University of Basel

Facing Challenges of Online Teaching in Higher Education Institutions due to the First COVID-19 Lockdown

The Role of University Teachers' Experience, Attitude and Self-Efficacy

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IAIE 2021 Conference, ONLINE in Tel Aviv
Intercultural Education in an Age of Information and Disinformation - June 28, 2021

1 COVID-19 situation and intercultural education

- COVID-19 has disrupted conventional learning and teaching at educational institutions (Bozkurt et al., 2020; Crawford et al., 2020).
- > 80% of schools closed during the first COVID-19 wave (UNESCO).
- Most important educational response: Continuity of education.
- But: Also social, economic and political consequences arised.
- Now: Where does intercultural education stand in all this?

2 Educational Technology to Close the Gap

- Educational technology includes a variety of digital tools and applications.
- Educational technology is a means to achieve instructional goals (Ross et al., 2010).
- It should at any point improve the quality of teaching, by…
  - Increasing the intensity of learning, supporting active learning,
  - Supporting individualised / personalized learning, and
  - Supporting online social learning (Getto, 2020).

  → **Also enable intercultural learning in an online environment.**

- According to studies, educational technology has a positive effect on learning outcomes (Schmid et al., 2014).
- During COVID-19: Online teaching ≠ emergency remote teaching.

3 Attitude and Self-Efficacy as Key Factors

- **Attitude** «refers to the degree to which a person has a favourable or unfavourable evaluation of the behaviour in question» (Ajzen & Madden, 1980).

→ *Positive attitude towards educational technology influences the use of it* (Amhag et al., 2019; van der Spoel et al., 2020; Semerci & Aydin, 2018).

- **Self-efficacy** is defined as the teacher's belief or confidence in their ability to foster student learning outcomes (Tschannen-Moran et al., 1998).

→ Teacher with high self-efficacy beliefs can endure difficult times and ensure quality of teaching (Bandura, 1986).
→ Teacher self-efficacy helps to take new educational technology up and to adapt for the switch to online teaching during COVID-19 (Kaqinari et al., accepted).

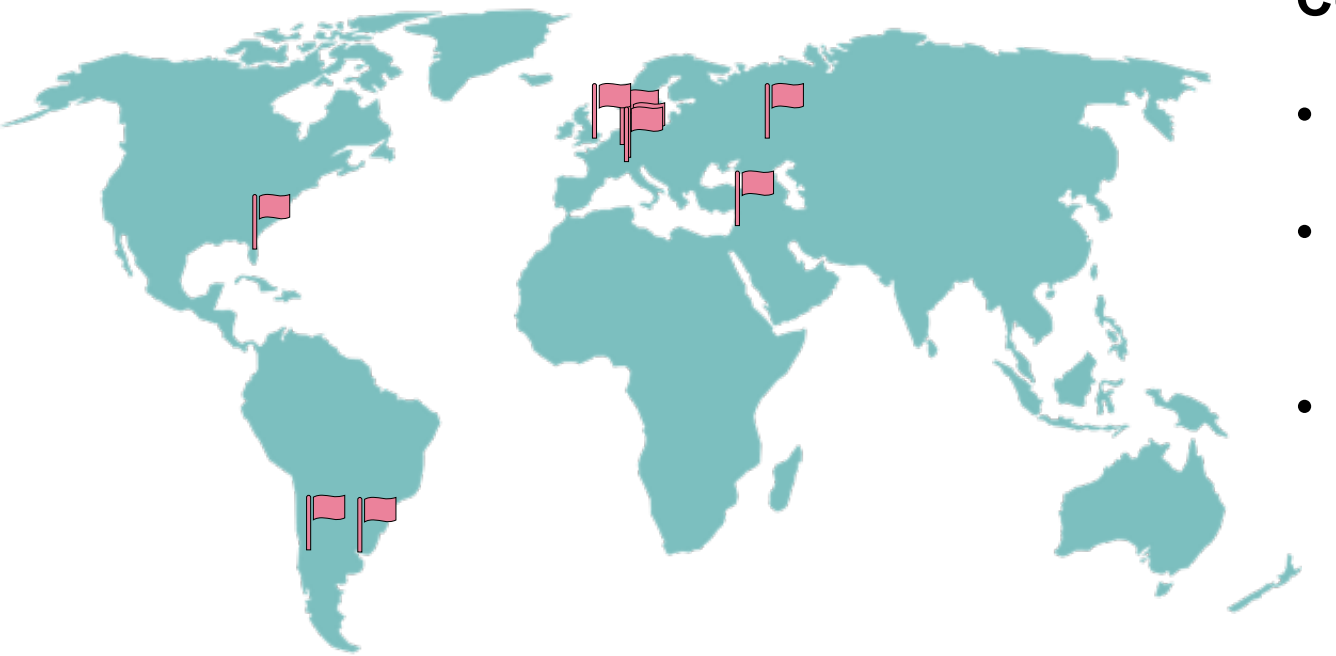
4 Research Questions

How does the use of educational technology vary by lecturers of different universities?

What is the role of experience, attitude, and teaching self-efficacy for the use of educational technology for online teaching?

What conclusions can be drawn for intercultural education?

5.1 The CRTS-Study: Context



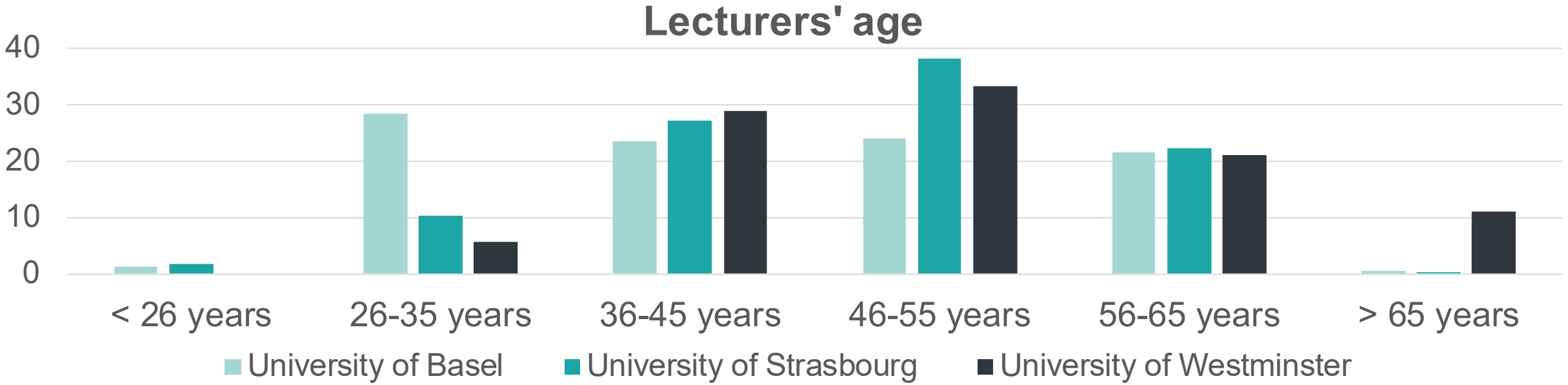
- **Project initiators**
  - University of Basel, Switzerland
  - Universidad de Buenos Aires, Argentina
  - University Duisburg-Essen, Germany
  - The Hebrew University of Jerusalem, Isreal
  - University of Miami, USA

Coronavirus-related teaching situation study

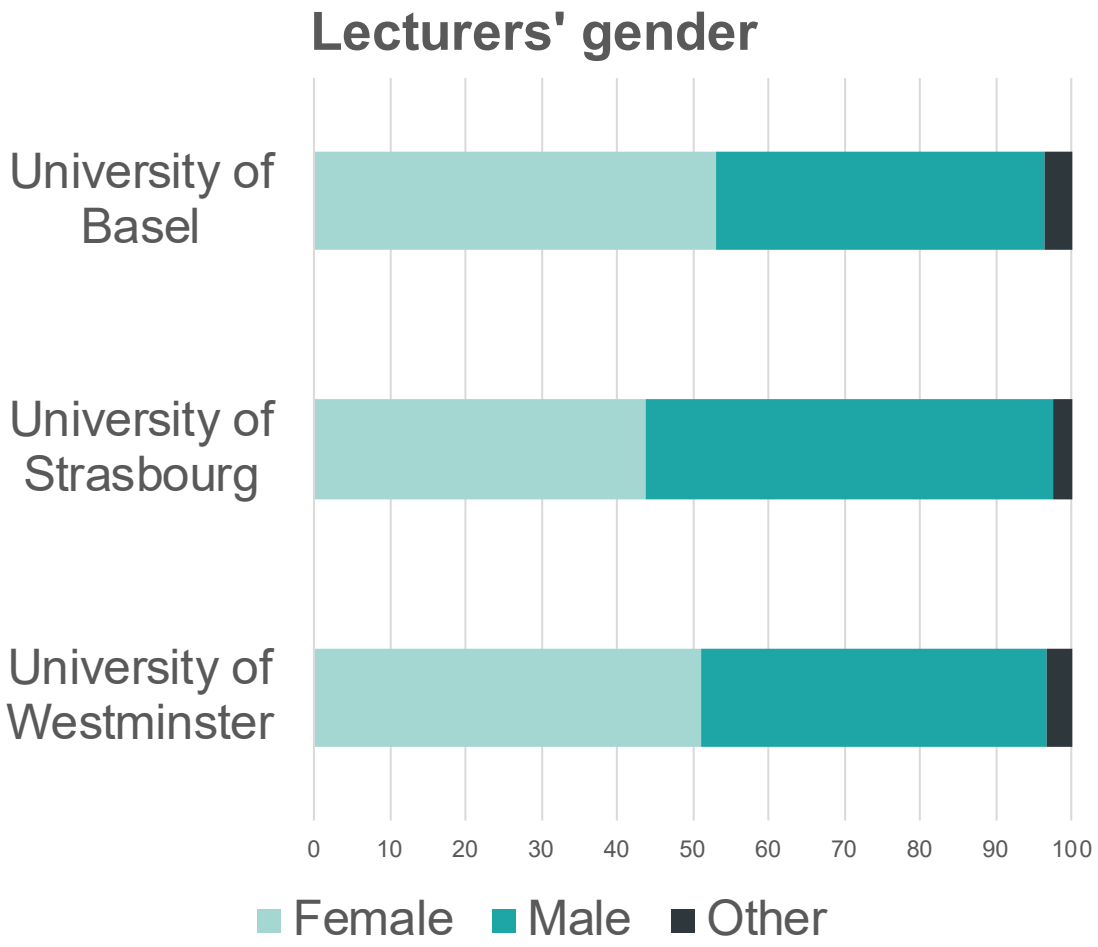
- University lecturers were surveyed
- During the first COVID-19 wave (May-June 2020)
- Data presented here from lecturers at…
  - University of Basel, Switzerland
  - University of Strasbourg, France
  - University of Westminster, England
- The trilingual questionnaire comprised items/scales regarding…
  - Educational technology use before and during the lockdown
  - Attitude towards educational technology and self-efficacy in teaching

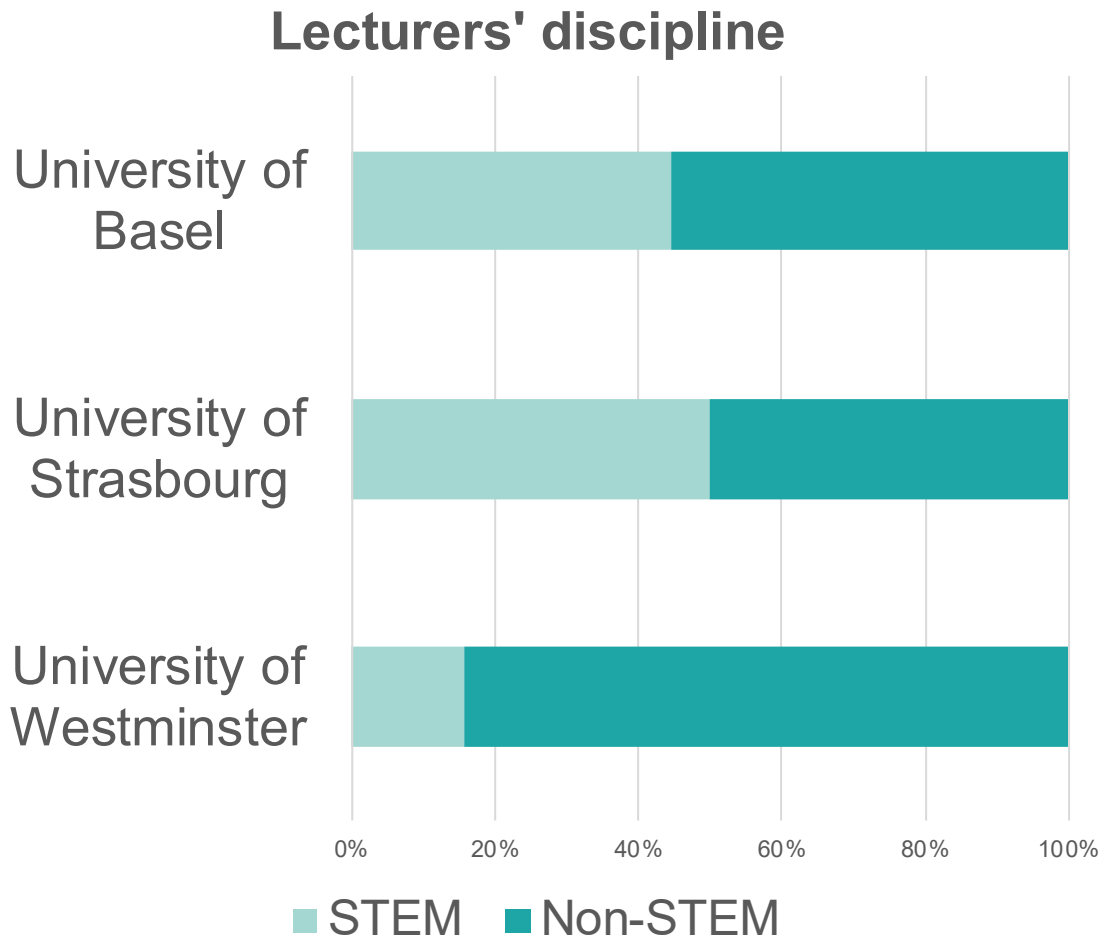
5.2 The CRTS-Study: Sample

University	N	%
University of Basel (UB)	162	26.5
University of Strasbourg (US)	360	58.8
University of Westminster (UW)	90	14.7
Total	**612**	**100.0**



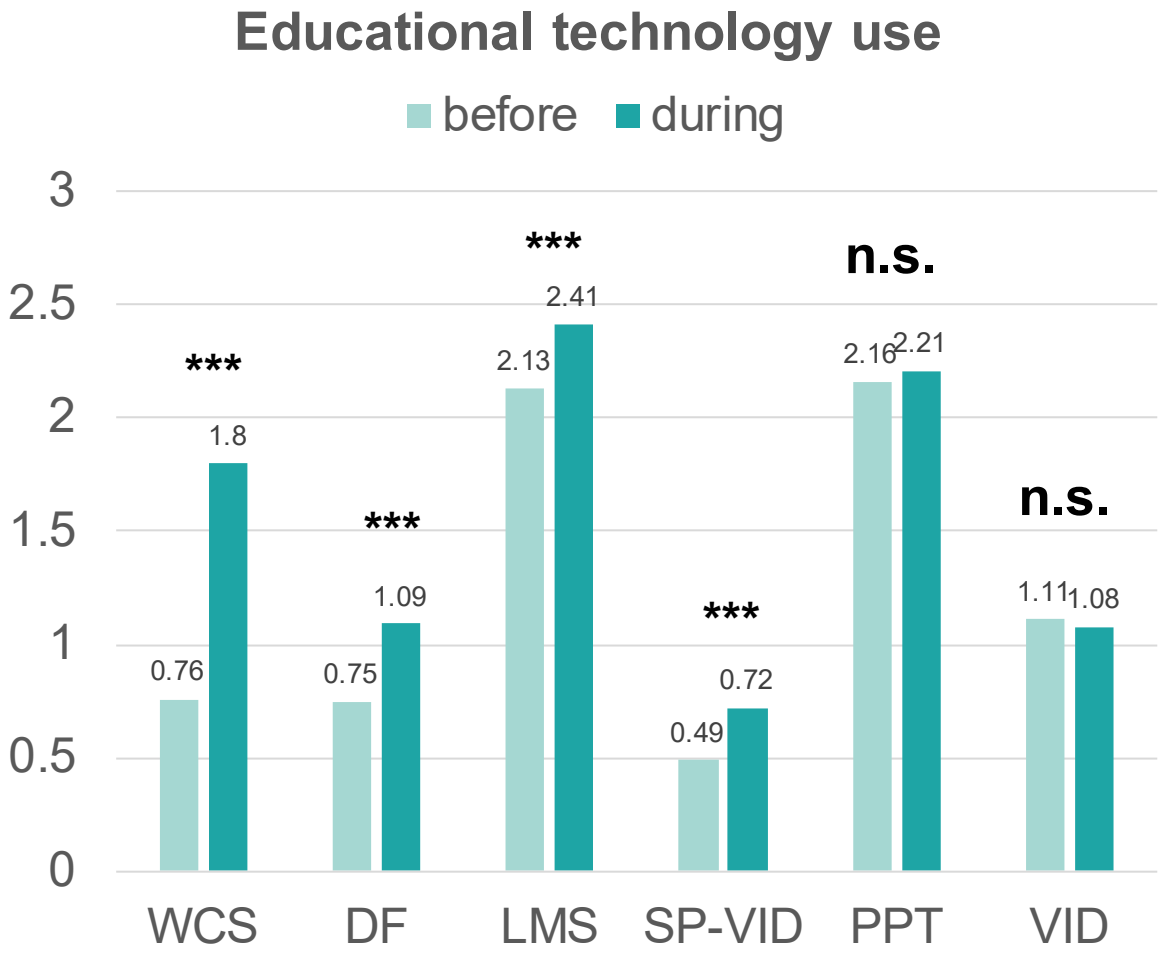
5.2 The CRTS-Study: Sample

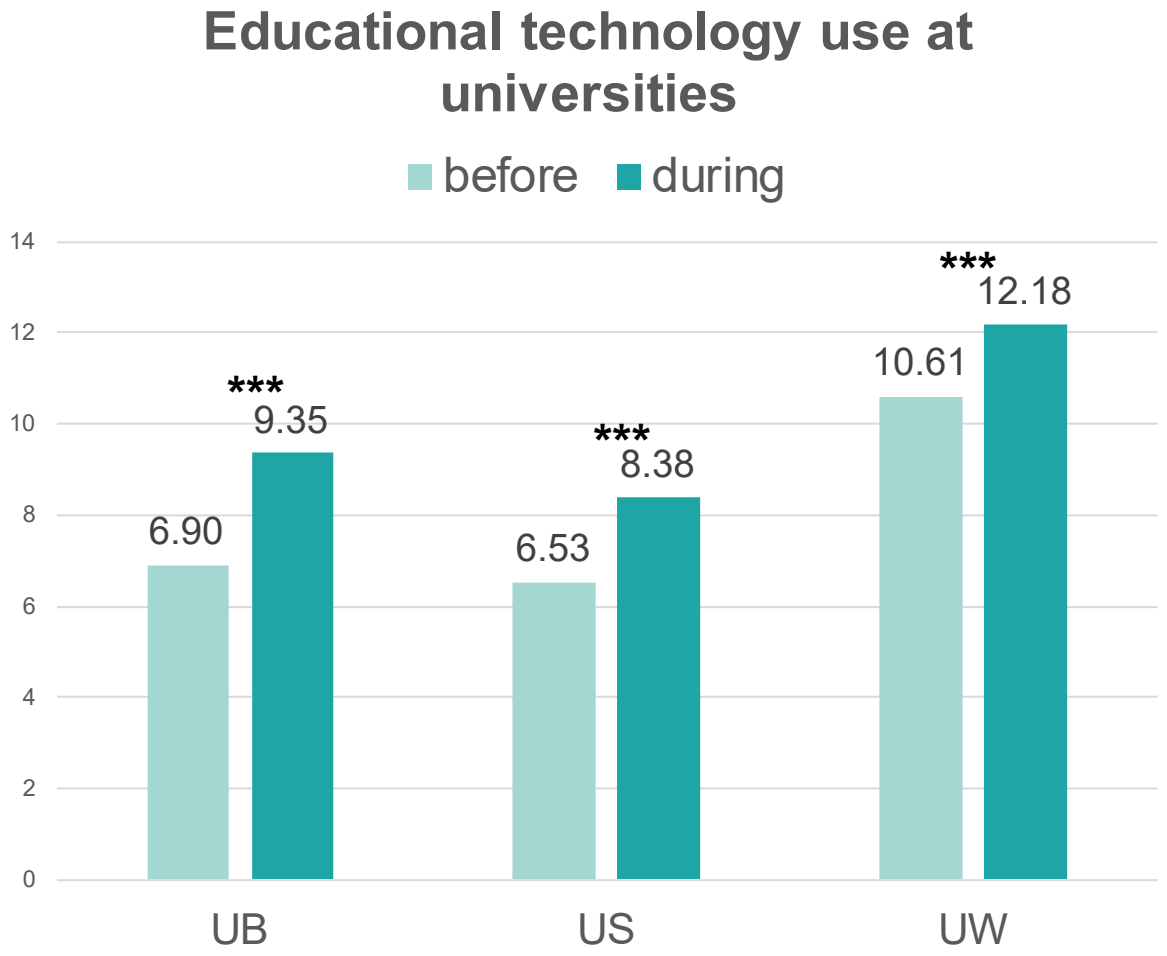




5.3 The CRTS-Study: Results

How does the use of educational technology vary by lecturers of different universities?





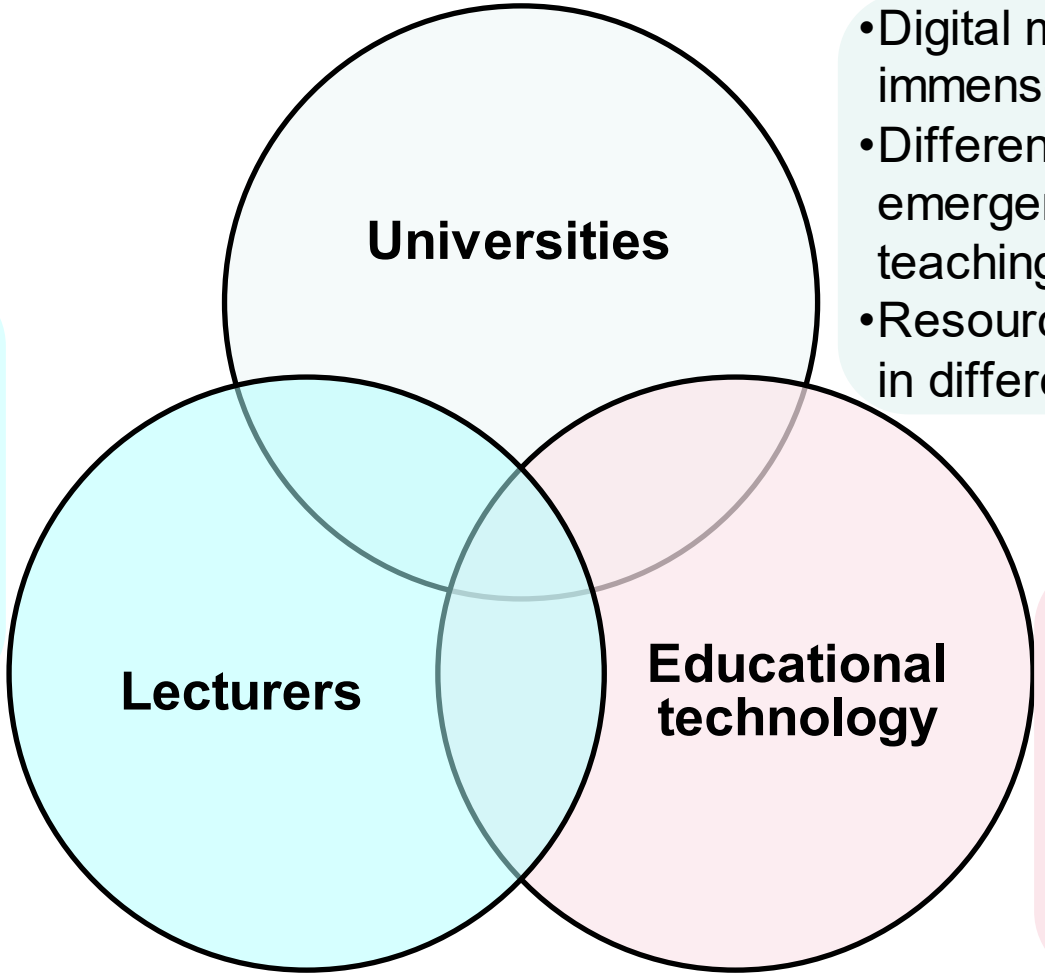
5.4 The CRTS-Study: Results

What is the role of experience, attitude, and teaching self-efficacy for the use of educational technology for online teaching?

	Model 1		Model 2	
	β	*p*	*β*	*p*
Gender (0=female, 1=male)	-0.086	.067	-0.039	.284
Age	-0.067	.163	-0.114	**.001**
Discipline (0=STEM, 1=Non-STEM)	0.112	**.018**	0.019	.606
Attitude			0.049	.206
Self-efficacy			0.117	**.002**
EdTech use before			0.591	**< .001**
Adjusted R2	0.024		0.445	
F	(3, 457) = 4.81 *p* = .003		(6, 454) = 62.40 *p* < .001	

6.1 Conclusion

- Lecturers with different prerequisites for online teaching.
- Experience and self-efficacy as key factors for a successful shift.



- Digital maturitiy differed immensely.
- Differences in pivoting to emergency remote teaching.
- Resources were mobilised in different ways.

- Educational technology as a means to ensure education.
- Synchronous online teaching to replace conventional university teaching.

6.2 Conclusion

What conclusions can be drawn for intercultural education?

1. Universities as institutions have their own culture:
   - Embedded in a cultural context (with members from different cultural backgrounds)
   - Organizational culture

2. A sudden switch to online teaching needs immense personal resources. Therefore, it is important to refocus on intercultural education in an online environment:
   - Digital equity (Resta & Laferrière, 2015)
   - Interculturality in online learning and teaching (Sadykova & Meskill, 2019)
   - Intercultural education in an online environment (Damary et al., 2017)

3. Intercultural education = online intercultural education?
   (Dautbašić & Saračević, 2020)

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Thank you
for your attention.