

RUSSIAN SCIENCE TECHNOLOGY AND EDUCATION
CONFERENCE (RUSTEC 2020)

Transformation of University
teaching methods: crisis and new
sustainable forms of education
process

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Content

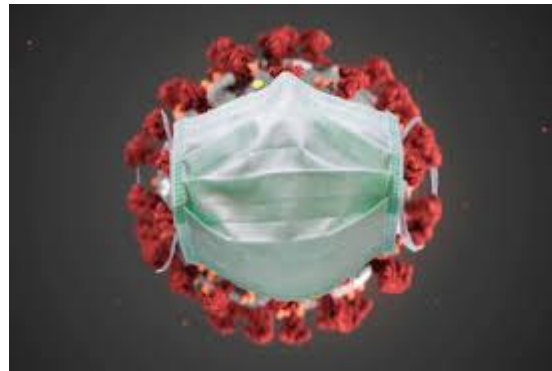
- ▶ What is the impact of crisis? COVID19 and University's life
- ▶ Case study of Korean University
- ▶ Flip-learning
- ▶ Problem/Project based learning
- ▶ What are the future expectations?

COVID19 and Education process

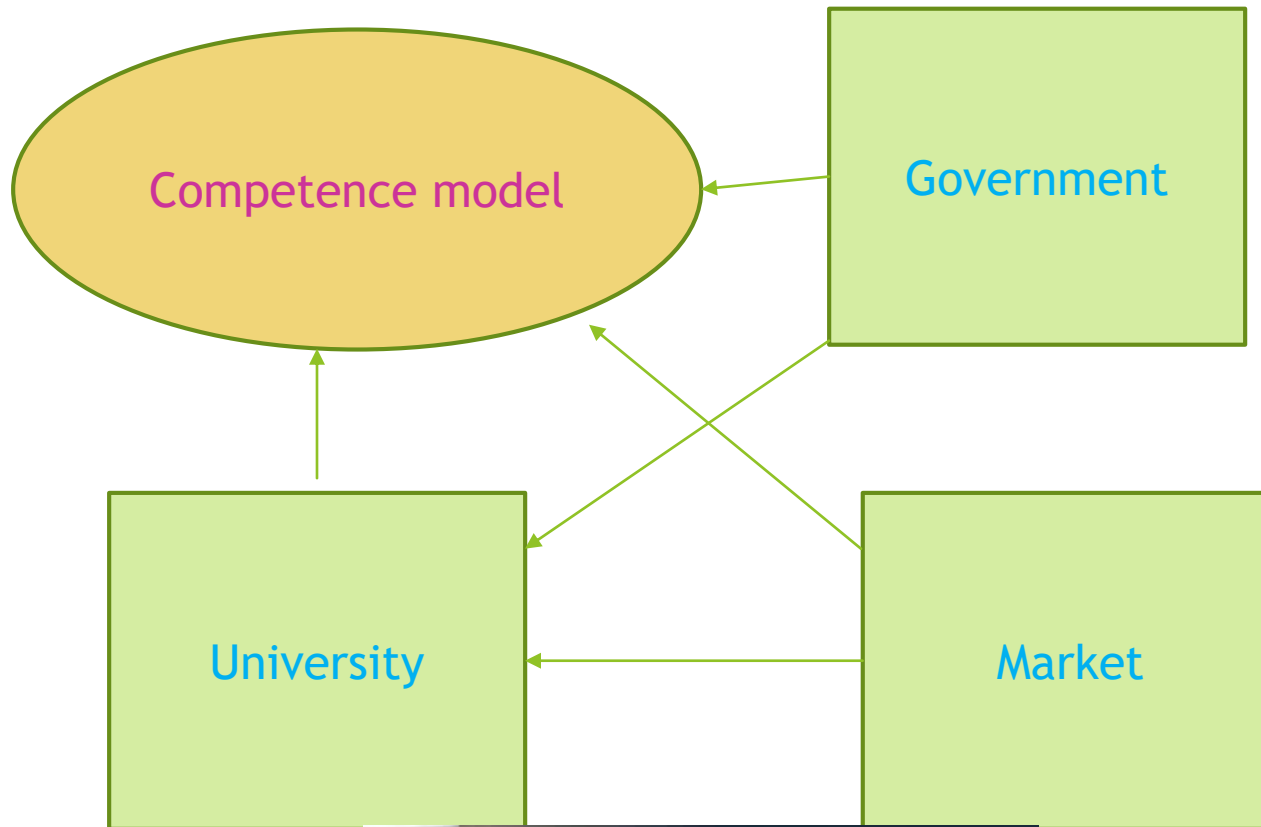
Before COVID19	During COVID19
Offline education	Online education
Face-to-face communication	Not physical communication
Mentorship	Tutorship
Environment and infrastructure	Technology based
Traditional forms of teaching	New forms of education
Incremental innovations	Radical innovation

Main discussion nowadays:

1. What is the final impact of COVID19 period for the University education system?
2. Will be the education system the same after crisis?



High level Education system in South Korea



Case study of Korean Universities

- ▶ Example: Korea University of Technology and Education (KOREATECH)
- ▶ School of Industrial Management
- ▶ Korean students (all levels/grades)
- ▶ Period: 2020 (semester 1 + semester 2)

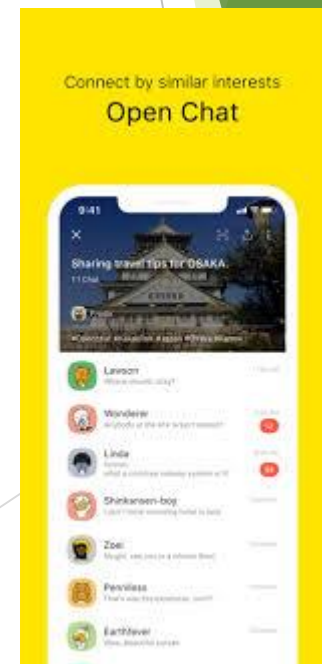
Story of education in 2020-1 semester

- ▶ Format: online+offline
- ▶ The start of semester was postponed
- ▶ Previous version of El University portal
- ▶ No changes in teaching methods except online approach



Story of education in 2020-2 semester

- ▶ Format: online
- ▶ The start of semester is in-time
- ▶ New version of El University portal - Real-time lecture option has been added
- ▶ Main changes in teaching methods: acceleration of PBL, FL, discussions, SNS

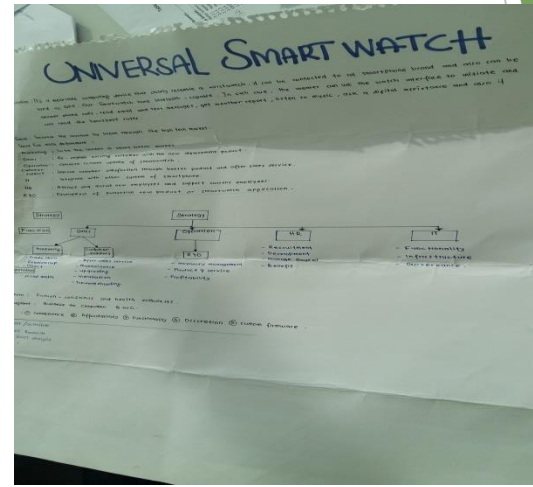


Management studies.

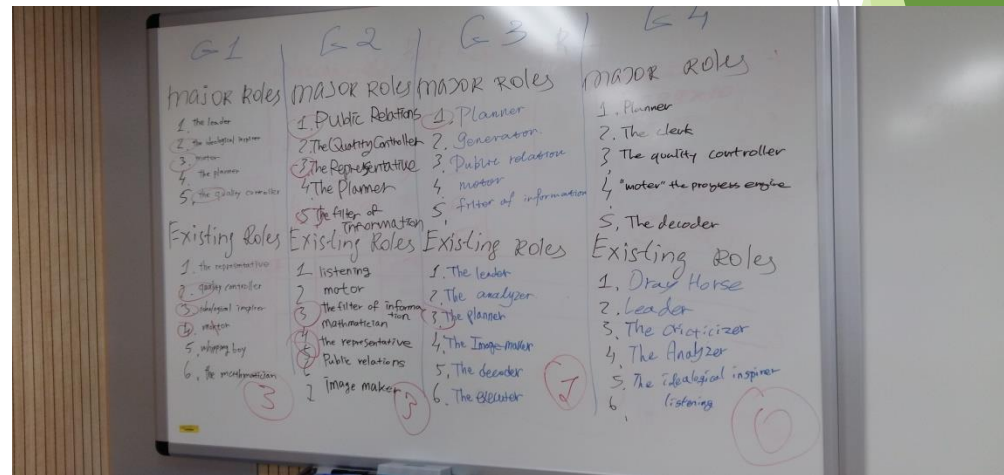
Flip-learning: Pre-class activity

- ▶ Watching video records
- ▶ Home task (based on video content)
- ▶ Book chapter reading
- ▶ Survey

In-class activity



- ▶ Practice (Real-time activity in Zoom)
- ▶ Discussion
- ▶ Business games
- ▶ Case study



After-class activity

- ▶ Q&A
- ▶ SNS chat
- ▶ Problem statement



Advantages

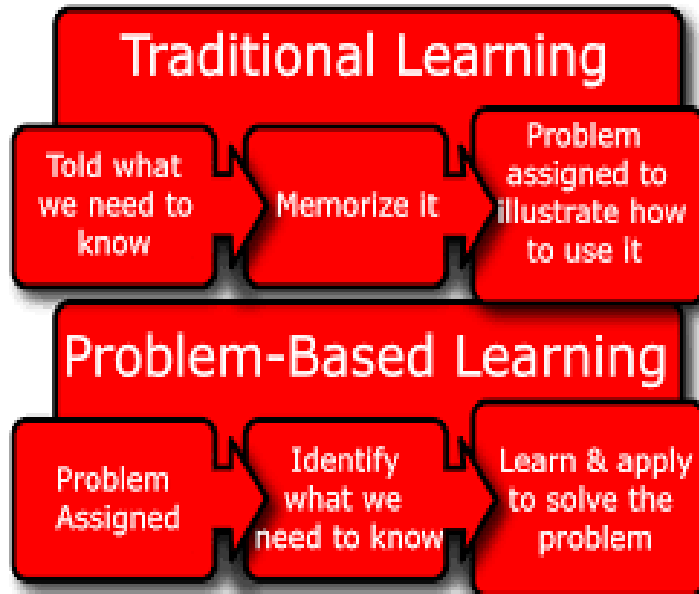
- ▶ More discussion
- ▶ More lecture and explanation
- ▶ More practice
- ▶ Effective group dynamics
- ▶ More easy during online period of education

PROBLEMS

- ▶ Students don't know about flip-learning - so they are afraid to apply to such course
- ▶ Students have low level of motivation to do home task (pre-class activity)
- ▶ Most of the students tell that it is not easy for them to listen English video lecture

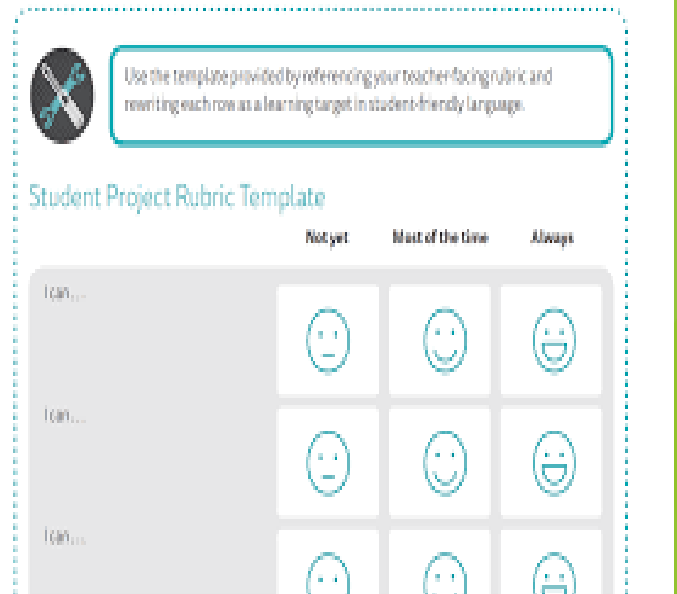
Problem/Project based learning

- ▶ Problem-based
- ▶ Cases study (3 steps for 3 weeks: problem recognition, discussion, solution presentation)
- ▶ Project-based
- ▶ Project (number of project steps depends on number of educational weeks)












Benefits of PBL in the era of COVID19

- ▶ Easy to manage such class online
- ▶ Acceptable for daily communication process between professor and student
- ▶ More interesting format for online classes
- ▶ Acceleration of innovative decisions and textbooks
- ▶



Use the template provided by referencing your teacher-facing rubric and rewriting each row as a learning target in student-friendly language.

Student Project Rubric Template

	Not yet	Most of the time	Always
Learn...			
Learn...			
Learn...			

Summary

- ▶ What we can learn from COVID19 educational period for our future?
- ▶ New technologies?
- ▶ New competencies?
- ▶ New professions?
- ▶ **New strategies!**



Thank you!

