Lessons learned from emergency remote teaching

- Vocational Education and Training during and post COVID19

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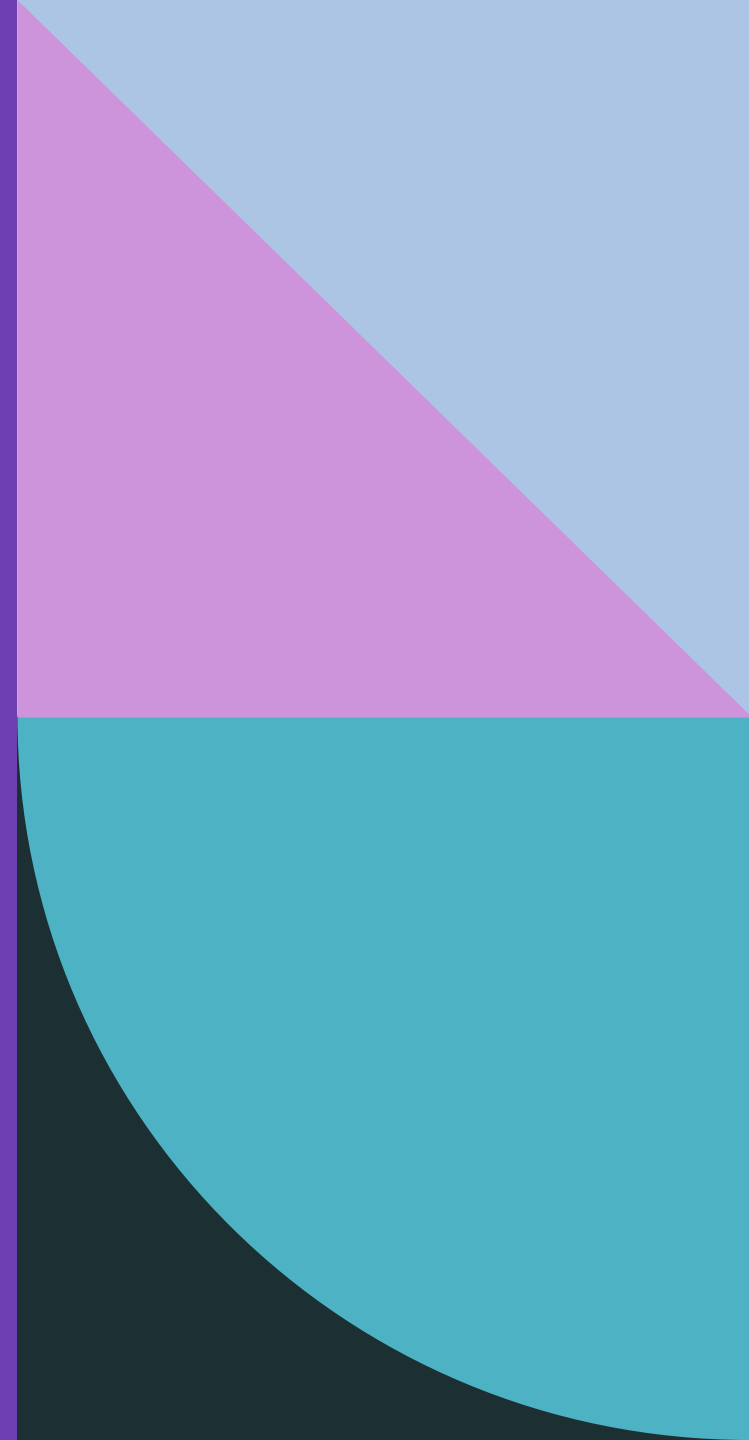# 5 points and 3 scenarios

1. The need for presence
2. The need for social relations
3. The need for variation in activities
4. The need for flexibility
5. The need for educational leadership

3 future scenarios for VET
- Necessary
- Possible
- Plausible

A moment to pause and reflect!

- *Emergency remote teaching* is decidedly different from deliberate and well-designed distance and online education (Bozkurt & Sharma, 2020; Hodges et al., 2020)

- Conclusions based on the COVID19-experience should be cautious and informed by prior research and practice

- Even pre-COVID19 there has been increasing critique of how *ed-tech* is redefining and oftentimes reducing concepts of teaching and learning

- Let's avoid 'stupid optimism' (Faser & Selwyn, 2021) and think carefully!

A virus that changed ..

Our perception of what we deem important with regard to teaching and learning processes

- The social aspect

- The design for learning

- Domains/subjects more or less 'applicable' to online transformation

Our understanding of differences and smililarities, possibilities and challenges

- Onsite vs. Online teaching and learning

1. Presence

- In general, students prefer teacher-initiated activity (Gundersen, Gynther & Nortvig, 2020)

- No need for physical teacher presence!

- Note 'teaching presence', not teacher presence ..

↓↓↓

- The design for learning is always crucial

- Presence can (easily) be mediated – e.g. though text, video and/or sound

Community of Inquiry

SOCIAL PRESENCE

COGNITIVE PRESENCE

Supporting Discourse

EDUCATIONAL EXPERIENCE

Setting Climate

Selecting Content

TEACHING PRESENCE (Structure/Process)

Communication Medium

Garrison, Andersen & Archer (2000)

2. Social relations

Online education is challenged:

Body and para-language is sparse - eye contact and sound

Informal communication is sparse – the social glue

Tendency to extreme goal-orientation

- Need for continuous for feedback
- Need for breaks

→ prioritize the relational work

→ be professional but also personal (not private)
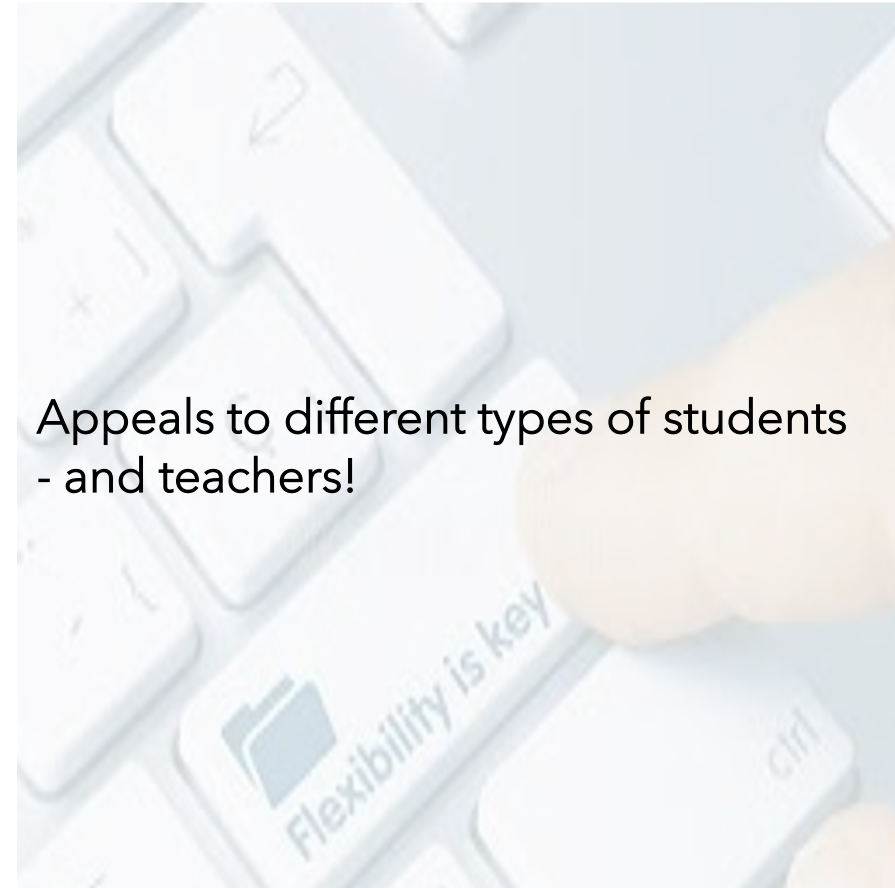
3. Variation in activity

[Video with Laurillard](#)

4. Flexibility

Online education offers plenty opportunities to blend between:

- **Place** (from blended to distance)
- **Time** (individual, collaborative)
- **Pace** (a/synchronous → *personalized*)

What are the opportunities onsite?

Appeals to different types of students - and teachers!

5. Educational leadership

- School leaders are *also* challenged to adapt and navigate their way through the tide of internal and external expectations

- Organizational readiness

- Human resources

- Infrastructure

↓↓↓

- Organizing hope!

- Achieving change and more imaginative narratives of alternative and utopian futures .. (Ericsson & Kostera (eds.), 2019)

- Perhaps Utopia as design principle?? (Hayes & Marino, 2015)
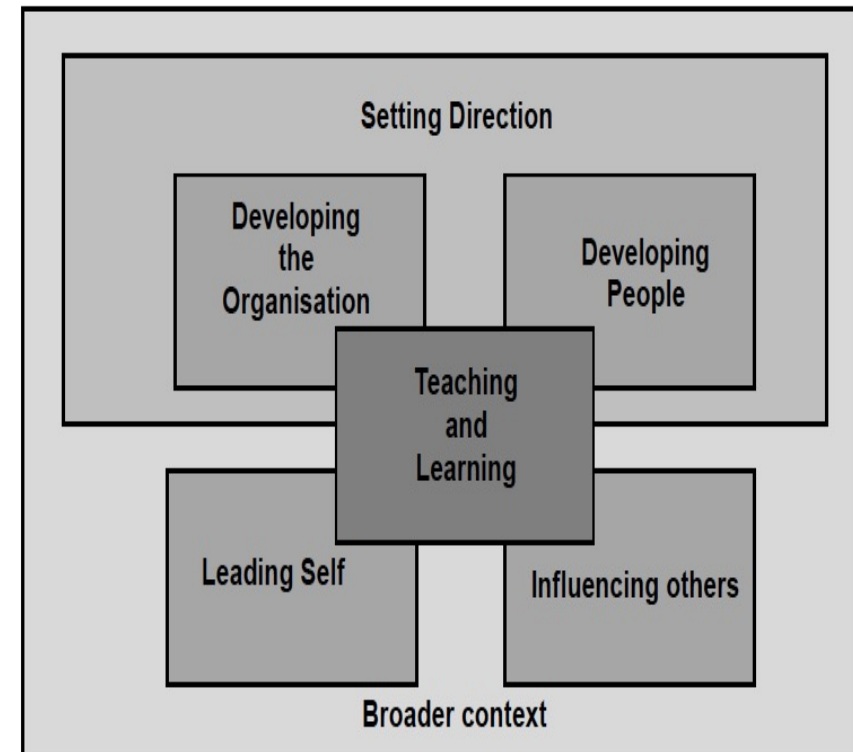
Drysdale & Gurr (2017)
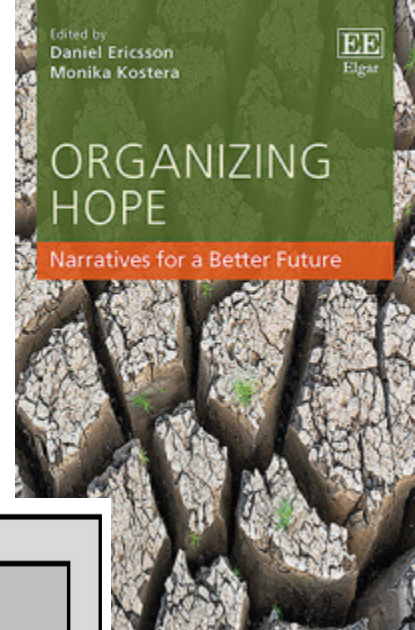
The future for VET?

- Necessary
- Possible
- Plausible

Current and future students will expect, perhaps demand, learning experiences that reflect and enhance the way live in the world.

Salmon (2019)

Blended learning

Onsite	Online
The physical space	The mediated space
The physical present teacher	The mediated teacher
Physical matrials and tools	Mediated matrials and tools
The physical present students	Mediated students
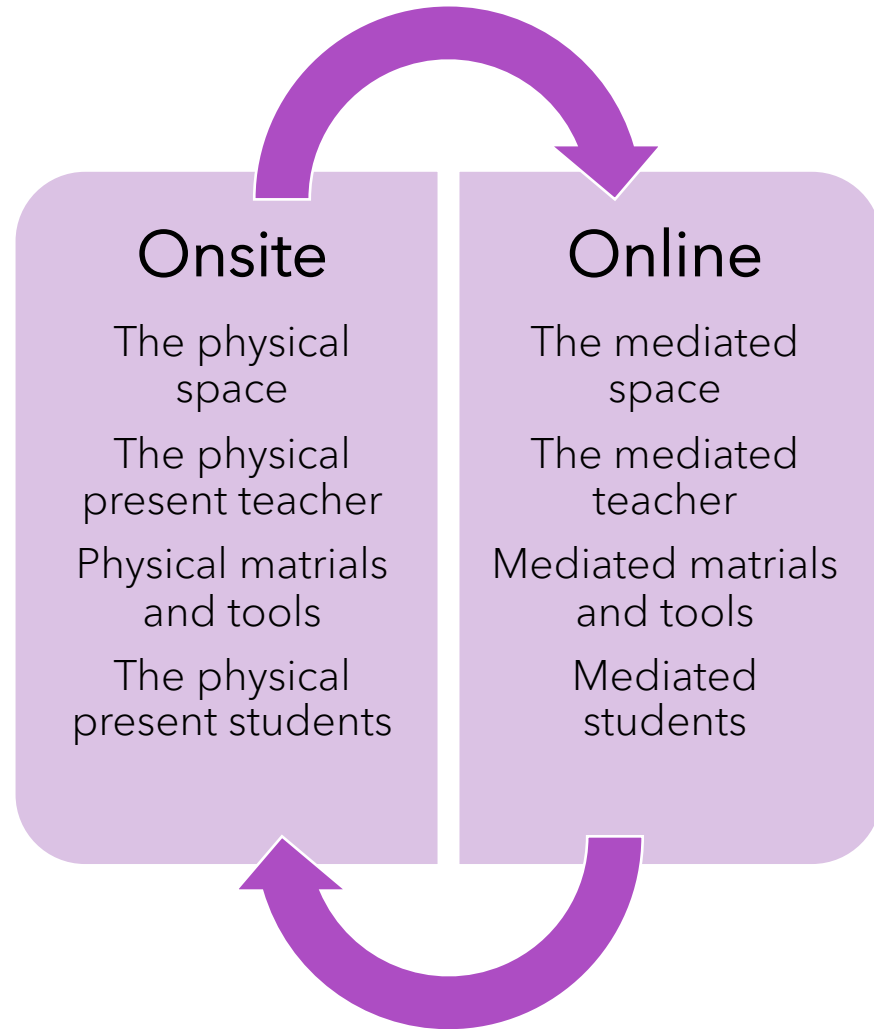
Gundersen et al. (2020)

Online space is typically used for theoretical knowledge acquisition – is it possible to think differently?

Practical skills can be mediated, but requires new designs (Nortvig et al., 2020)

Hybrid education

Simultaneously teaching in different spaces

Highly demanding – didactically, learning wise and organizational!

Makes sense in terms of:

- Economy: small, specialized classes

- Organization: geographical spread - and expertise

- Didactically: student prerequisites

How do we design a third space? A meaningful boundary zone for learning?

(Riis & Brodersen, 2021, Pedersen, Nørgaard & Köppe, 2018, Christiansen & Gynther, 2013)

Education 4.0

A new approach to educational design and learning taking into account globalization, digitalization and the industrial revolution(s):

- Adresses new educational challenges

  New formats

  New designs for learning

- Attention to new demands in terms of knowledge, skills and job functions (e.g., computational thinking, drone operating and robot specialists)

- Application of new advances technologies and services

- Invites new forms of collaboration and co-creation between VET schools and their ecology!

Riis & Lomholt (2021), Christiansen mfl. (2018)

CPS - Cyber-fysiske systemer

Smart produktion og robotter

Big Data analyse

Behandling af data

AI - Kunstig intelligens

Intelligent lærende analyse

Virtualisering

Modellering og simulering

Internet of Everything

Internet of Things
Internet of People
Internet of Service

The road ahead …

What is necessary, possible, plausible – and not least *preferable?*

- *Focus* on values, purpose and your students

- *Avoid* unwavering conclusions – prioritize vigilance and *curious* evaluation

- *Rethink and redesign* - *also the physical space* – blend and focus on flexibility

- *Emergency remote teaching* has been something unique, nonetheless there _are_ similarities to deliberate and well-designed teaching and learning

- But please note that general transferability from the COVID19 experience is difficult!

W H Y ?

Learn from prior research and practice - to create *the best education* possible for your students – and teachers!
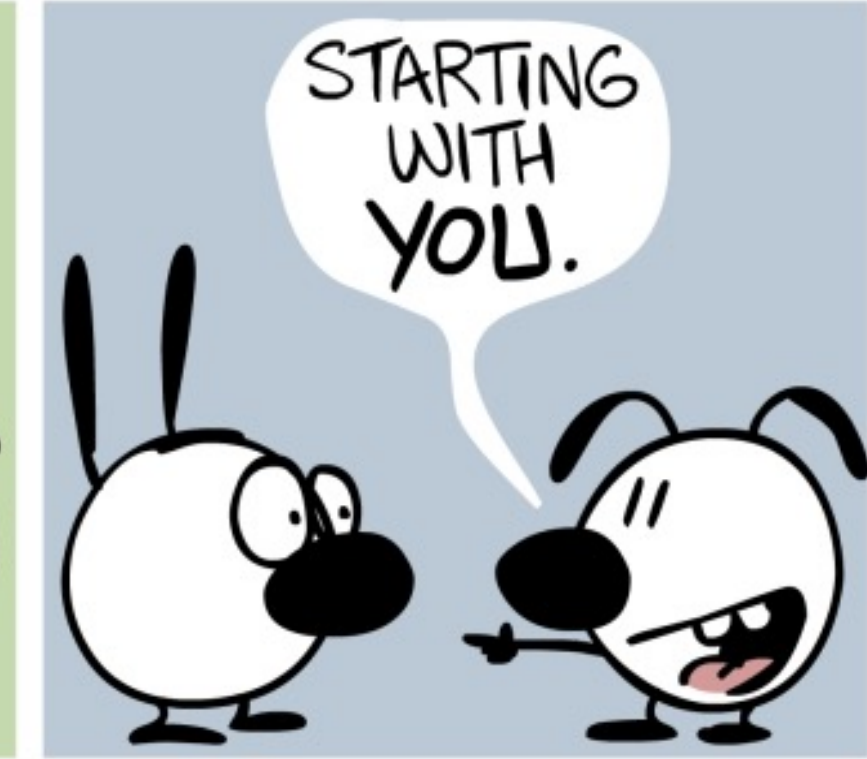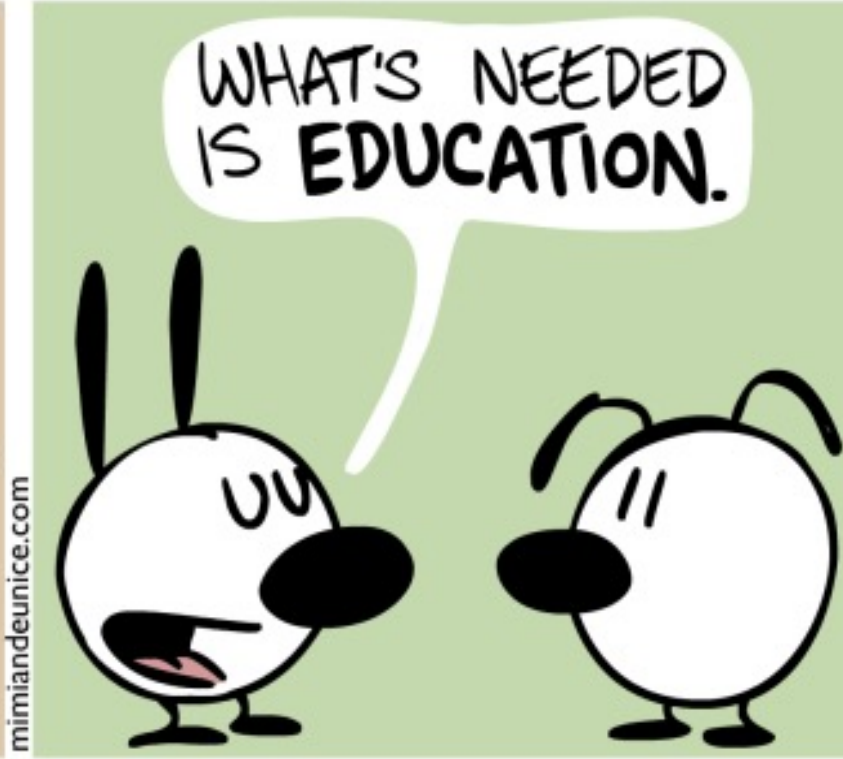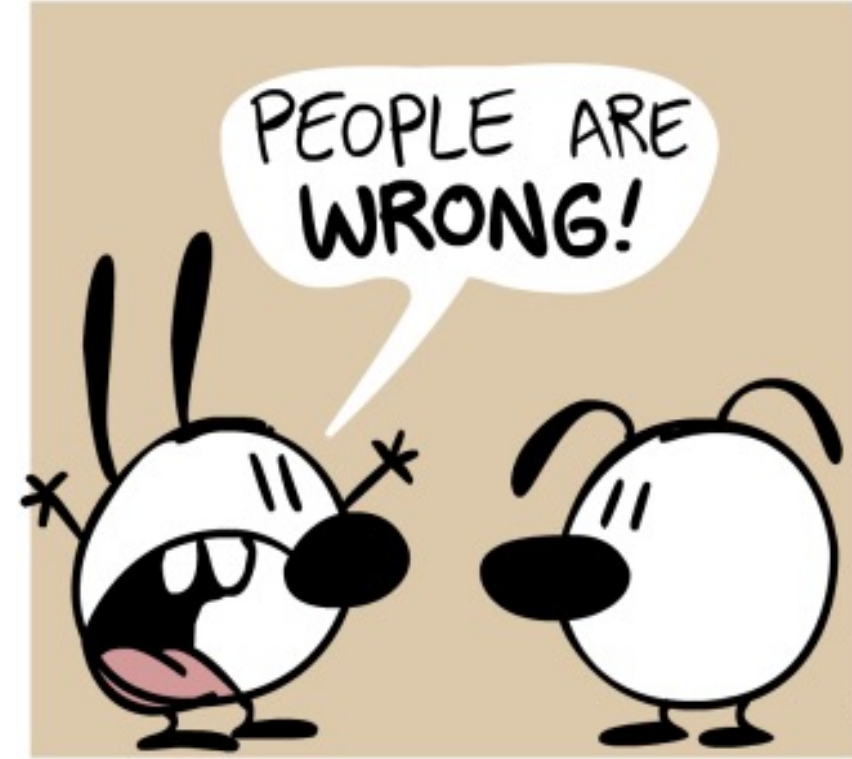
Thank you for listening ;-)

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