Open edX (for consortium)

Share OER via OpenCourseWare

HU-OCW

- Develop and publish OER and MOOC
  500+ lectures   2K+ materials   60k+ access / year
- Received Open Education Award (OE Global)

Lecture videos and materials

https://ocw.hokudai.ac.jp

Open MOOC through reusing OER

Open MOOC to reuse OER

- edX and JMOOC
  - Develop at least 1 course / year

Research at OEC

- Development of OER for digital literacy
  - Cooperative research with Adobe
  - Focus on 21st century skills
  - Share and reuse on other universities
- Effectiveness of MOOC
  - Assessment of peer-review of essay
  - Analysis existing essays of learners
  - Propose improved strategy for precise scoring

Improvement of learning by team-based efforts

Faculty and Staff

Learning Platform

Instructional Designer

Improvement Of Learning

Learning Analytics

OER Production

Copyright

Improvement Cycle
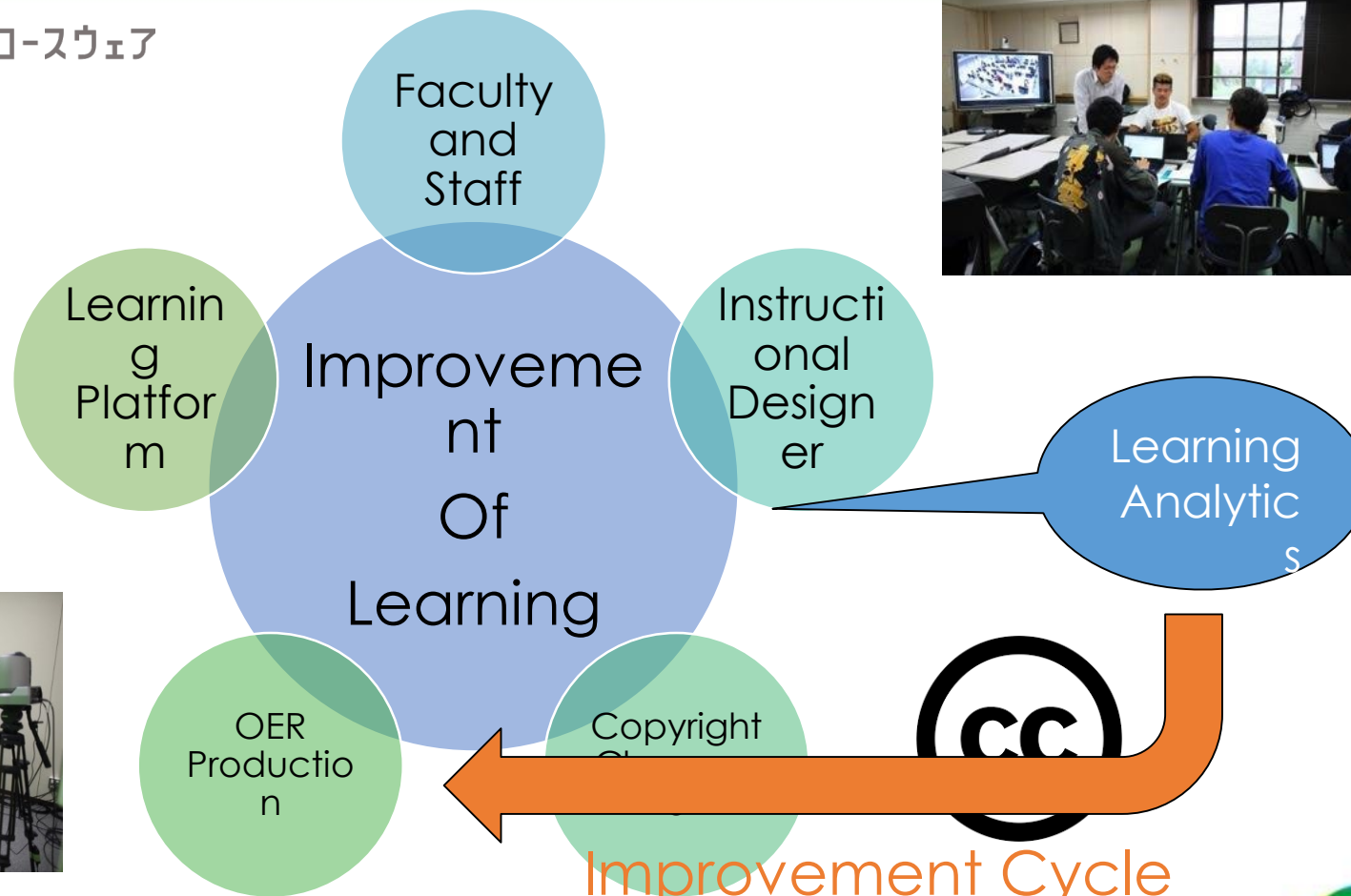
University-wide support for remote teaching

Creating website for Teaching online

https://sites.google.com/huoec.jp/onlinelecture

- ■ Guidance for selecting appropriate online teaching methods based on instructional design theory
- ■ Viewed by 390,000 people by the end of 2021
- ■ Accumulation of FAQs that aggregate answers to inquiries

Implementation of Seminar
For faculty and Staff
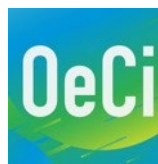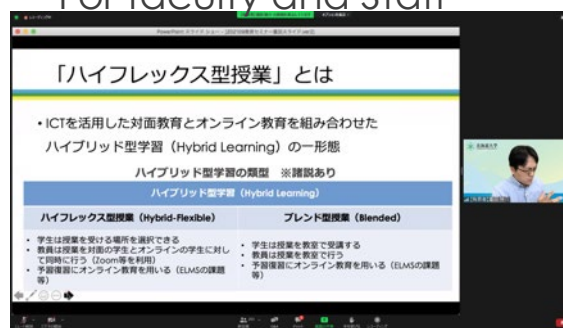
- ■ Sharing advanced educational methods and good practices
- ■ A total of 3,000 participants by the end of FY2021
- ■ Established a Slack group for online learning methods

Information Science Department
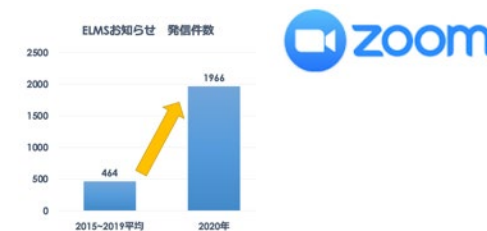
- ■ Increasing capacity of LMS
- ■ Introducing Zoom university license
- ■ Lending PCs and Wi-Fi routers to students

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Hybrid Leaning

- Hybrid-flexible learning for students' flexibility

- Blended learning combining online learning and face-to-face

Hybrid Learning	
Hybrid-Flexible	**Blended**
Emergency Remote Teaching	**Combining online and Face-to-face Learning**
• Students have the flexibility to choose where to take classes • Teachers give classes to both face-to-face and online students • Conduct supplementary lessons online by capture lecture	• Knowledge acquisition and self-evaluation online • Active learning and collaborative learning in face-to-face • Conducting exams and communication between faculty and students on campus

Challenges for hybrid-flexible learning

対面授業 同期型

同時配信授業 同期型　オンデマンド授業 非同期型

zoom　ELMS HOKKAIDO UNIVERSITY

自宅　自習スペース　　自宅　自習スペース

- Giving Students Flexibility in Taking Courses
- Infection prevention
- Increased burden on faculty

Student Attendance	Students' flexibility	Faculty burden	Learning effectiveness
Classroom	Easy to participate active learning and communication	Utilize existing teaching methodology	Relatively high
Synchronous online	Infection prevention	Difficulty to grasp students' learning status	Relatively low
Asynchronous online	On-demand learning by lecture video	Time consuming for lecture video preparation	Combining face-to-face learning is desirable

Rebuilding method : Developed by OEC
Transforming existing lecture to blended learning

Blended
(Flipped Learning)

Face-to-face

Synchronous
Online

Input(Lecture)	**Substitute**	Input(Lecture)	**Transform**	Input(video lecture)
Output(Individual assessment)		Output(Individual assessment)	**（Rebuild）**	Output(Individual assessment)
Collaboration (Group work)		Collaboration (Group work)		Mini lecture
				Collaboration (Group work)

https://sites.google.com/huoec.jp/onlinelecture/forteachers/toolkit

Rebuilding method : Developed by OEC
Transforming existing lecture to blended learning

Analyze existing lecture

- Reflect learning objectives and classifying teaching activities during class
- Classify teaching activities for five teaching strategies (Input, output, collaboration, communication, assessment)

Select appropriate teaching method

- Consider advantages and challenges to teach online or face-to-face
- Select appropriate teaching methods on each sections

Rearrange sequence(optional)

- Rearrange order considering learning objectives (ex. flipped classroom)

https://sites.google.com/huoec.jp/onlinelecture/forteachers/toolkit

Thank you everyone for your Patience