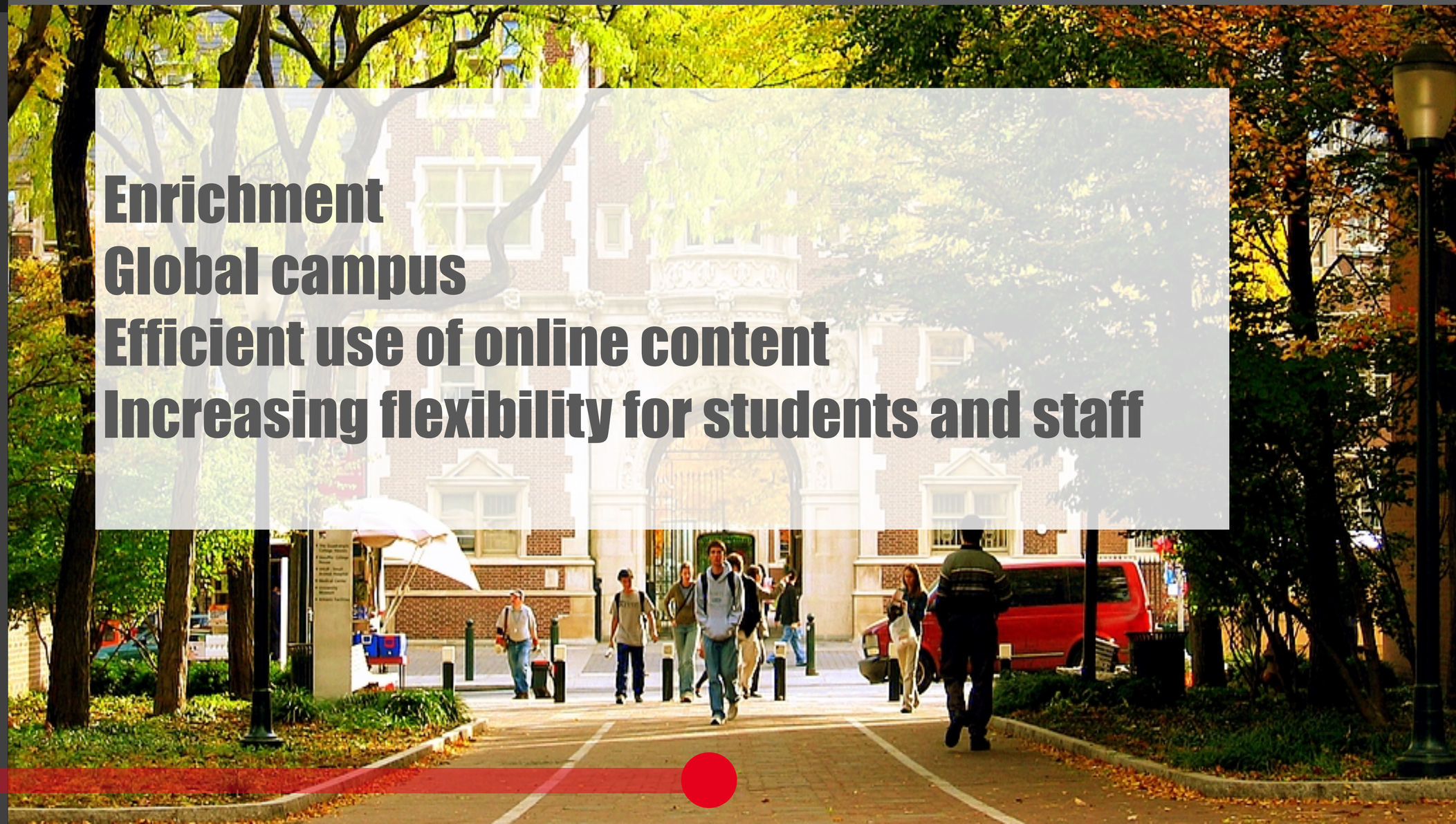
MOOCs for credit

Virtual exchange

Why?

ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

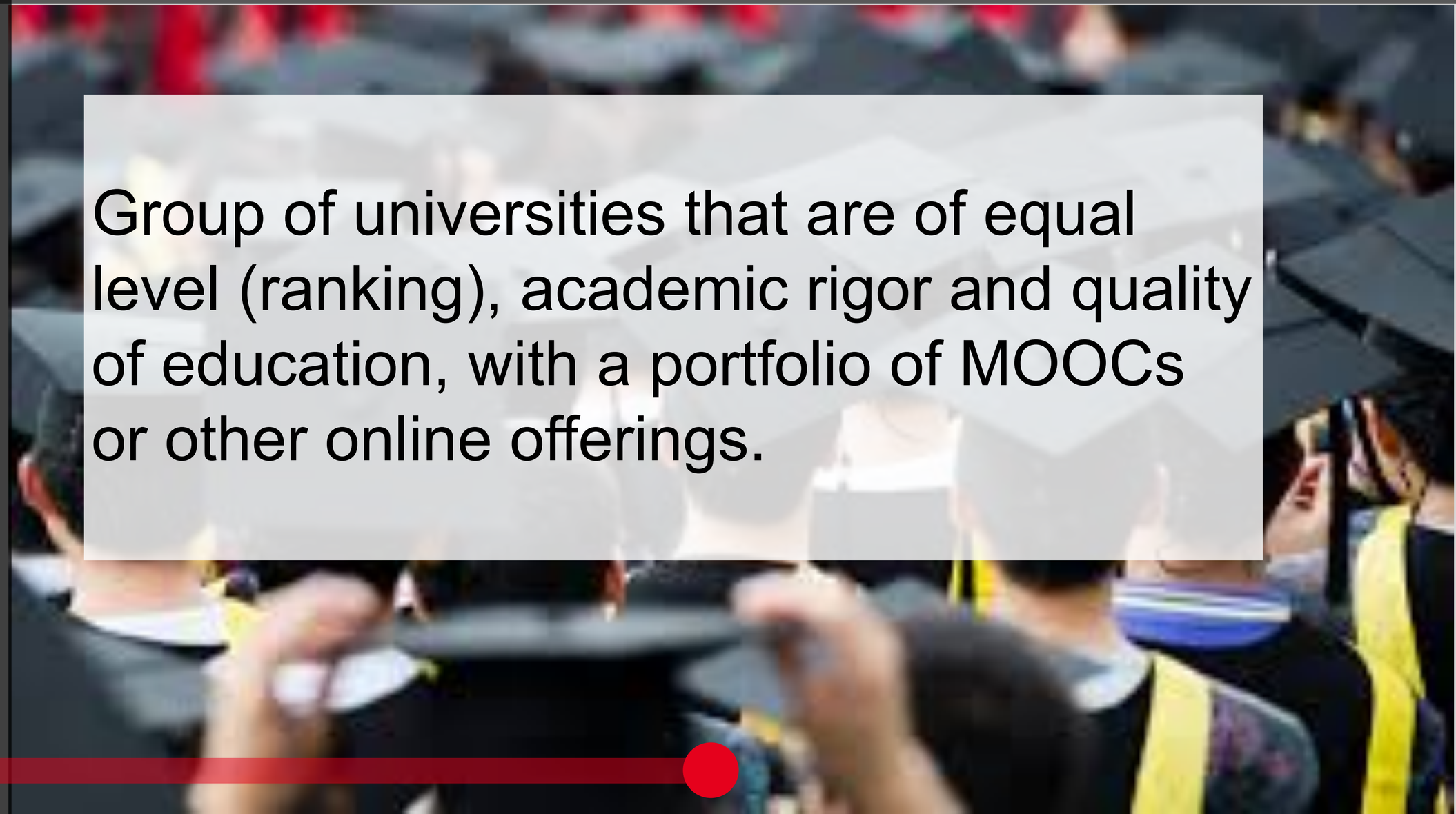


Enrichment
Global campus
Efficient use of online content
Increasing flexibility for students and staff

Virtual exchange

Who?

ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE



Group of universities that are of equal level (ranking), academic rigor and quality of education, with a portfolio of MOOCs or other online offerings.

Virtual exchange

Who?

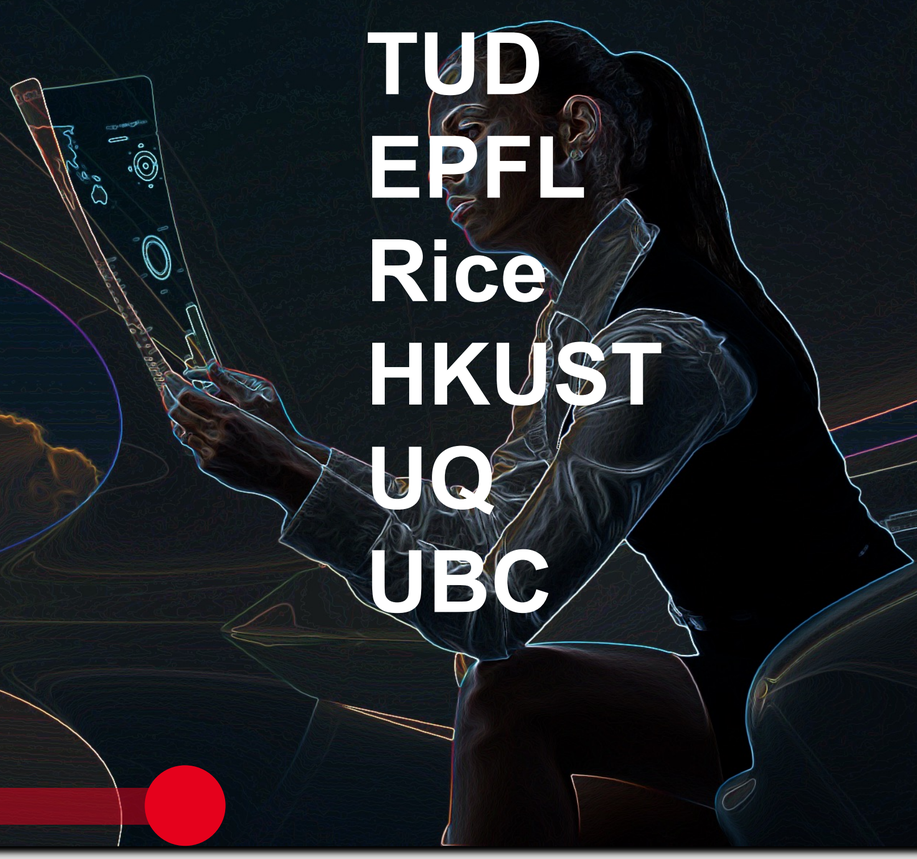
ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE

European Virtual Exchange

EPFL
UC Louvain
WUR
UC3M
EP
Leiden University
TUD
UPMC

Global Alliance

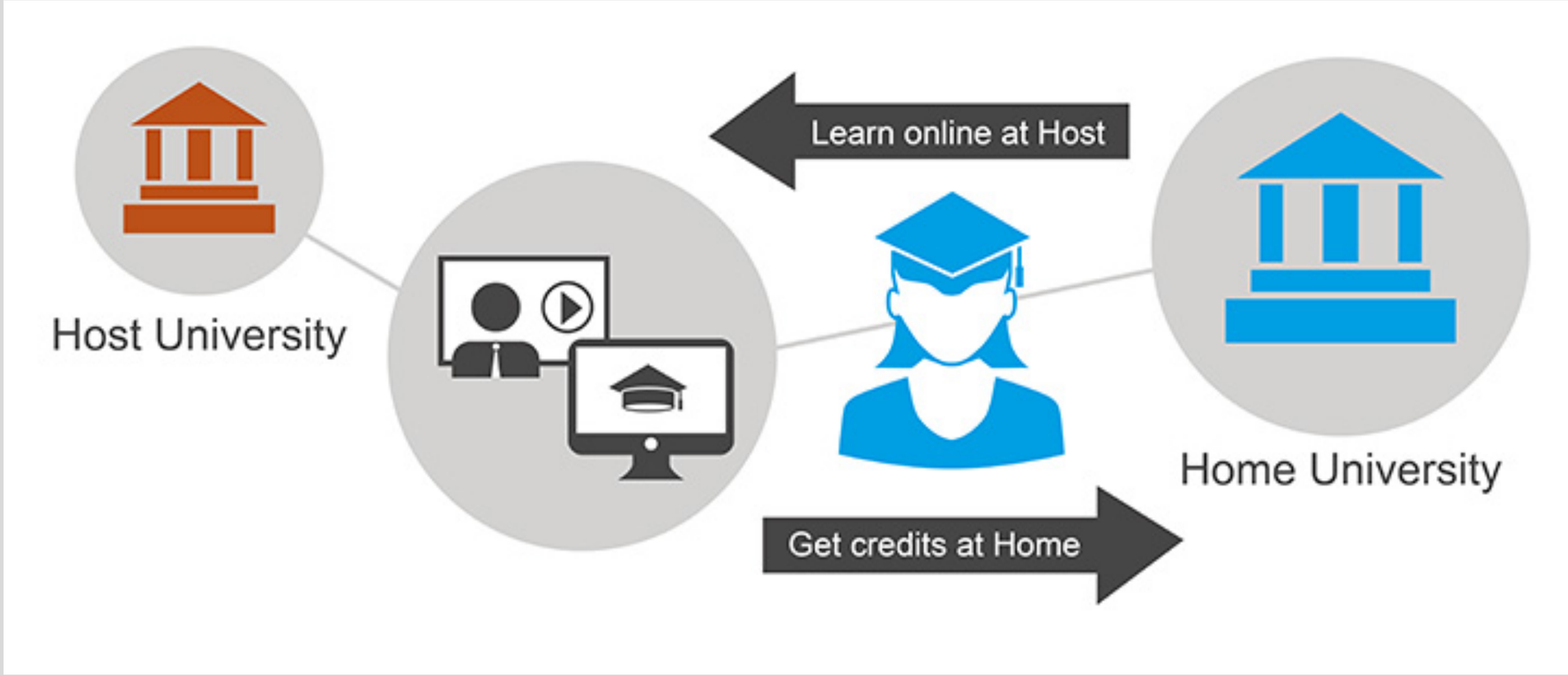
ANU
TUD
EPFL
Rice
HKUST
UQ
UBC



One interface

Virtual exchange

What?



Virtual exchange

What?

ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE

Host University

- Offers MOOC
- Creates exam
- Grades exam
- Sends transcript
- Handles appeals and complaints

Home University

- Has students
- Supervises on campus exam
- Acknowledges credit

Virtual exchange

For Whom?

ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

Students at EPFL:

- Optional courses for 3rd year Bachelor
- Optional courses for 1st or 2nd year Master students, with excellent performance
- Approval procedure similar to regular exchange:
  - Case by case
  - Section director

Virtual exchange

How

ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

3 year pilot, **4** guiding principles:

- Mutual trust
- Modest effort
- Different timing
- Synchronous and same exam

Virtual exchange

Mutual trust

ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

We offer MOOCs also to our own students

The MOOCs and exam are thus part of regular QA process

Exam regulations are same as for regular courses

Virtual exchange

Modest effort

ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

The MOOC should be self-sufficient
Maximum number of extra students for grading
Simple or existing administrative procedures

Virtual exchange

Different timing

ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

We recognize different semester start and end
We recognize different time zones
We recognize different academic year start and end

Virtual exchange

Synchronous exam

ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

All exams of a certain MOOC have to take place at the same time at the different universities

All exams of a certain MOOC have to take place in the same way

Agreement

ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

1. Host University offers MOOC to own students and exchange students

2. Home University allows students to take MOOC for # credits

3. Host University accepts exchange students

4. Exchange student is registered as non-degree credit earning student at host university

5. Host University regulations and procedures apply

Responsibilities and challenges for Host University

ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE

Finding professors who want to grade extra exams

Scheduling the exams months in advance

MOOCs and on-campus course have to be similar or new MOOCs have to be included in the study plan

Current status at EPFL: Digital Signal Processing & Fundamentals of Biomedical Imaging

Responsibilities and challenges for Home University

ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE

Selecting and accepting MOOCs from other Universities (exam times and types, content)

Proctoring exams on-site according to Host University rules

Supporting students in their exchange adventure: other rules & complaint procedures, all has to be followed online
& how to integrate with on-campus courses at home university

Current status at EPFL: Start September 2017

Virtual exchange

Discussion at EPFL

ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

- Select MOOCs that you offer your students?
- Approve individual applications?
- Offer own MOOCs at own students?

Current MOOC list (+/- 30)

ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE

Découvrir la science politique

Décrypter des enjeux politiques actuels à partir d'une boîte à o
importantes, une démarche analytique et une perspective critiq
de Louvain

Language: French (no subtitles)
Credits: 5 ECs
Maximum number of students: 10
Start date: 18 September 2017 | Application dea

now

See course description | Sneak Preview on edX

Introduction to Supply Chain Managem

Learn how to make rational and confident supply chain decisior
they impact the finance, market and strategy of your company
de Louvain

Credits: 5 ECs
Maximum number of students: 10
Start date: 1 Novermber 2017 | Application deac

now

See course description | Sneak Preview on edX

iOS programming (Programmation iOS

Vous voulez apprendre à programmer sur un iPhone ou un iPac
vous. Il vous donnera les bases de cette programmation et vou
vos premières applications | **UPMC Sorbonne Universités**

Language: French, English subtitles
Credits: 6 ECs
Maximum number of students: 15
Start date: 1 September 2017 | Application deac

now

See course description | Sneak Preview on edX

https://moocs.epfl.ch/page-146328-en.html

Target outcomes

ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

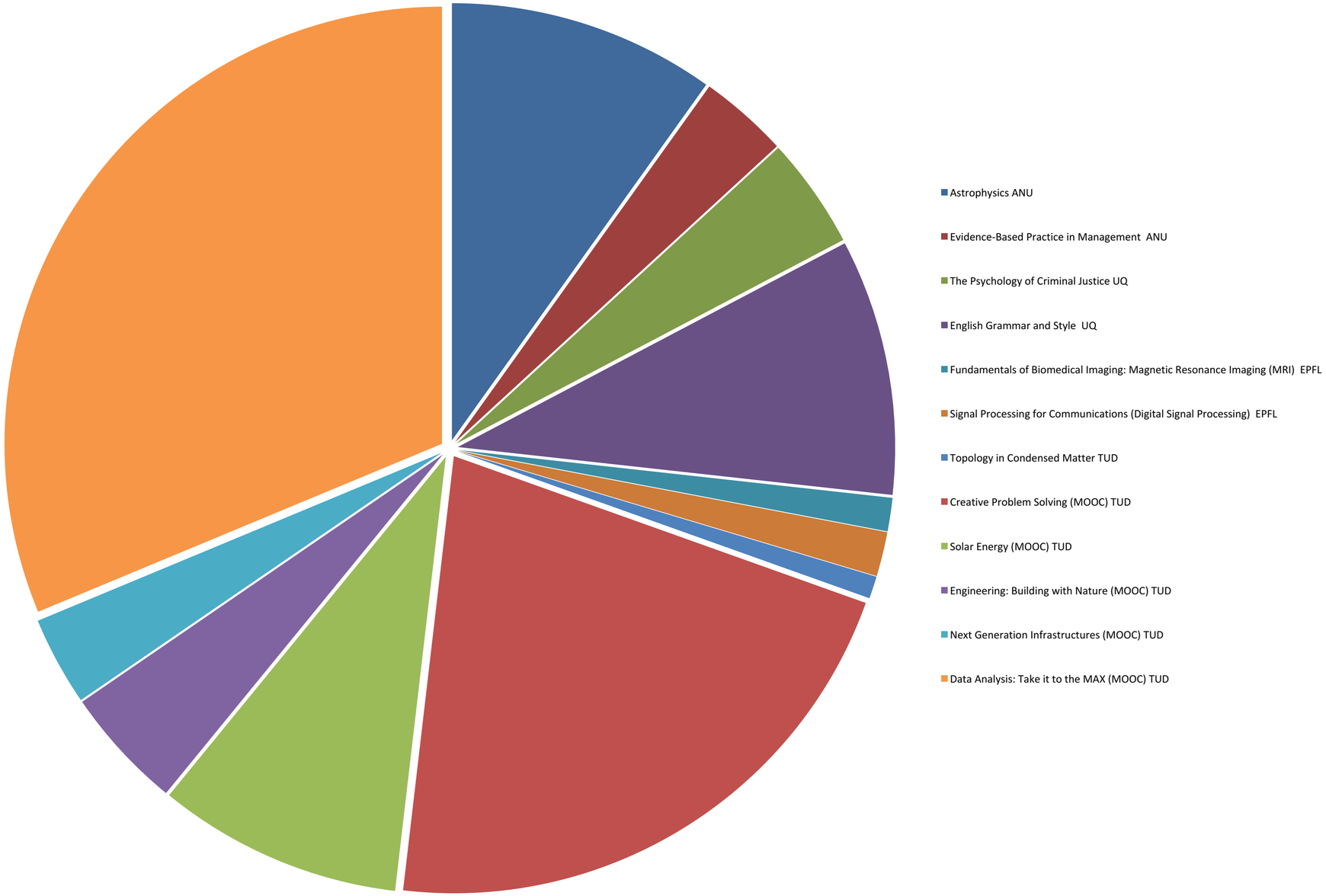
The students' performance ratio's per course (drop out/fail/pass) are not significantly different for internal and virtual students

The ratio of credits received and credits given to participating universities through the MOOC's is between 0.8 and 1.2 for each university

The course evaluations of on-campus
and virtual students should not be significantly different.

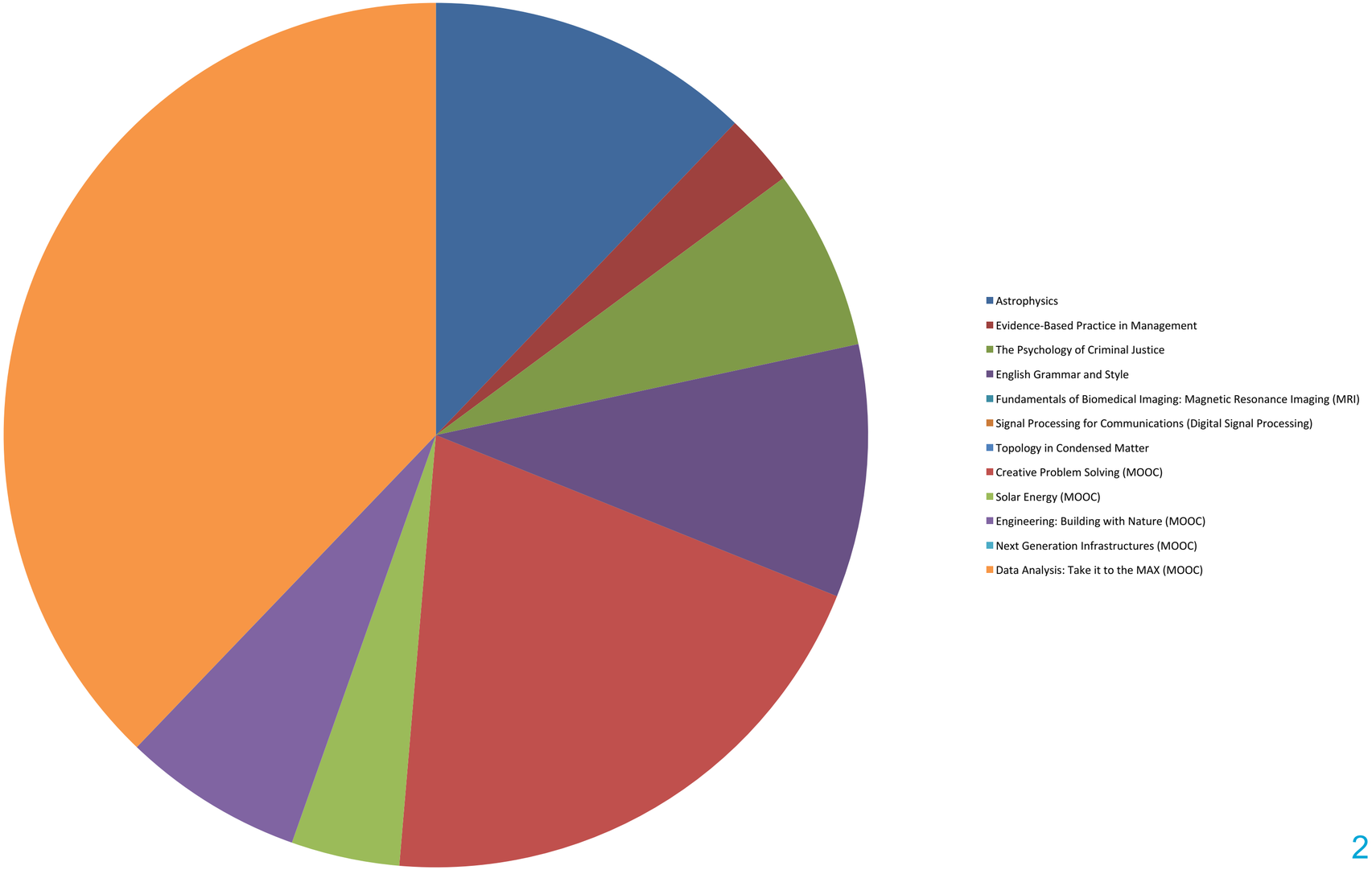
Virtual exchange

Enrolled students (n=243)



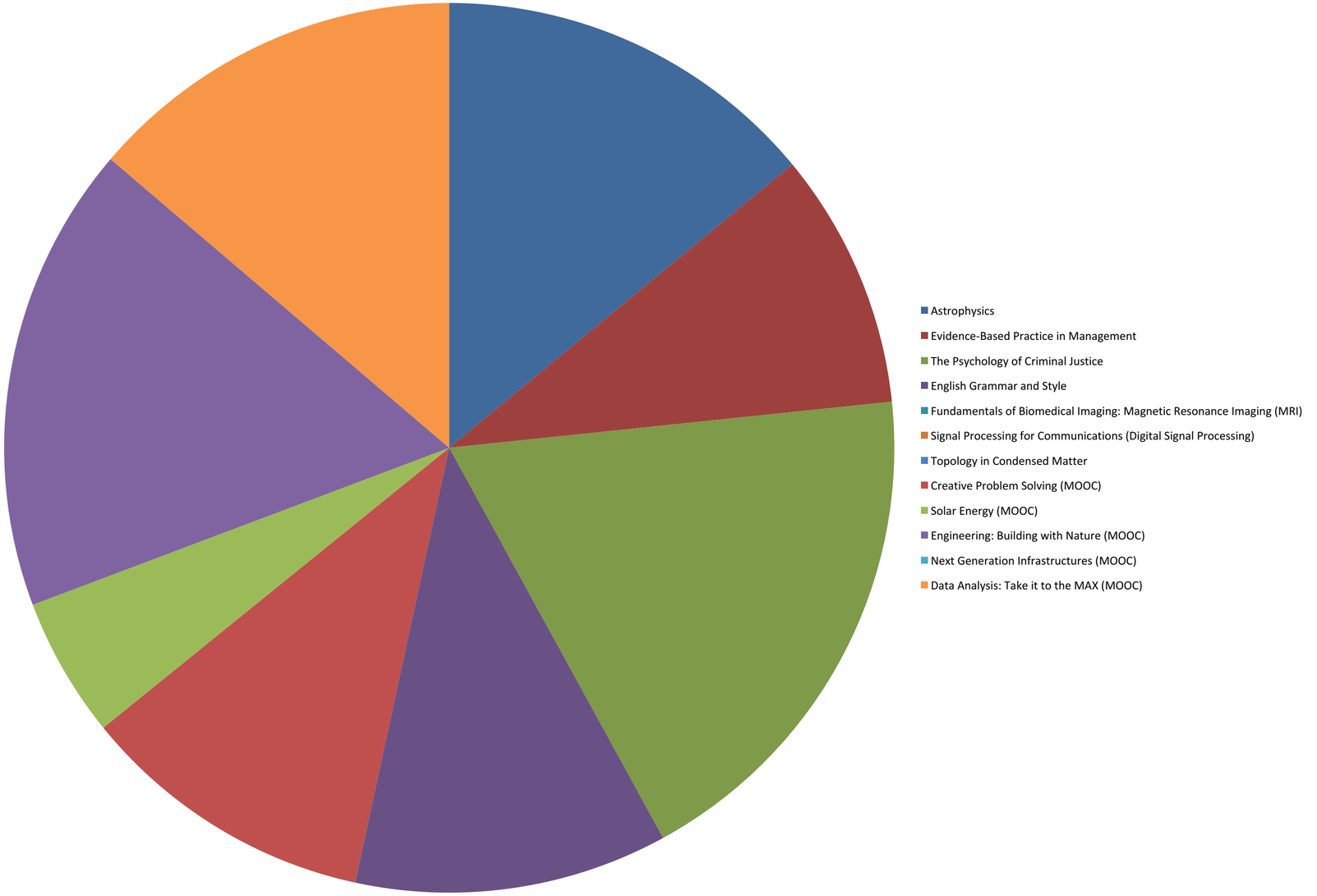
Virtual exchange

Who did the exam (n=74 including European alliance)



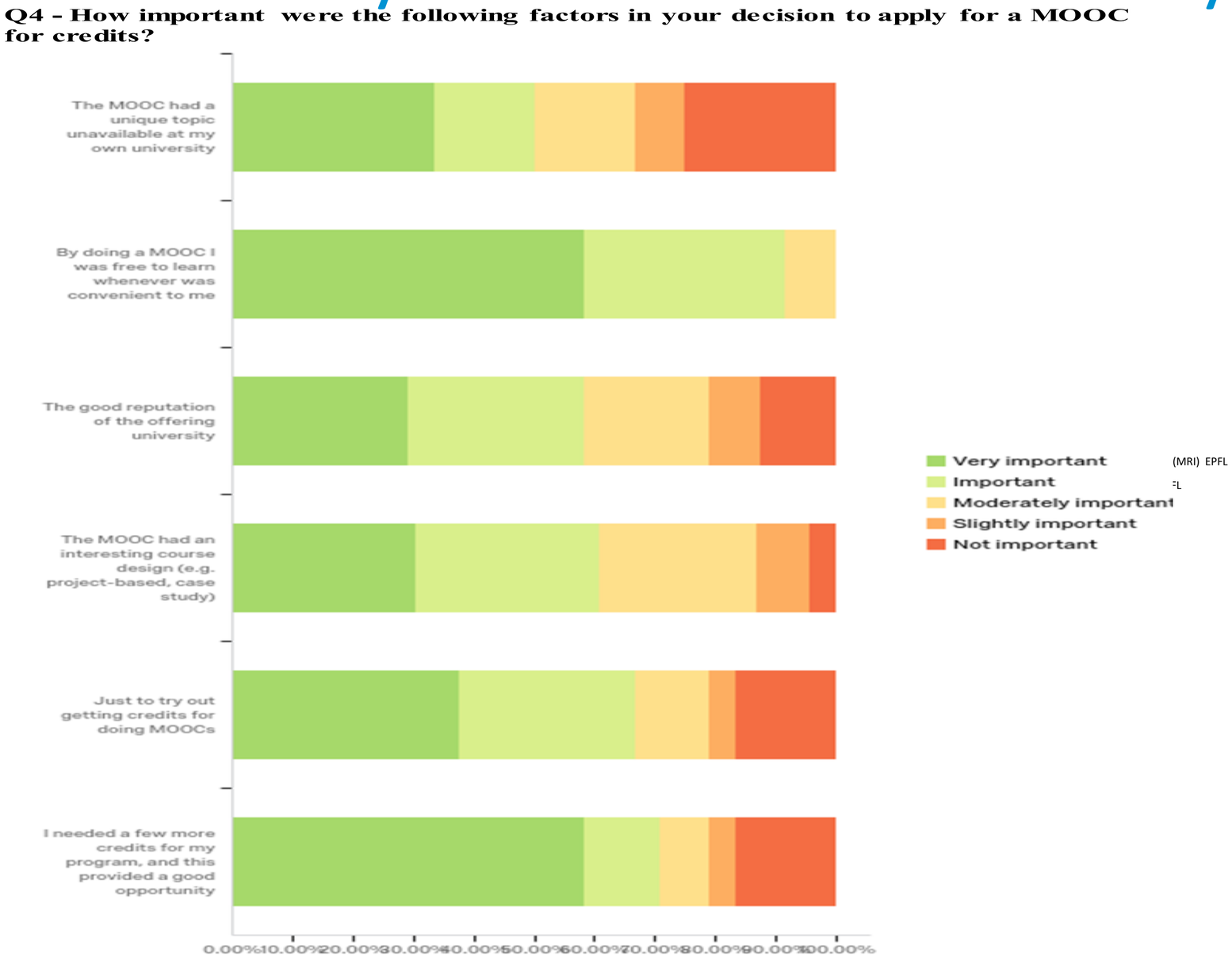
Virtual exchange

Completion rates per course



Virtual exchange

Preliminary results of student survey (n=24



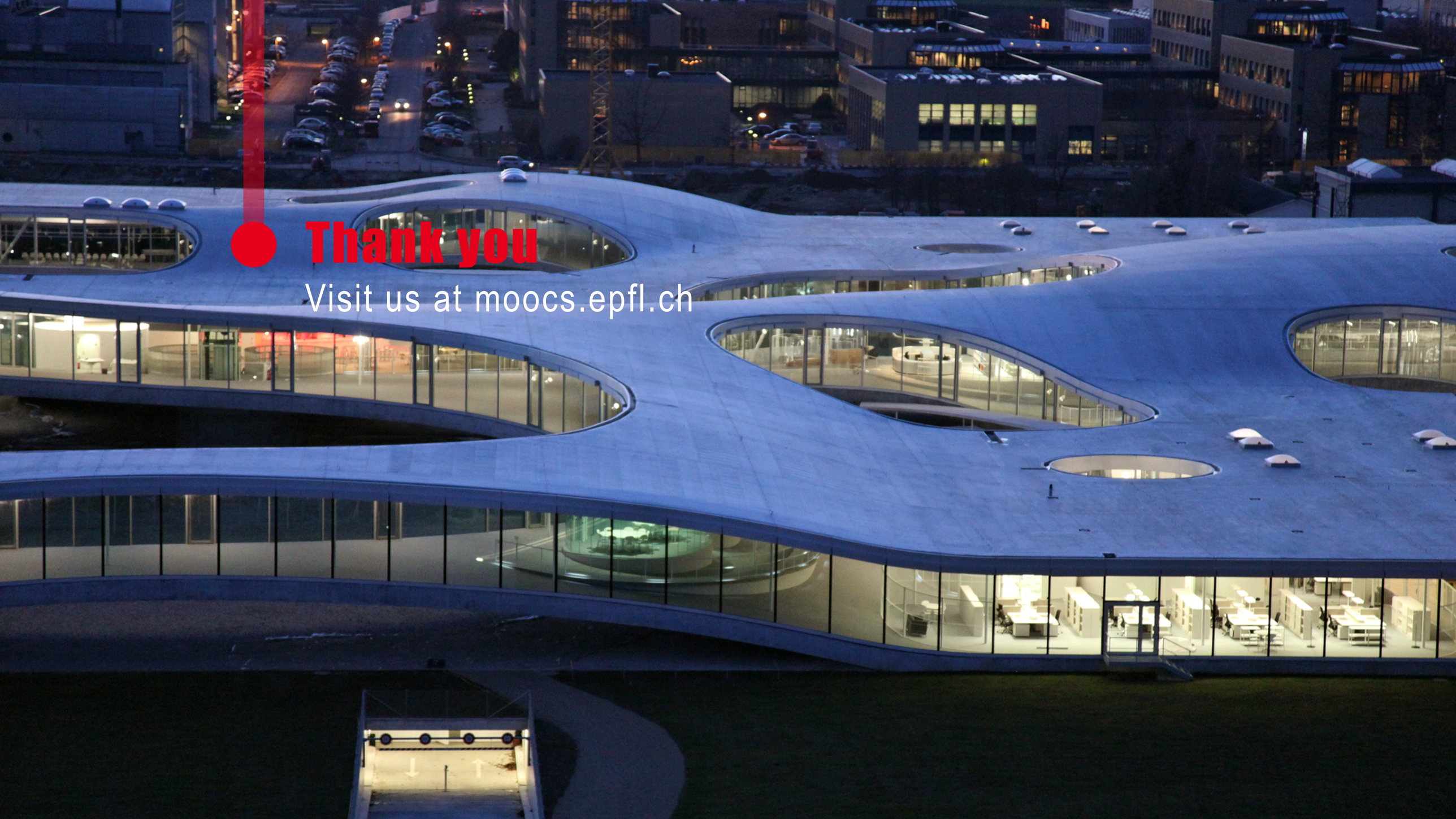
Virtual exchange

Lessons learned

ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

Challenges:

- Drop out rates high – investment high
- Fitting a new approach to match old rules and procedures
- Admin procedures are tedious
- What about costs – tuition fees etc


Thank you
Visit us at moocs.epfl.ch